

# Regulatory Analysis Form

(Completed by Promulgating Agency)

INDEPENDENT REGULATORY  
REVIEW COMMISSION

(All Comments submitted on this regulation will appear on IRRC's website)

(1) Agency  
Environmental Protection

(2) Agency Number:  
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(3) PA Code Cite: 25 Pa. Code Chapter 129

(4) Short Title: Control of VOC Emissions from Miscellaneous Metal Parts Surface Coating Processes, Miscellaneous Plastic Parts Surface Coating Processes and Pleasure Craft Surface Coatings

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(6) Type of Rulemaking (check applicable box):

- Proposed Regulation  
 Final Regulation  
 Final Omitted Regulation

- Emergency Certification Regulation  
 Certification by the Governor  
 Certification by the Attorney General

(7) Briefly explain the regulation in clear and nontechnical language. (100 words or less)

The proposed rulemaking would amend Chapter 129 (relating to standards for sources) to add § 129.52d (relating to control of VOC emissions from miscellaneous metal parts surface coating processes, miscellaneous plastic parts surface coating processes and pleasure craft surface coatings) to adopt reasonably available control technology (RACT) requirements and RACT emission limitations for stationary sources of volatile organic compound (VOC) emissions from miscellaneous metal parts surface coating processes and miscellaneous plastic parts surface coating processes. These processes include surface coating of automotive and transportation plastic parts, business machine plastic parts, pleasure craft, and bodies or body parts for new heavier vehicles, and surface coating performed on a separate coating line at an automobile and light-duty truck assembly coating facility on which coatings are applied to other parts intended for use in new automobiles or new light-duty trucks or to aftermarket repair or replacement parts for automobiles or light-duty trucks, as well as related cleaning activities. The proposed rulemaking would also add terms and definitions to § 129.52d to support the interpretation of the proposed measures and amend §§ 129.51, 129.52, 129.67 and 129.75 to support the addition of § 129.52d.

Emissions of VOCs are precursors to the formation of ground-level ozone, a criteria air pollutant. Ground-level ozone is formed from emissions of nitrogen oxides (NOx) and VOCs in the presence of sunlight. High concentrations of ground-level ozone air pollution are a serious threat to public health and welfare and the environment. The ground-level ozone air pollution reduction measures in this proposed rulemaking are reasonably necessary to attain and maintain the health- and welfare-based ozone National Ambient Air Quality Standards (NAAQS) in this Commonwealth and to satisfy related Clean Air Act (CAA) (42 U.S.C.A. §§ 7401—7671q) requirements.

This proposed rulemaking will be submitted to the United States Environmental Protection Agency (EPA) for approval as a revision to the Commonwealth's State Implementation Plan (SIP) following promulgation of the final-form regulation.

**(8) State the statutory authority for the regulation. Include specific statutory citation.**

The proposed rulemaking is authorized under section 5(a)(1) of the Air Pollution Control Act (act) (35 P.S. § 4005(a)(1)), which grants the Environmental Quality Board (Board) the authority to adopt rules and regulations for the prevention, control, reduction and abatement of air pollution in this Commonwealth. Section 5(a)(8) of the act (35 P.S. § 4005(a)(8)) also grants the Board the authority to adopt rules and regulations designed to implement the provisions of the CAA.

**(9) Is the regulation mandated by any federal or state law or court order, or federal regulation? Are there any relevant state or federal court decisions? If yes, cite the specific law, case or regulation as well as any deadlines for action.**

Yes. State regulations to control VOC emissions from the miscellaneous metal parts surface coating processes and miscellaneous plastic parts surface coating processes covered in this proposed rulemaking, as well as related cleaning activities, are required under Federal law.

The state regulations will be reviewed by the EPA and will be approved by the EPA if the provisions meet the RACT requirements of the CAA and its implementing regulations. 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." See *State Implementation Plans; General Preamble for Proposed Rulemaking on Approval of Plan Revisions for Nonattainment Areas—Supplement (on Control Techniques Guidelines)*, 44 FR 53761, 53762 (September 17, 1979).

In accordance with sections 172(c)(1), 182(b)(2)(A) and 184(b)(1)(B) of the CAA (42 U.S.C.A. §§ 7502(c)(1), 7511a(b)(2)(A) and 7511c(b)(1)(B)), the proposed rulemaking establishes the VOC emission limitations and other requirements of the EPA 2008 Miscellaneous Metal and Plastic Parts Coatings Control Techniques Guidelines (CTG) as RACT for these sources in this Commonwealth. See *Consumer and Commercial Products, Group IV: Control Techniques Guidelines in Lieu of Regulations for Miscellaneous Metal Products Coatings, Plastic Parts Coatings, Auto and Light-Duty Truck Assembly Coatings, Fiberglass Boat Manufacturing Materials, and Miscellaneous Industrial Adhesives*, 73 FR 58481, 58483 (October 7, 2008).

Section 109(b) of the CAA (42 U.S.C.A. § 7409(b)) provides that the Administrator of the EPA must establish NAAQS for criteria air pollutants at levels that protect public health and welfare and the environment. The criteria air pollutants are commonly found throughout the United States and currently include six air pollutants: ground-level ozone, particle pollution (often referred to as particulate matter), carbon monoxide, sulfur oxides, NO<sub>x</sub>, and lead. These air pollutants, when present in sufficient concentration in the ambient air, can cause harm to public health and welfare and to the environment.

The EPA calls these six principal pollutants "criteria" air pollutants because it regulates them by developing human health-based or environmentally-based, or both, criteria (science-based guidelines) for setting permissible ambient air levels. The set of standards based on human health is called primary standards. Another set of standards intended to prevent environmental and property damage is called secondary standards. Of the six criteria air pollutants, high concentrations of ground-level ozone and particle pollution

are the most widespread health and welfare threats. The EPA promulgated the ground-level ozone NAAQS in July 1997 at 0.08 part per million (ppm) averaged over 8 hours and lowered it in March 2008 to 0.075 ppm. See 62 FR 38855 (July 18, 1997) and 73 FR 16436 (March 27, 2008).

Section 110(a) of the CAA (42 U.S.C.A. § 7410(a)) provides that each state shall adopt and submit to the EPA a plan to implement measures [State Implementation Plan or "SIP"] to enforce the NAAQS or revision to the NAAQS promulgated under section 109(b) of the CAA. Section 172(c)(1) of the CAA provides that SIPs for nonattainment areas must include "reasonably available control measures," including "reasonably available control technology" or "RACT," for sources of emissions of NO<sub>x</sub> and VOC. Section 182(b)(2) of the CAA (42 U.S.C.A. § 7511a(b)(2)) provides that for moderate ozone nonattainment areas, states must revise their SIPs to include RACT for sources of VOC emissions covered by a CTG document issued by the EPA prior to the area's date of attainment. CTG documents provide information about a source category and recommendations of what the EPA considers to be RACT for the source category.

Section 183(e) of the CAA (42 U.S.C.A. § 7511b(e)) directs the EPA to list for regulation those categories of products that account for at least 80% of the VOC emissions from consumer and commercial products in ozone nonattainment areas. Section 183(e)(3)(C) of the CAA (42 U.S.C.A. § 7511b(e)(3)(C)) further provides that the EPA may issue a CTG document in place of a National regulation for a product category where the EPA determines that the CTG will be "substantially as effective as regulations" in reducing emissions of VOC in ozone nonattainment areas. The CTG provides states with the EPA's recommendation of what constitutes RACT for the covered category. States can use the Federal recommendations provided in the CTG to inform their own determination as to what constitutes RACT for VOC emissions from the covered category. State air pollution control agencies may implement other technically-sound approaches that are consistent with the CAA requirements and the EPA's implementing regulations or guidelines.

In 1995, the EPA listed miscellaneous metal products coatings and plastic parts coatings on its section 183(e) list and, in 2008, issued a CTG for these product categories. See 60 FR 15264, 15267 (March 23, 1995) and 73 FR 58481; *Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings*, EPA-453/R-08-003, Office of Air Quality Planning and Standards, EPA, September 2008. The Miscellaneous Metal and Plastic Parts Coatings CTG document is available on the EPA website at: [www.epa.gov/airquality/ozonepollution/SIPToolkit/ctgs.html](http://www.epa.gov/airquality/ozonepollution/SIPToolkit/ctgs.html).

Section 184(a) of the CAA (42 U.S.C.A. § 7511c(a)) provides that the entire Commonwealth is included in the Ozone Transport Region (OTR) established under section 184 ([www.otcair.org](http://www.otcair.org)). Section 184(b) of the CAA (42 U.S.C.A. § 7511c(b)) addresses provisions for the SIP of a state included in the OTR. Section 184(b)(1)(B) of the CAA requires that states in the OTR, including Pennsylvania, submit a SIP revision requiring implementation of RACT for all sources of VOC emissions in the state covered by a specific CTG and not just for those sources that are located in designated nonattainment areas of the state. Consequently, the Commonwealth's SIP must include regulations applicable statewide to control VOC emissions from miscellaneous metal products coatings and plastic parts coatings, including surface coating of automotive and transportation plastic parts, business machine plastic parts, pleasure craft, and bodies or body parts for new heavier vehicles, as well as related cleaning activities, which are covered by the applicable CTG issued under the following notice: *Consumer and Commercial Products, Group IV: Control Techniques Guidelines in Lieu of Regulations for Miscellaneous Metal Products Coatings, Plastic Parts Coatings, Auto and Light-Duty Truck Assembly Coatings, Fiberglass Boat Manufacturing Materials, and Miscellaneous Industrial Adhesives*, 73 FR 58481, 58483. The Commonwealth's SIP must also include regulations applicable statewide to control VOC emissions from a separate coating line at an automobile and light-duty truck assembly coating facility on which coatings are applied to other parts intended for use in new automobiles or new light-duty trucks or to aftermarket repair or replacement parts for automobiles or light-duty trucks, as

well as related cleaning activities. In the 2008 notice of final determination and availability of final Control Techniques Guidelines, the EPA determined that the recommendations of the 2008 Miscellaneous Metal and Plastic Parts Coatings CTG would be substantially as effective as National regulations in reducing VOC emissions from the miscellaneous metal products coatings and plastic parts coatings product categories in ozone nonattainment areas. See 73 FR 58481.

The Department reviewed the recommendations included in the 2008 Miscellaneous Metal and Plastic Parts Coatings CTG for their applicability to the ground-level ozone reduction measures necessary for this Commonwealth. The Bureau of Air Quality has determined that the VOC emission reduction measures provided in the Miscellaneous Metal and Plastic Parts Coatings CTG are appropriate to be implemented in this Commonwealth as RACT for these categories. The Bureau of Air Quality determined that three VOC content limits applicable to the pleasure craft coatings industry should be altered slightly from the CTG to represent RACT for that industry, based on a June 1, 2010, memorandum from the EPA entitled, "Control Technique Guidelines for Miscellaneous Metal and Plastic Part Coatings – Industry Request for Reconsideration." The EPA wrote the memorandum in response to input from the pleasure craft coatings industry following the EPA's publication of the CTG.

Section 182(b)(2) of the CAA (42 U.S.C.A. § 7511a(b)(2)) requires that a CTG issued by the EPA after November 15, 1990, include the date by which states subject to section 182(b) must submit SIP revisions in response to the CTG. The EPA issued the Miscellaneous Metal and Plastic Parts Coatings CTG on October 7, 2008. See 73 FR 58481. The EPA provided a 1-year period for the required SIP submittal, making SIP revisions for implementation of the Miscellaneous Metal and Plastic Parts Coatings CTG recommendations due by October 7, 2009. See 73 FR 58481, 58484.

If the EPA Administrator finds that a state has failed to submit an acceptable implementation plan or has failed to implement the requirements of an approved plan, sanctions will be imposed 18 months after the Administrator makes the determination (i.e., "failure to submit finding"). Sanctions cannot be imposed if a deficiency has been corrected within the 18-month period after the finding. The EPA has not yet made such a finding for this rulemaking.

Section 179 of the CAA (42 U.S.C.A. § 7509) authorizes the EPA to use two types of sanctions: 1) imposing what are called "2:1 offsets" on new or modified sources of emissions; and 2) withholding of certain Federal highway funds. Under section 179 of the CAA and its implementing regulations, the Administrator first imposes 2:1 emission offset sanctions for new or modified major stationary sources in the nonattainment area, and then, if the deficiency has not been corrected within 6 months, also applies Federal highway funding sanctions. See 40 CFR 52.31 (relating to selection of sequence of mandatory sanctions for findings made pursuant to section 179 of the Clean Air Act). The Commonwealth receives approximately \$1.6 billion in Federal transportation funding annually, which would be at risk if the Commonwealth does not implement RACT requirements for the control of VOC emissions from miscellaneous metal products coatings, plastic parts coatings and pleasure craft coatings.

In 2004, the EPA designated 37 counties in this Commonwealth as 8-hour ozone nonattainment areas for the 1997 8-hour ozone NAAQS. Based on the ambient air monitoring data for the 2013 ozone season, all monitored areas of the Commonwealth are attaining the 1997 8-hour ozone NAAQS. The Department must ensure that the 1997 ozone standard is attained and maintained by implementing permanent and enforceable control measures to ensure violations of the standard do not occur for the next decade.

In April 2012, the EPA designated five areas in Pennsylvania as nonattainment for the 2008 ozone NAAQS. See 77 FR 30088, 30143 (May 21, 2012). These areas include all or a portion of Allegheny, Armstrong,

Berks, Beaver, Bucks, Butler, Carbon, Chester, Delaware, Fayette, Lancaster, Lehigh, Montgomery, Northampton, Philadelphia, Washington and Westmoreland Counties. The Commonwealth must ensure that these areas attain the 2008 ozone standard by 2015 and that they continue to maintain the standard thereafter.

**(10) State why the regulation is needed. Explain the compelling public interest that justifies the regulation. Describe who will benefit from the regulation. Quantify the benefits as completely as possible and approximate the number of people who will benefit.**

The purpose of this proposed rulemaking is to implement control measures to reduce VOC emissions Statewide from miscellaneous metal parts surface coating processes and miscellaneous plastic parts surface coating processes, including surface coating of automotive and transportation plastic parts, business machine plastic parts, pleasure craft, and bodies or body parts for new heavier vehicles, as well as related cleaning activities. The proposed rulemaking would also implement VOC emission control measures for a separate coating line at an automobile and light-duty truck assembly coating facility on which coatings are applied to other parts intended for use in new automobiles or new light-duty trucks or to aftermarket repair or replacement parts for automobiles or light-duty trucks, as well as related cleaning activities. VOCs are precursors for ground-level ozone formation. Ground-level ozone, a public health and welfare hazard, is not emitted directly by miscellaneous metal parts surface coatings or miscellaneous plastic parts surface coatings, but is formed by a photochemical reaction between VOCs and NO<sub>x</sub> in the presence of sunlight.

The EPA regulates ground-level ozone as a criteria air pollutant because of its widespread adverse health and environmental effects. Exposure to high concentrations of ground-level ozone is a serious human and animal health and welfare threat, causing respiratory illnesses and decreased lung function, agricultural crop loss, visible foliar injury to sensitive plant species, and damage to forests, ecosystems and infrastructure. Implementation of the proposed VOC control measures for miscellaneous metal parts surface coating processes, miscellaneous plastic parts surface coating processes and pleasure craft surface coatings would benefit the health and welfare of the approximately 12.77 million residents (as of July 2013) and the numerous animals, crops, vegetation and natural areas of this Commonwealth by reducing emissions of VOCs and the subsequent formation of ground-level ozone air pollution. Ground-level ozone air pollution can also be transported downwind via regional air currents and meteorological events. Reductions of ground-level ozone in this Commonwealth will therefore also benefit the residents of downwind states and downwind environments. The measures in the proposed rulemaking are reasonably necessary to attain and maintain the health- and welfare-based 8-hour ozone NAAQS in this Commonwealth, to satisfy related CAA requirements, and to protect the livelihoods of numerous citizens and residents.

Exposure to high levels of ground-level ozone air pollution correlates to increased respiratory disease and higher mortality rates. Ozone can inflame and damage the lining of the lungs. Within a few days, the damaged cells are shed and replaced. Over a long time period, lung tissue may become permanently scarred, resulting in permanent loss of lung function and a lower quality of life. When ambient ozone levels are high, more people with asthma have attacks that require a doctor's attention or use of medication. Ozone also makes people more sensitive to allergens including pet dander, pollen and dust mites, all of which can trigger asthma attacks. The EPA has concluded that there is an association between high levels of ambient ozone and increased hospital admissions for respiratory ailments including asthma. While children, the elderly and those with respiratory problems are most at risk, even healthy individuals may experience increased respiratory ailments and other symptoms when they are exposed to high levels of ambient ozone while engaged in activities that involve physical exertion. High levels of ground-level ozone also affect animals including pets, livestock, and wildlife, in ways similar to humans.

The EPA has estimated the monetized health benefits of attaining the NAAQS. For example, the EPA estimated that the monetized health benefits of attaining the 2008 8-hour ozone standard of 0.075 ppm range from \$8.3 billion to \$18 billion on a National basis by 2020. See *Regulatory Impact Analysis, Final National Ambient Air Quality Standard for Ozone*, July 2011, [http://epa.gov/glo/pdfs/201107\\_OMBdraft-OzoneRIA.pdf](http://epa.gov/glo/pdfs/201107_OMBdraft-OzoneRIA.pdf). Prorating that benefit to the Commonwealth, based on population, results in a public health benefit of \$337 million to \$732 million. The Department is not stating that these estimated monetized health benefits would all be the result of implementing the proposed rulemaking RACT measures, but the EPA estimates are indicative of the benefits to Commonwealth residents of attaining the 2008 8-hour ozone NAAQS.

In addition to causing adverse human and animal health effects, the EPA has concluded that ground-level ozone affects vegetation and ecosystems, leading to reductions in agricultural crop and commercial forest yields by destroying chlorophyll; reduced growth and survivability of tree seedlings; and increased plant susceptibility to disease, pests, and other environmental stresses, including harsh weather. In long-lived species, these effects may become evident only after several years or even decades and have the potential for long-term adverse impacts on forest ecosystems. Ozone damage to the foliage of trees and other plants can decrease the aesthetic value of ornamental species used in residential landscaping, as well as the natural beauty of parks and recreation areas. Through deposition, ground-level ozone also contributes to pollution in the Chesapeake Bay. These effects can have adverse impacts including loss of species diversity and changes to habitat quality and water and nutrient cycles. High levels of ground-level ozone can also cause damage to buildings and synthetic fibers, including nylon, and reduced visibility on roadways and in natural areas.

Ground-level ozone also impacts Pennsylvania's farm crops, forests, parks, and timber. The economic value of some welfare losses due to high concentrations of ground-level ozone can be calculated, such as crop yield loss from both reduced seed production and visible injury to some leaf crops, including lettuce, spinach and tobacco, as well as visible injury to ornamental plants, including grass, flowers and shrubs. Other types of welfare loss may not be quantifiable, such as the reduced aesthetic value of trees growing in heavily visited parks.

Information about the economic benefit of the Pennsylvania agricultural industry is provided by the Pennsylvania Department of Agriculture. Pennsylvania's 62,000 farm families are the stewards of more than 7.7 million acres of farmland. With \$6.8 billion in cash receipts annually from production agriculture, Pennsylvania farmers and agribusinesses are the leading economic driver in our state. In addition to production agriculture, the industry also raises revenue and supplies jobs through support services such as food processing, marketing, transportation, and farm equipment. In total, production agriculture and agribusiness contributes nearly \$68 billion to Pennsylvania's economy. (Source: Pennsylvania Department of Agriculture.) These families, farms, and related businesses benefit directly from the reduction of ground-level ozone air pollution concentrations.

The Pennsylvania Department of Conservation and Natural Resources (DCNR) is the steward of the state-owned forests and parks. DCNR awards millions of dollars in construction contracts each year to build and maintain the facilities in its parks and forests. Timber sales on state forest lands contribute to the \$5 billion a year timber industry. Hundreds of concessions throughout the park system help complete the park experience for both state and out-of-state visitors. (Source: Pennsylvania Department of Conservation and Natural Resources.)

Information about Pennsylvania's hardwoods industry is provided by the Pennsylvania Department of Agriculture in its 2009-2010 biennial Hardwoods Development Council report, cited below. The following information and references are found in that report. Pennsylvania leads the nation in growing volume of hardwood species, with 17 million acres in forest land. As the leading producer of hardwood lumber in the United States, Pennsylvania also leads in the export of hardwood lumber, exporting nearly \$800 million annually in lumber, logs, furniture, and paper products to more than 70 countries around the world. Recent U.S. Forest Service data shows that the state's forest growth-to-harvest rate is better than 2 to 1. This vast renewable resource puts the hardwoods industry at the forefront of manufacturing in the Commonwealth. Through 2006, the total annual direct economic impact generated by Pennsylvania's wood industry was \$18.4 billion. The industry employed 128,000 people, with \$4.7 billion in wages and salaries earned. Production was 1.1 billion board feet of lumber annually. (Strauss, Lord, Powell; PSU, June 2007.)

(Source: Pennsylvania Hardwoods Development Council Biennial Report, 2009-2010.) A copy of this document is available from the Bureau of Air Quality upon request.

(Source: Pennsylvania Hardwoods Development Council Photo, *Pennsylvania Hardwood Leading the Nation*.

[http://www.agriculture.state.pa.us/portal/server.pt/gateway/PTARGS\\_0\\_2\\_24476\\_10297\\_0\\_43/AgWebsite/Files/Publications/8631\\_panel11\\_Leading\\_the\\_Nation\\_100ppi.jpg](http://www.agriculture.state.pa.us/portal/server.pt/gateway/PTARGS_0_2_24476_10297_0_43/AgWebsite/Files/Publications/8631_panel11_Leading_the_Nation_100ppi.jpg)

**(11) Are there any provisions that are more stringent than federal standards? If yes, identify the specific provisions and the compelling Pennsylvania interest that demands stronger regulations.**

There are no Federal statutory or regulatory RACT limits for VOC emissions from miscellaneous metal parts surface coating processes or miscellaneous plastic parts surface coating processes. In 2004, however, the EPA promulgated the National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products, 40 CFR Part 63, Subpart MMMM (relating to National emission standards for hazardous air pollutants for surface coating of miscellaneous metal parts and products), set forth at 40 CFR 63.3880—63.3981. See 69 FR 130 (January 2, 2004). Also, in 2004, the EPA promulgated the National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products, 40 CFR Part 63, Subpart PPPP (relating to National emission standards for hazardous air pollutants for surface coating of plastic parts and products), set forth at 40 CFR 63.4480—63.4581. See 69 FR 20968 (April 19, 2004). These two NESHAPs are collectively referred to as the 2004 NESHAPs throughout this document. These 2004 NESHAPs established organic hazardous air pollutant (HAP) emission limits based on low-HAP content coatings and low-volatile-emitting (non-atomizing) coating application technology for the respective surface coating categories.

When developing the VOC emission reduction RACT measures included in its 2008 Miscellaneous Metal and Plastic Parts Coatings CTG, the EPA took into account the HAP emission reduction measures of the 2004 NESHAPs for the metal parts and products and the plastic parts and products coating industries. Many HAPs are VOCs, but not all VOCs are HAPs. The requirements of the 2004 NESHAPs apply to "major sources" of HAP emissions from miscellaneous metal parts and products coating facilities and plastic parts and products coating facilities. For the purpose of regulating HAP emissions, a "major source" is considered to be a stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year (tpy) or more of any single listed HAP or 25 tpy or more of any combination of HAPs. See section 112(a)(1) of the CAA (42 U.S.C.A. § 7412(a)(1)); see also 61 FR 27133 (May 30, 1996). Most of the Federal recommendations for control of VOC emissions included in the 2008 Miscellaneous Metal and Plastic Parts Coatings CTG are based on the HAP content and emission rate limits for surface coating of

miscellaneous metal parts and products and surface coating of plastic parts and products and other requirements set forth in the 2004 NESHAPs.

This proposed rulemaking is designed to adopt the standards and recommendations in the 2008 Miscellaneous Metal and Plastic Parts Coatings CTG to meet the requirements of sections 172(c)(1), 182(b)(2) and 184(b)(1)(B) of the CAA. The proposed rulemaking would apply the standards and recommendations of the CTG across this Commonwealth, as required under section 184(b)(1)(B) of the CAA. The VOC content and emission rate limitations and other requirements of the proposed rulemaking would not be more stringent than Federal standards. The ground-level ozone air pollution reduction measures in this proposed rulemaking are reasonably necessary to attain and maintain the health- and welfare-based ozone NAAQS in this Commonwealth and to satisfy related CAA requirements.

**(12) How does this regulation compare with those of the other states? How will this affect Pennsylvania's ability to compete with other states?**

This proposed rulemaking is similar to the regulations already adopted by Connecticut, New Hampshire and Maryland. These states are members of the OTR, along with the Commonwealth. The proposed rulemaking would have no effect on Pennsylvania's ability to compete with other states that have miscellaneous metal parts surface coating operations and miscellaneous plastic parts surface coating operations, including operations that surface coat automotive and transportation plastic parts, business machine plastic parts, pleasure craft, or bodies or body parts for new heavier vehicles, or separate coating lines at automobile and light-duty truck assembly coating facilities on which coatings are applied to other parts intended for use in new automobiles or new light-duty trucks or to aftermarket repair or replacement parts for automobiles or light-duty trucks.

**(13) Will the regulation affect any other regulations of the promulgating agency or other state agencies? If yes, explain and provide specific citations.**

Title 25 *Pa. Code*, Chapter 129, would be amended as follows:

Section 129.51(a) (relating to general) would be amended to establish that compliance with § 129.52d may be achieved by alternative methods.

Section 129.51(a)(3) would be amended to establish that compliance by a method other than the use of a low-VOC content coating, adhesive, sealant, adhesive primer, sealant primer, surface preparation solvent or cleanup solvent or ink which meets the applicable emission limitation in § 129.52d shall be determined on the basis of equal volumes of solids.

Section 129.51(a)(6) would be amended to establish that the alternative compliance method is incorporated into a plan approval or operating permit, or both, reviewed by the EPA, including the use of an air cleaning device to comply with § 129.52d.

Section 129.52(g) (relating to surface coating processes) would be amended to establish that the records required for surface coating processes regulated under § 129.52, including surface coating of miscellaneous metal parts and products, shall be maintained on site for 2 years, unless a longer period is required by an order, plan approval or operating permit issued under Chapter 127 (relating to construction, modification, reactivation and operation of sources) and that the records shall be submitted to the Department in an acceptable format on a schedule reasonably prescribed by the Department.

Section 129.67(a) (relating to graphic arts systems) would be amended to establish that it applies to facilities whose rotogravure and flexographic printing presses by themselves or in combination with a surface coating operation subject to § 129.52d have the potential to emit or have emitted VOCs into the outdoor atmosphere in quantities greater than 1,000 pounds (460 kilograms) per day or 100 tons (90,900 kilograms) per year during any calendar year since January 1, 1987.

Section 129.75(b)(1) (relating to mobile equipment repair and refinishing) would be amended to establish that it does not apply to a person who applies surface coating to mobile equipment or components if the process is already covered by § 129.52d.

This proposed rulemaking would establish a compliance date of January 1, 2016. In order to allow additional time to finalize this rulemaking, the Department has requested comment on the compliance date in the preamble, asking for consideration of a May 1, 2016 compliance date, instead, to be established in the final rulemaking.

For two types of coating operations, this proposed rulemaking would provide an option for the owner or operator to elect to be regulated under § 129.52e (relating to control of VOC emissions from automobile and light-duty truck assembly surface coating operations and heavier vehicle coating operations) instead of under this proposed rulemaking. The two types of coating operations are: (1) coating of a body or body part for a new heavier vehicle at the facility; and (2) a separate coating line at an automobile and light-duty truck assembly coating facility on which coatings are applied to other parts intended for use in new automobiles or new light-duty trucks or to aftermarket repair or replacement parts for automobiles or light-duty trucks. The option to comply with § 129.52e is provided to allow these owners and operators flexibility in complying with their permit conditions or to optimize their operations.

**(14) Describe the communications with and solicitation of input from the public, any advisory council/group, small businesses and groups representing small businesses in the development and drafting of the regulation. List the specific persons and/or groups who were involved. (“Small business” is defined in Section 3 of the Regulatory Review Act, Act 76 of 2012.)**

The proposed rulemaking was discussed with the Air Quality Technical Advisory Committee (AQTAC) on February 20, 2014. The AQTAC voted unanimously to concur with the Department’s recommendation to forward the proposed rulemaking to the Board for consideration as a proposed rulemaking. The proposed rulemaking was discussed with the Citizens Advisory Council (CAC) Policy and Regulatory Oversight (PRO) Committee on March 12, 2014. On the recommendation of the PRO Committee of the CAC, on March 18, 2014, the CAC concurred with the Department’s recommendation to forward the proposed rulemaking to the Board. The proposed rulemaking was discussed with the Small Business Compliance Advisory Committee (SBCAC) on April 23, 2014. The SBCAC voted unanimously to concur with the Department’s recommendation to forward the proposed rulemaking to the Board for consideration as a proposed rulemaking. The AQTAC, SBCAC and CAC meetings are advertised and open to the public.

On September 14, 2009, the EPA was contacted by the pleasure craft coatings industry to reconsider some of the VOC emission limits recommended in the final Miscellaneous Metal and Plastic Parts Coatings CTG. The pleasure craft coatings industry asserted that three of the VOC emission limits in the CTG were too low considering the performance requirements of the pleasure craft coatings and that the VOC emission limits recommended did not represent RACT for the National pleasure craft coatings industry. The industry suggested several options for revision. The EPA did not take action on the concerns, but left it up to the states to address the concerns. On June 1, 2010, the EPA issued a memorandum entitled, “Control Technique Guidelines for Miscellaneous Metal and Plastic Part Coatings – Industry Request for

Reconsideration,” in which the EPA stated that each state could determine what would be appropriate for the pleasure craft coatings industry in its jurisdiction. Other states, including Connecticut, New Hampshire, and Maryland, have included the pleasure craft coatings industry’s suggested changes in their regulations. The regulations of each of these three states have been approved by the EPA as revisions to each state’s SIP.

Accordingly, the proposed rulemaking includes the following differences from the CTG related to the pleasure craft surface coatings categories, in Table IV:

- Added a specialty category for Antifoulant Sealer/Tiecoat with a VOC content limit of 0.42 kg VOC/liter coating and 3.5 lb VOC/gallon coating, less water and exempt compounds, as applied.
- Changed the VOC content limits for the Extreme High-gloss Topcoat category from 0.49 kg VOC/liter coating to 0.60 kg VOC/liter coating and from 4.1 lb VOC/gallon coating to 5.0 lb VOC/gallon coating, less water and exempt compounds, as applied.
- Changed the VOC content limits for the Other Substrate Antifoulant Coating category from 0.33 kg VOC/liter coating to 0.40 kg VOC/liter coating and from 2.8 lb VOC/gallon coating to 3.3 lb VOC/gallon coating, less water and exempt compounds, as applied.

The Department expects that these revised VOC content limits for the pleasure craft surface coatings would have a *de minimis* impact on the amount of VOC emission reductions achieved from the implementation of the proposed rulemaking.

In addition, Mr. Robert Gandley of the MacDonald, Illig, Jones & Britton LLP law firm contacted the Department in August 2012, requesting that the Department include in the proposed rulemaking the exemption from VOC content limitations for aerosol coatings found on pages 6 and 30 of the CTG. An exemption for aerosol coatings is provided at § 129.52d(a)(4). On February 11, 2014, Mr. Gandley was provided with notice of the February 20, 2014, AQTAC meeting and a copy of the draft proposed rulemaking Annex A that was posted on the Department’s webpage for consideration at the AQTAC meeting by the AQTAC members and the public.

Also, Mr. David Darling, of the American Coatings Association, contacted the Department in February 2014 regarding two typographical errors in the draft proposed rulemaking Annex A. In Table I, the baked coating category for ‘Drum Coating, New, Exterior’ was listed as 0.28 kg VOC/liter coating and 2.3 lb VOC/gallon coating, less water and exempt compounds, as applied. These proposed limits were revised in the proposed rulemaking to reflect the limits in the CTG of 0.34 kg VOC/liter coating and 2.8 lb VOC/gallon coating, less water and exempt compounds, as applied. In Table VI, the air dried coating category for ‘Solar-absorbent’ was listed as 0.42 kg VOC/liter solids and 3.5 lb VOC/ gallon solids, as applied. These proposed limits were revised in the proposed rulemaking to reflect the limits in the CTG of 0.80 kg VOC/liter solids and 6.67 lb VOC/gallon solids, as applied.

**(15) Identify the types and number of persons, businesses, small businesses (as defined in Section 3 of the Regulatory Review Act, Act 76 of 2012) and organizations which will be affected by the regulation. How are they affected?**

This proposed rulemaking would apply to the owner and operator of a facility that manufactures metal parts or products or plastic parts or products, including automotive and transportation plastic parts, business machine plastic parts, pleasure craft, or bodies or body parts for new heavier vehicles, that applies subject coatings to the surfaces of the parts and products that are produced. This proposed rulemaking would apply as well to the owner and operator of a separate coating line at an automobile and light-duty truck assembly coating facility, on which coatings are applied to other parts intended for use in new automobiles or new light-duty trucks or to aftermarket repair or replacement parts for automobiles or light-duty trucks. This proposed rulemaking would also apply to the owner and operator of a facility that applies subject coatings to the surfaces of metal parts or products, or plastic parts or products, on a contractual basis.

The provisions of the proposed rulemaking would apply to the owner and operator of a process that applies subject coatings to the surfaces of a variety of metal and plastic parts and products that are not covered by the recommendations provided in the Control Technique Guidelines that have been issued by the EPA for other categories of consumer or commercial products. The miscellaneous metal products coatings and plastic parts coatings categories identified by the EPA under section 183(e) of the CAA, and covered by the proposed rulemaking, consist of the coatings that are applied to the surfaces of a varied range of metal and plastic parts and products. These parts and products are constructed either entirely or partially from metal or plastic, or both. These miscellaneous metal parts and products and miscellaneous plastic parts and products include metal and plastic components of the following types of products as well as the products themselves: fabricated metal products, molded plastic parts, small and large farm machinery, commercial and industrial machinery and equipment, automotive or transportation equipment, interior or exterior automotive parts, construction equipment, motor vehicle accessories, bicycles and sporting goods, toys, recreational vehicles, pleasure craft (recreational boats), extruded aluminum structural components, railroad cars, heavier vehicles, lawn and garden equipment, business machines, laboratory and medical equipment, electronic equipment, steel drums, metal pipes, and numerous other industrial and household products. A heavier vehicle is defined as a self-propelled vehicle designed for transporting persons or property on a street or highway that has a gross vehicle weight rating over 8,500 pounds.<sup>1</sup>

The miscellaneous metal products coatings and plastic parts coatings categories identified by the EPA under section 183(e) of the CAA, and covered by the proposed rulemaking, consist of the coatings that are applied to the surfaces of a varied range of metal and plastic parts and products. These parts and products are constructed either entirely or partially from metal or plastic, or both. The EPA VOC emission control recommendations provided in the Miscellaneous Metal and Plastic Parts Coatings CTG, and reflected in the proposed rulemaking, include VOC content limits and VOC emission rate limitations for metal parts and products surface coatings and plastic parts and products surface coatings, including automotive and transportation plastic parts surface coatings, business machine plastic parts surface coatings, and pleasure craft surface coatings. The EPA recommendations also include VOC content limits for motor vehicle materials surface coatings, which are reflected in the proposed rulemaking as well. The motor vehicle material surface coating VOC content limits, as well as the other proposed coating VOC content limits and VOC emission rate limitations, would also be applicable to the owner and operator of a separate coating line at an automobile and light-duty truck assembly coating facility on which coatings are applied to other parts intended for use in new automobiles or new light-duty trucks or to aftermarket repair or replacement parts for automobiles or light-duty trucks.

<sup>1</sup> See *Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings*, EPA-453/R-08-003, page 4, footnote.

The owner or operator of a separate coating line at an automobile and light-duty truck assembly coating facility, and the owner or operator of a facility that coats a body or body part for a new heavier vehicle, would have the option to elect to be regulated under § 129.52e (relating to control of VOC emissions from automobile and light-duty truck assembly surface coating operations and heavier vehicle coating operations) instead of this proposed rulemaking. This option is provided to allow these owners and operators flexibility in complying with their permit conditions or to optimize their operations. This effectuates the recommendations in the EPA's *Control Techniques Guidelines for Automobile and Light-Duty Truck Assembly Coatings*, EPA-453/R-08-006, Office of Air Quality Planning and Standards, EPA, September 2008, that a state consider giving an owner or operator of a separate coating line at an automobile and light-duty truck assembly coating facility the option of complying with the state's regulation adopted under the 2008 Automobile and Light-Duty Truck Assembly Coatings CTG instead of the 2008 Miscellaneous Metal and Plastic Parts Coatings CTG; and that a state give an owner or operator of a facility that coats bodies or body parts for new heavier vehicles the option to comply with the state's regulation adopted under the 2008 Miscellaneous Metal and Plastic Parts Coatings CTG or the 2008 Automobile and Light-Duty Truck Assembly Coatings CTG. See 2008 Automobile and Light-Duty Truck Assembly Coatings CTG, p. 4 and 2008 Miscellaneous Metal and Plastic Parts Coatings CTG, p. 4.

An owner or operator of an affected surface coating process that applies a surface coating regulated in one of these categories and emits 2.7 tons or more of actual VOC emissions per 12-month rolling period threshold, including related cleaning activities and before consideration of controls, would need to meet the applicable VOC content limit for the coating or the VOC emission rate limit applicable to the coating and would be required to implement work practice standards and recordkeeping. An owner and operator of an affected surface coating process with actual VOC emissions below the 2.7 tons per 12-month rolling period threshold, including related cleaning activities and before consideration of controls, would be subject only to the recordkeeping requirements and, if requested by the Department, reporting requirements of the proposed rulemaking. The types and numbers of these businesses, and how they would be affected, are described below.

However, coatings that are applied to test panels and coupons as part of research and development, quality control, or performance testing activities at paint research or manufacturing facilities are not included in the miscellaneous metal products and plastic parts coatings categories under section 183(e) and are therefore not addressed by the EPA in this CTG.<sup>2</sup> These coating activities would not be regulated by the proposed rulemaking.

The Department's assessment of how many owners and operators of miscellaneous metal parts and products and plastic parts and products manufacturing facilities would potentially be subject to the proposed rulemaking resulted from reviewing information provided in the CTG for these categories, as well as the 2004 NESHAPs, the Department's air quality databases, the U.S. Small Business Administration (SBA) Small Business Size Regulations under 13 CFR Chapter 1, Part 121 (relating to small business size regulations), and information obtained from the Pennsylvania Small Business Development Center's (SBDC) Environmental Management Assistance Program (EMAP). The North American Industry Classification System (NAICS) codes provided by the EPA in the final rule issuing the CTG and the final rules promulgating the 2004 NESHAPs were used to identify potentially subject facilities. The NAICS is an industry classification system developed by Canada, Mexico, and the United States that groups establishments into industry groups based on the economic activities, producing and nonproducing, in

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<sup>2</sup> See *Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings*, EPA-453/R-08-003, page 5.

which the establishment is primarily engaged. NAICS is a two- through six-digit hierarchical classification code system, offering five levels of detail. Each digit in the code is part of a series of progressively narrower categories, and the more digits in the code signify greater classification detail. The first two digits designate the economic sector, the third digit designates the subsector, the fourth digit designates the industry group, the fifth digit designates the NAICS industry, and the sixth digit designates the National industry. A complete and valid NAICS code contains six digits. See <http://www.naics.com/frequently-asked-questions/>, question number 18. More information about the United States portion of the NAICS is available at <http://www.census.gov/eos/www/naics/>.

The EPA provided three-digit NAICS codes in the Federal Register final rule notice issuing the CTG. See *Consumer and Commercial Products, Group IV: Control Techniques Guidelines in Lieu of Regulations for Miscellaneous Metal Products Coatings, Plastic Parts Coatings, Auto and Light-Duty Truck Assembly Coatings, Fiberglass Boat Manufacturing Materials, and Miscellaneous Industrial Adhesives*, 73 FR 58481, 58482. The Federal Register final rule notices promulgating the 2004 NESHAPs listed corresponding six-digit NAICS codes that provided more focused search criteria. These six-digit NAICS codes identified a variety of manufacturing sectors, as described above. See *National Emission Standards for Hazardous Air Pollutants: Surface Coating of Miscellaneous Metal Parts and Products*, 69 FR 130, and *National Emission Standards for Hazardous Air Pollutants: Surface Coating of Plastic Parts and Products*, 69 FR 20968.

The Department gathered information from the “Environmental Facility Application Compliance Tracking System” (eFACTS) database and the Air Information Management System (AIMS) database about potentially affected facilities. These are Department air quality databases that share data and interface with each other. Facility specific information, including the NAICS identifying code, is inputted into eFACTS; the database contains records of permitted and some previously inspected facilities for which permits are not required. Site specific sources and emissions, as well as site NAICS codes, are inputted into AIMS to maintain the emission inventory. However, eFACTS and AIMS do not provide an exhaustive list of all facilities in this Commonwealth, but only those with which the Department has had contact and a reason to input their data; these are usually the largest emitters.

A search of the eFACTS database and the AIMS database, using the NAICS codes provided in the EPA’s final rule notices promulgating the 2004 NESHAPs as the search codes, generated a list of 344 miscellaneous metal parts and miscellaneous plastic parts manufacturing facilities in this Commonwealth reporting VOC emissions or having a permit issued by the Department, or both. The owners and operators of 160, or 46.5%, of these 344 facilities reported VOC emissions for calendar year 2012. The Department assumed that the owners and operators of the 160 facilities with 2012 reported VOC emissions all do surface coating (which is not likely), as a search of the AIMS data for a small number of the listed facilities showed that some with VOC emissions over 2.7 tpy may either be covered by an exemption in the proposed rulemaking or by another surface coating regulation in 25 Pa. Code, Chapter 129 and therefore not be subject to the proposed rulemaking; or do not conduct surface coating and have VOC emissions from some other type of process, such as parts washing.

According to the Department databases, the actual VOC emissions from these 160 facilities assumed to be subject to the proposed rulemaking totaled 4,552 tons in 2012. Of the 160 facilities reporting VOC emissions in 2012, the owners and operators of 139, or 86.9% (139/160), of these facilities reported VOC emissions totaling 2.7 tons or more; their combined reported emissions totaled 4,531 tons in 2012. Accordingly, the owners and operators of these 139 facilities would be assumed to emit 2.7 tons or more of actual VOC emissions per 12-month rolling period threshold, including related cleaning activities and before consideration of controls, and would be required to implement VOC emission reduction measures, work practice standards and recordkeeping requirements. The records would be submitted to the

Department in an acceptable format upon receipt of a written request from the Department. The owners and operators of the remaining 21 facilities, or 13.1% (21/160), reported VOC emissions below 2.7 tons; their combined reported emissions totaled 21 tons in 2012. The owners and operators of these 21 facilities would be subject only to the recordkeeping requirements and, if requested by the Department, reporting requirements of the proposed rulemaking.

A review of the U.S. SBA Small Business Size Regulations under 13 CFR Chapter 1, Part 121 provided the standard used by the Department for determining what constitutes a small business for these NAICS categories. The small business size standard for most of these NAICS categories was based on number of employees and ranged from 500 to 1,500 employees; that is, the business could have as many as 500 to 1,500 employees and be considered a small business. In a few instances the small business-size standard for the affected NAICS code was annual product sales in the millions of dollars. The SBDC EMAP reviewed the list of 160 potentially subject facilities reporting VOC emissions in 2012 identified by the Department from its databases and determined which of the 160 facilities were considered a small business under the SBA Small Business Size Regulations. Employee data could not be found for 58 of the 160 facilities. Annual product sales data did not apply as the small business size standard for any of the 160 facilities reporting VOC emissions in 2012. For the remaining 102 facilities (160 – 58), all but three met the definition of small business under the SBA Small Business Size Regulations based on number of employees. The owners and operators of these three facilities reported a combined total of 78.5 tons of actual VOC emissions in 2012, or 2% of the total 4,552 tons of actual VOC emissions reported in 2012 from these sources. The remaining 4,473.5 tons of actual VOC emissions, or 98%, emitted in 2012 by these sources, therefore, were from small business-sized facilities.

As these data demonstrate, a facility may be classified as a small business under the Federal Small Business Size Regulations under 13 CFR Chapter 1, Part 121, while still emitting sufficient emissions of VOC to be subject to regulations designed to implement measures for the control of those VOC emissions. RACT regulations are a Federal CAA requirement, applicable to the owners and operators of all affected sources that meet the applicable VOC emission thresholds regardless of business size.

It is possible that the proposed rulemaking would also apply to owners and operators of other facilities that perform surface coating of miscellaneous metal parts or miscellaneous plastic parts that have not yet been identified, because the HAP emission reduction measures of the 2004 NESHAPs do not apply to the owners and operators of area sources (that is, sources that emit less than 10 tpy of any single listed HAP or less than 25 tpy of any combination of HAPs). Owners and operators of area source miscellaneous metal parts surface coating facilities or miscellaneous plastic parts surface coating facilities are, therefore, not currently required to implement the HAP emission reduction measures provided in the 2004 NESHAPs and would not have been issued a Title V permit by the Department incorporating these measures as applicable requirements.

The SBDC EMAP provided the Department with a list of 6,624 small business-sized facilities in this Commonwealth identified by the NAICS codes provided in the EPA's final rule notices promulgating the 2004 NESHAPs. Using the percentages developed from analysis of the list of 344 miscellaneous metal parts and miscellaneous plastic parts facilities generated by the Department databases and described above, the Department assumed that 46.5% of the 6,624 facilities on the list provided by the SBDC EMAP conduct surface coating of miscellaneous metal parts or miscellaneous plastic parts, including surface coating of automotive and transportation plastic parts, business machine plastic parts, pleasure craft, bodies or body parts for new heavier vehicles, or other parts intended for use in new automobiles or new light-duty trucks or to aftermarket repair or replacement parts for automobiles or light-duty trucks. Accordingly, the owners and operators of 3,080 facilities (46.5% of 6,624 facilities) identified as small businesses by the SBDC EMAP

would potentially be subject to the proposed rulemaking. Of these 3,080 facilities, the owners and operators of 2,677 facilities (3,080 x 86.9%) are estimated to have actual VOC emissions at or above the 2.7 tons per 12-month rolling period threshold, including related cleaning activities and before consideration of controls, and would be required to implement VOC emission reduction measures, work practice standards and recordkeeping requirements, and submit records to the Department upon receipt of a written request. The owners and operators of the remaining 403 facilities (3,080 – 2,677 facilities, or 13.1%) would be assumed to have actual VOC emissions below the 2.7 tons per 12-month rolling period threshold, including related cleaning activities and before consideration of controls, and would be subject only to the recordkeeping requirements and, if requested by the Department, reporting requirements of the proposed rulemaking. It should be noted, however, that of the 3,080 small business-sized facilities assumed to be subject to the proposed rulemaking, many may not conduct surface coating of miscellaneous metal parts or miscellaneous plastic parts, or may conduct surface coating that would be subject to another surface coating regulation in 25 Pa. Code, Chapter 129, and therefore not be subject to the proposed rulemaking. Therefore, the projected number of 3,080 potentially subject small business-sized facilities is likely higher than the number of small business-sized facilities that would actually be subject to the proposed rulemaking. Additional information regarding potentially affected sources will be gleaned during the public participation process.

The difference in projected number of facilities with VOC emissions equal to or more than 2.7 tons per 12-month rolling period between the Department's list of 139 potentially affected permitted facilities and the SBDC EMAP's list of 2,677 potentially affected small business-sized facilities is likely due to the Department's database being for the owners and operators of previously and currently permitted facilities based on regulatory criteria for acquiring a permit, while the SBDC EMAP list is based on a self-reported business classification about their small-business-sized facility without considering the level of VOC emissions. Most of the owners and operators of the permitted facilities in the Department's database have actual emissions, or the potential to have emissions, at or above 8 tons per year of VOCs, or installed a new source emitting over 2.7 tons VOC emissions per year, thus requiring a permit.

The VOC emission reduction measures included in the 2008 CTG are largely based on the 2004 NESHAPs HAP emission reduction measures. While the owner or operator of a miscellaneous metal parts surface coating facility or miscellaneous plastic parts surface coating facility area source of HAP may not meet the threshold for implementing the HAP emission reduction measures of the 2004 NESHAPs, the owner or operator may meet the applicability threshold limit for implementing the proposed rulemaking measures to control VOC emissions. If the proposed rulemaking would apply to the owners and operators of facilities that have not yet been identified, they would likely be small businesses, as shown above in the discussion of the 344 facilities identified by the Department from its databases. The small business size standard for most of these NAICS categories was based on number of employees and ranged from 500 to 1,500 employees. While a business employing as many as 500 to 1,500 employees could be considered a small business under the Federal Small Business Size regulations, a facility or surface coating operation employing 500 to 1,500 employees could be creating a lot of product and generating large amounts of VOC emissions.

The EPA based its cost effectiveness information in the CTG on the analysis it performed for the 2004 NESHAPs. The EPA assumed that the owners and operators of facilities subject to the CTG applicability threshold of 2.7 tons per 12-month rolling period would use the reformulation of high-VOC content coating materials to low-VOC content coating materials control option because reformulation of coatings is more cost effective than the installation and operation of VOC emission capture systems and add-on air pollution control devices. The EPA used the 2004 NESHAP costs for reformulation of high-HAP content coating materials to low-HAP content coating materials because these costs are thought to be similar to the costs of reformulating high-VOC content coating materials to low-VOC content coating materials. The EPA estimated the cost averaged across all sizes of facilities subject to the 2004 NESHAPs to be \$10,500 per

facility, based on the reformulation of high-HAP content coating materials to low-HAP content coating materials and use of low-HAP content coating materials.<sup>3</sup>

The EPA identified 1,296 facilities in ozone nonattainment areas Nationwide as potentially subject to the levels of control recommended in the CTG. The EPA applied the NESHAP-derived cost of \$10,500 per facility to the number of facilities it identified Nationwide to calculate a total estimated cost of implementation. Multiplying \$10,500 x 1,296 facilities equals a total cost of \$13.6 million, based on the reformulation of high-VOC content coating materials to low-VOC content coating materials and use of low-VOC content coating materials.<sup>4</sup> The EPA estimated that the VOC control measure recommendations in the CTG would reduce VOC emissions from the 1,296 facilities by 35%, or 7,738 tpy. Dividing \$13.6 million by 7,738 tpy equals a cost of \$1,758 per ton of VOC emissions reduced.

The proposed rulemaking provides as one compliance option the use of individual compliant coating materials in proposed § 129.52d(d)(1). Coatings that are compliant with the HAP content limits and emission rate limits of the 2004 NESHAPs and with the proposed rulemaking VOC content limits and emission rate limits in subsection (d) are readily available to the owners and operators of all sizes of subject facilities. The proposed rulemaking would provide flexibility in compliance through the second option of using a combination of VOC content limit compliant coating materials and specified high-transfer-efficient application methods with a VOC emissions capture system and add-on air pollution control device in subsection (d)(2). A third compliance option, the use of a VOC emissions capture system and add-on air pollution control device with an overall control efficiency of at least 90%, instead of the use of complying coating materials and specified high-transfer-efficient application methods, is provided in subsection (d)(3). However, because of the wide availability and lower cost (compared to installation and operation of VOC emissions capture systems and add-on air pollution control devices) of compliant VOC content coating materials and high-transfer-efficient coating application methods, compliant coating materials and specified high-transfer-efficient coating application methods are generally expected to be used by affected owners and operators to reduce VOC emissions from coating processes subject to this proposed rulemaking.

VOC emission limitations established by this proposed rulemaking would not require the submission of applications for amendments to existing operating permits. These requirements would be incorporated as applicable requirements at the time of permit renewal, if less than 3 years remain in the permit term, as specified under § 127.463(c) (relating to operating permit revisions to incorporate applicable standards). If 3 years or more remain in the permit term, the requirements would be incorporated as applicable requirements in the permit within 18 months of the promulgation of the final-form rulemaking, as required under § 127.463(b).

New legal, accounting or consulting procedures would not be required.

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<sup>3</sup> See *Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings*, EPA-453/R-08-003, pages 39-40.

<sup>4</sup> See *Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings*, EPA-453/R-08-003, pages 39-40.

**(16) List the persons, groups or entities, including small businesses, which will be required to comply with the regulation. Approximate the number that will be required to comply.**

The proposed rulemaking would apply to the owner and operator of a miscellaneous metal part surface coating process or miscellaneous plastic part surface coating process, or both, that surface coats automotive and transportation plastic parts, business machine plastic parts, pleasure craft, or bodies or body parts for new heavier vehicles, as well as to the owner and operator of a separate coating line at an automobile and light-duty truck assembly coating facility on which coatings are applied to other parts intended for use in new automobiles or new light-duty trucks or to aftermarket repair or replacement parts for automobiles or light-duty trucks. The Department reviewed its databases and identified 160 facilities whose owners and operators may be subject to the proposed rulemaking. Of the 160 potentially subject facilities, the owners and operators of 99 facilities were identified as small businesses under the SBA Small Business Size Regulations under 13 CFR Chapter 1, Part 121, and the owners and operators of three facilities were identified as not being small businesses. Data could not be found for the remaining 58 facilities to determine if the owners and operators were considered a small business.

The SBDC EMAP provided the Department with a list of 6,624 small business-sized facilities in this Commonwealth identified by the NAICS codes provided in the EPA's final rule notices promulgating the 2004 NESHAPs. Using the percentages developed from the list of facilities generated by its databases and described in the response to Question 15, the Department assumed that 46.5% of the 6,624 facilities on the list provided by the SBDC EMAP conduct miscellaneous metal parts surface coating or miscellaneous plastic parts surface coating. Accordingly, the owners and operators of 3,080 facilities (46.5% of 6,624 facilities) identified as small businesses would potentially be subject to the proposed rulemaking. It should be noted that the owners and operators of many of the 3,080 small business-sized facilities assumed to be subject to the proposed rulemaking may not conduct surface coating of miscellaneous metal parts or miscellaneous plastic parts, or may do surface coating that would be subject to another surface coating regulation in 25 *Pa. Code*, Chapter 129 and therefore not be subject to the proposed rulemaking. Therefore, the projected number of 3,080 potentially subject small business-sized facilities is likely higher than the number of small business-sized facilities that would actually be subject to the proposed rulemaking.

It is possible that the proposed rulemaking would also apply to owners and operators of other facilities that have not yet been identified, because the 2004 NESHAPs do not apply to area sources (that is, sources that emit less than 10 tpy of any single listed HAP or less than 25 tpy of any combination of HAPs).

Please also see the response to Question 15.

**(17) Identify the financial, economic and social impact of the regulation on individuals, small businesses, businesses and labor communities and other public and private organizations. Evaluate the benefits expected as a result of the regulation.**

The EPA based its cost effectiveness information in the Miscellaneous Metal and Plastic Parts Coatings CTG on the analysis it performed for the 2004 NESHAPs. The EPA assumed that the owners and operators of facilities subject to the CTG applicability threshold of 2.7 tons per 12-month rolling period would use the reformulation of high-VOC content coating materials to low-VOC content coating materials control option because reformulation of coatings is more cost effective than installation and operation of VOC emission capture systems and add-on air pollution control devices. The EPA used the 2004 NESHAP costs for reformulation of high-HAP content coating materials to low-HAP content coating materials because these costs are thought to be similar to the costs of reformulating high-VOC content coating materials to low-VOC content coating materials. The EPA estimated the cost averaged across all sizes of facilities subject to the 2004 NESHAPs to be \$10,500 per facility, based on the use of low-HAP content coating materials.

The EPA identified 1,296 facilities in ozone nonattainment areas Nationwide as potentially subject to the levels of control recommended in the CTG. The EPA applied the NESHAP-derived cost of \$10,500 per facility to the number of facilities it identified Nationwide to calculate a total estimated cost of implementation. Multiplying \$10,500 x 1,296 facilities equals a total cost of \$13.6 million Nationwide, based on the reformulation and use of low-VOC content coating materials. The EPA stated in the CTG that it estimates that implementing the recommended VOC control measures would reduce the emissions of VOC from the 1,296 facilities at or above the threshold of 15 pounds per day by 35%, or 7,738 tpy.<sup>5</sup> Dividing \$13.6 million by 7,738 tpy equals a cost of \$1,758 per ton of VOC emissions reduced Nationwide under the CTG.

As discussed in the response to Question 15, the Department estimates that the owners and operators of 139 facilities in this Commonwealth each emit 2.7 tons or more of actual VOC emissions per 12-month rolling period threshold, including related cleaning activities and before consideration of controls. The combined reported VOC emissions of these facilities totaled 4,531 tons in 2012. Using the 35% emission reduction estimate that the EPA used for the Nationwide estimate, implementation of the recommended VOC emission control measures could generate reductions of as much as 1,586 tons (4,531 tons x 35%) of VOC emissions per 12-month rolling period from these 139 facilities.

The Department calculated the estimated maximum annual cost that may be incurred by the owners and operators of the 139 potentially affected facilities in this Commonwealth on a facility basis by using the EPA's cost effectiveness number of \$1,758 per ton of VOC emissions reduced on an annual basis. Multiplying \$1,758/ton reduced x 1,586 tons of VOC emissions reduced equals total combined costs of approximately \$2.8 million for the owners and operators of the 139 facilities on an annual basis. The average estimated cost per facility to implement the proposed VOC control measures is \$2.8 million divided by 139 facilities, which equals approximately \$20,000 per year per facility. This estimated cost of \$20,000 per year per facility is higher than the EPA's estimate of \$10,500 per year per facility. This may be due in part to the Commonwealth-specific emission data used in the calculation.

The Department also calculated the cost effectiveness for the owners and operators of the 139 potentially affected facilities in this Commonwealth using the EPA's cost of \$10,500 per year per facility. The estimated total maximum anticipated annual costs to the affected regulated industry could be up to \$1.46 million (\$10,500 x 139 facilities). Therefore, the cost effectiveness for the reductions of 1,586 tons of VOC

<sup>5</sup> See *Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings*, pages 32 and 40.

emissions would be approximately \$920 per ton of VOC emissions reduced (\$1.46 million/1,586 tons) on an annual basis, which is lower than the EPA estimate of \$1,758 per ton of VOC emissions reduced on an annual basis.

The Department therefore estimates that the range of cost effectiveness to the regulated industry for implementing the proposed rulemaking is \$920/ton VOC emissions reduced to \$1,758/ton reduced on an annual basis. The range of cost per regulated facility for implementing the proposed VOC emission control measures is estimated to be \$10,500 to \$20,000 per year per facility. The Department expects that the annual costs to the regulated industry in this Commonwealth will be at the lower end of these ranges because low-VOC content coating materials are likely to be readily available at a cost that is not significantly greater than the high-VOC content coatings they replace as a result of the development of NESHAP-compliant low-HAP content coating materials, since lower HAP content usually means lower VOC content. Therefore, the research and development of low-VOC content coating materials should already be complete and these expenses would not be a factor in the cost of complying with the proposed rulemaking VOC emission control measures.

The Department estimates a similar cost-effectiveness for small businesses. Extrapolating the amount of total VOC emissions, 4,531 tons, including related cleaning activities and before consideration of controls, from the 139 facilities identified in the Department's databases as emitting at or above the 2.7 tons per 12-month rolling period to the potentially subject 2,677 small business-sized facilities identified by the SBDC EMAP that could have actual VOC emissions at or above the 2.7 tons per 12-month rolling period threshold, including related cleaning activities and before consideration of controls, projects total VOC emissions of 87,262 tons from these sources ( $139/4,531 \text{ tons} = 2,677/X \text{ tons}$ ). Implementation of the recommended control measures could generate potential VOC emission reductions of 30,542 tons per 12-month rolling period ( $87,262 \text{ tons} \times 35\%$ ) from the 2,677 potentially subject small business-sized facilities identified by the SBDC EMAP.

The Department calculated the estimated maximum annual cost that may be incurred by the owners and operators of the 2,677 potentially affected small business-sized facilities in this Commonwealth on a facility basis by using the EPA's cost effectiveness number of \$1,758 per ton of VOC emissions reduced. Multiplying \$1,758/ton reduced  $\times$  30,542 tons of VOC emissions reduced equals total combined costs of approximately \$53.7 million for the owners and operators of the 2,677 facilities. The cost per facility is \$53.7 million divided by 2,677 facilities, which equals approximately \$20,000 per facility to implement the proposed VOC control measures. This cost of \$20,000 per facility is higher than the EPA's estimate of \$10,500 per facility.

The Department also calculated the cost effectiveness for the owners and operators of the 2,677 potentially affected small business-sized facilities in this Commonwealth using the EPA's cost of \$10,500 per facility. The estimated total maximum anticipated annual costs to the potentially subject owners and operators of regulated small businesses could be up to \$28 million ( $\$10,500 \times 2,677 \text{ facilities}$ ). Therefore, the cost effectiveness for the reductions of 30,542 tons of VOC emissions would be approximately \$920 per ton of VOC emissions reduced ( $\$28 \text{ million}/30,452 \text{ tons}$ ) on an annual basis, which again is lower than the EPA estimate of \$1,758 per ton of VOC emissions reduced on an annual basis.

The Department therefore estimates that the range of cost effectiveness to the small business-sized regulated industry for implementing the proposed rulemaking is \$920/ton VOC emissions reduced to \$1,758/ton reduced. The range of cost per small business-sized regulated facility for implementing the proposed VOC emission control measures is estimated to be \$10,500 per facility to \$20,000 per facility. The Department expects that the costs to the small business-sized regulated industry in this Commonwealth will be at the

lower end of these ranges because low-VOC content coating materials are likely to be readily available at a cost that is not significantly greater than the high-VOC content coatings they replace as a result of the development of NESHAP-compliant low-HAP content coating materials, since lower HAP content usually means lower VOC content. Therefore, the research and development of low-VOC content coating materials should already be complete and these expenses would not be a factor in the cost of complying with the proposed rulemaking VOC emission control measures.

The owner and operator of a subject facility that already complies with the requirements of the 2004 NESHAPs or other applicable Best Available Technology permitting requirements through the use of VOC emission capture systems and add-on air pollution control devices may already comply with the requirements of this proposed rulemaking and, if so, might have no additional annual costs. The proposed rulemaking provides as one compliance option the use of individual compliant coating materials in proposed § 129.52d(d)(1). Coatings that are compliant with the 2004 NESHAPs HAP content limits and with the proposed rulemaking VOC content limits are readily available to the owners and operators of all sizes of affected facilities. The proposed rulemaking would provide flexibility in compliance through the second option of using a combination of VOC content limit compliant coating materials and specified high-transfer-efficient application methods with a VOC emissions capture system and add-on air pollution control device in subsection (d)(2). A third compliance option, the use of a VOC emissions capture system and add-on air pollution control device with an overall control efficiency of at least 90%, instead of the use of complying coating materials and specified high-transfer-efficient application methods, is provided in subsection (d)(3). However, because of the wide availability and lower cost (compared to installation and operation of VOC emission capture systems and add-on air pollution control devices) of compliant VOC content coating materials and high-transfer-efficient coating application methods, compliant coating materials and specified high-transfer-efficient coating application methods are generally expected to be used by affected owners and operators to reduce VOC emissions from miscellaneous metal parts surface coating processes and miscellaneous plastic parts surface coating processes.

The implementation of the work practices for the use and application of cleaning materials is expected to result in a net cost savings. The recommended work practices for cleaning activities should reduce the amounts of cleaning materials used by reducing the amounts that are lost to evaporation, spillage and waste.

The recordkeeping and reporting requirements for owners and operators at, above or below the threshold for control measures should be minimal because the records required by the proposed rulemaking are in line with what the industry currently tracks for inventory purposes or in current permits. The owner or operator of a facility subject to the proposed rulemaking is required to maintain records sufficient to demonstrate compliance with the applicable requirements. The records shall be maintained on site for 2 years, unless a longer period is required by an order, plan approval or operating permit issued under Chapter 127 (relating to construction, modification, reactivation and operation of sources). Records maintained for compliance demonstrations may include purchase, use, production and other records.

Implementation of the VOC emission control measures in the proposed rulemaking could generate reductions of as much as 1,586 tons of VOC emissions per 12-month rolling period from the 139 facilities identified by the Department in its databases and as much as 30,542 tons per 12-month rolling period from the 2,677 potentially subject small business-sized facilities identified by the SBDC EMAP, depending on the level of compliance already demonstrated by the owners and operators of these facilities. These projected estimated reductions in VOC emissions and the subsequent reduced formation of ozone would help ensure that the owners and operators of regulated facilities, farms and agricultural enterprises, hardwoods and timber industries and tourism-related businesses, and residents of labor communities, citizens and the environment of this Commonwealth experience the benefits of improved ground-level

ozone air quality. Commonwealth residents would also potentially benefit from improved groundwater quality through reduced quantities of VOCs and HAPs from low-VOC content and low-HAP content miscellaneous metal parts and miscellaneous plastic parts coatings and cleaning materials. Although the proposed rulemaking is designed primarily to address ozone air quality, the reformulation or substitution of low-VOC content coating materials, to meet the VOC content limits applicable to users may also result in reduction of HAP emissions, which are also a serious health threat. The reduced levels of high-VOC content and high-HAP content solvents would benefit groundwater quality through reduced loading on water treatment plants and in reduced quantities of high-VOC content and high-HAP content solvents leaching into the ground, streams and rivers.

The proposed rulemaking may create economic opportunities for VOC emission control technology innovators, manufacturers, and distributors through an increased demand for new or improved equipment. In addition, the owners and operators of regulated facilities that use VOC emissions capture systems and add-on air pollution control devices may be required to install and operate an emissions monitoring system or equipment necessary for an emissions monitoring method in order to comply with the rulemaking, thereby creating an economic opportunity for the emissions monitoring industry.

Please also see the response to Question 18.

**(18) Explain how the benefits of the regulation outweigh any cost and adverse effects.**

The benefits of the proposed rulemaking are expected to outweigh the costs that would be incurred as a result of the proposed rulemaking. As explained in the response to Question 17, the range of cost effectiveness of implementing the proposed VOC emission control measures is estimated to be \$920 to \$1,758 per ton of VOC emissions reduced on an annual basis from affected facilities. Also as explained in the response to Question 17, the maximum anticipated total annual costs to the owners and operators of the potentially subject facilities range from \$1.46 million to \$2.8 million for the 139 facilities identified by the Department in its databases and from \$28 million to \$53.7 million for the 2,677 potentially subject small business-sized facilities identified by the SBDC EMAP. The Department expects that the costs to the known regulated industry and to the small business-sized regulated industry in this Commonwealth will be at the lower end of these ranges because low-VOC content coating materials are likely to be readily available at a cost that is not significantly greater than the high-VOC content coating materials they replace as a result of the development of NESHAP-compliant low-HAP content coating materials, since lower HAP content usually means lower VOC content. Therefore, the research and development of low-VOC content coating materials should already be complete and these expenses would not be a factor in the cost of complying with the proposed rulemaking VOC emission control measures.

As discussed in the response to Question 10, the EPA has estimated the monetized health benefits of attaining the 8-hour ozone standard of 0.075 ppm to range from \$8.3 billion to \$18 billion on a National basis by 2020. Prorating that benefit to the Commonwealth, based on population, results in a public health benefit of \$337 million to \$732 million. The Department is not stating that these estimated monetized health benefits would all be the result of implementing the proposed rulemaking RACT measures, but the EPA estimates are indicative of the benefits to Commonwealth residents and the owners and operators of businesses and industries of attaining the NAAQS. The estimated annual costs of \$1.46 million to \$2.8 million for the owners and operators of potentially affected identified facilities and the estimated annual costs of \$28 million to \$53.7 million for the owners and operators of potentially affected small business-sized facilities for implementing the proposed VOC emission control measures pale in comparison to the public health benefit of \$337 million to \$732 million to Commonwealth residents of attaining the 2008 8-hour ozone standard.

Further, as discussed in the response to Question 10, the economic benefits to the Commonwealth's agricultural and hardwoods industries, which have total annual economic impacts of \$57 billion and \$18.4 billion respectively, of attaining and maintaining the ozone NAAQS through reduced emissions of ozone precursors from coating processes subject to this proposed rulemaking, far outweigh the estimated maximum annual costs of \$1.46 million to \$2.8 million that may be incurred collectively by the owners and operators of potentially affected identified facilities and the estimated annual costs of \$28 million to \$53.7 million for the owners and operators of potentially affected small business-sized facilities.

**(19) Provide a specific estimate of the costs and/or savings to the regulated community associated with compliance, including any legal, accounting or consulting procedures which may be required. Explain how the dollar estimates were derived.**

The cost of complying with the requirements in the proposed rulemaking includes the cost of using low-VOC content coating materials; VOC emission capture systems and add-on air pollution control devices; or a combination of these two approaches.

The Miscellaneous Metal and Plastic Parts Coatings CTG provided VOC emission reduction cost-effectiveness information based on the 2004 NESHAPs. The EPA assumed that all owners and operators of facilities subject to the total actual VOC emissions applicability threshold of 15 pounds per day or the equivalent 2.7 tons per 12-month rolling period, including related cleaning activities and before consideration of controls, will use the reformulation of high-VOC content coating materials to low-VOC content coating materials option because it is more cost effective than installation and operation of VOC emission capture systems and add-on air pollution control devices. The EPA used the 2004 NESHAPs costs for reformulation to low-HAP content coating materials because these costs are thought to be similar to the costs for reformulation to low-VOC content coating materials. The EPA determined that the annual costs averaged across all sizes of facilities subject to the CTG to be estimated at \$10,500 per facility and the cost effectiveness to be \$1,758 per ton of VOC emissions reduced.

The EPA stated in the CTG that it estimates that implementing the recommended control measures would reduce the emissions of VOC from affected facilities at or above the threshold of 15 pounds per day by 35%. Therefore, implementation of the recommended control measures could generate reductions of as much as 1,586 tons (4,531 tons x 35%) of VOC emissions per 12-month rolling period from the 139 facilities identified by the Department in its databases as emitting at or above the 2.7 tons per 12-month rolling period threshold, including related cleaning activities and before consideration of controls, and therefore required to implement the proposed VOC emission reduction control measures.

The Department calculated the estimated maximum annual cost that may be incurred by the owners and operators of the 139 potentially affected facilities in this Commonwealth on a facility basis by using the EPA's cost effectiveness number of \$1,758 per ton of VOC emissions reduced on an annual basis. Multiplying \$1,758/ton reduced x 1,586 tons of VOC emissions reduced equals total combined costs of approximately \$2.8 million for the owners and operators of the 139 facilities on an annual basis. The average estimated cost per facility to implement the proposed VOC control measures is \$2.8 million divided by 139 facilities, which equals approximately \$20,000 per year per facility. This estimated cost of \$20,000 per year per facility is higher than the EPA's estimate of \$10,500 per year per facility. This difference in cost per year per facility may be due in part to the Commonwealth-specific emission data used in the calculation.

The Department also calculated the cost effectiveness for the owners and operators of the 139 potentially affected facilities in this Commonwealth using the EPA's cost of \$10,500 per year per facility. The

estimated total maximum anticipated annual costs to the affected regulated industry could be up to \$1.46 million ( $\$10,500 \times 139$  facilities). Therefore, the cost effectiveness for the reductions of 1,586 tons of VOC emissions would be approximately \$920 per ton of VOC emissions reduced ( $\$1.46 \text{ million} / 1,586 \text{ tons}$ ) on an annual basis, which is lower than the EPA estimate of \$1,758 per ton of VOC emissions reduced on an annual basis. This difference in cost effectiveness may be due in part to the Commonwealth-specific emission data used in the calculation.

Extrapolating the amount of total VOC emissions, 4,531 tons, including related cleaning activities and before consideration of controls, from the 139 facilities identified in the Department's databases as emitting at or above the 2.7 tons per 12-month rolling period to the potentially subject 2,677 small business-sized facilities identified by the SBDC EMAP that could have actual VOC emissions at or above the 2.7 tons per 12-month rolling period threshold, including related cleaning activities and before consideration of controls, projects total VOC emissions of 87,262 tons from these sources ( $139 / 4,531 \text{ tons} = 2,677 / X \text{ tons}$ ). Implementation of the recommended control measures could generate potential VOC emission reductions of 30,542 tons per 12-month rolling period ( $87,262 \text{ tons} \times 35\%$ ) from the 2,677 potentially subject small business-sized facilities identified by the SBDC EMAP.

The Department calculated the estimated maximum annual cost that may be incurred by the owners and operators of the 2,677 potentially affected small business-sized facilities in this Commonwealth on a facility basis by using the EPA's cost effectiveness number of \$1,758 per ton of VOC emissions reduced annually. Multiplying  $\$1,758/\text{ton reduced} \times 30,542 \text{ tons of VOC emissions reduced}$  equals total combined costs of approximately \$53.7 million for the owners and operators of the 2,677 facilities on an annual basis. The cost per facility is \$53.7 million divided by 2,677 facilities, which equals approximately \$20,000 per year per facility to implement the proposed VOC control measures. This cost of \$20,000 per year per facility is higher than the EPA's estimate of \$10,500 per year per facility.

The Department also calculated the cost effectiveness for the owners and operators of the 2,677 potentially affected small business-sized facilities in this Commonwealth using the EPA's cost of \$10,500 per year per facility. The estimated total maximum anticipated annual costs to the potentially subject owners and operators of regulated small businesses could be up to \$28 million ( $\$10,500 \times 2,677$  facilities). Therefore, the cost effectiveness for the reductions of 30,542 tons of VOC emissions would be approximately \$920 per ton of VOC emissions reduced ( $\$28 \text{ million} / 30,542 \text{ tons}$ ) on an annual basis, which again is lower than the EPA estimate of \$1,758 per ton of VOC emissions reduced on an annual basis.

The Department therefore estimates that the range of cost effectiveness to the regulated industry for implementing the proposed rulemaking is \$920/ton VOC emissions reduced to \$1,758/ton reduced on an annual basis. The range of cost per regulated facility for implementing the proposed VOC emission control measures is estimated to be \$10,500 to \$20,000 per year per facility. The cost per year per facility may be even lower than estimated because low-VOC content coating materials are readily available as a result of the availability of low-HAP content coating materials developed for the owners and operators of facilities subject to the 2004 NESHAPs. Research and development for lower VOC content coating materials should not be needed, since lower HAP coating content usually means lower VOC coating content.

The implementation of the work practices for the use and application of cleaning materials is expected to result in a net cost savings. The recommended work practices for cleaning activities should reduce the amounts of cleaning materials used by reducing the amounts that are lost to evaporation, spillage and waste.

New legal, accounting or consulting procedures would not be required.

**(20) Provide a specific estimate of the costs and/or savings to local governments associated with compliance, including any legal, accounting or consulting procedures which may be required. Explain how the dollar estimates were derived.**

No miscellaneous metal parts surface coating or miscellaneous plastic parts surface coating facilities have been identified as being owned by local governments. If a local government does, however, own or operate a miscellaneous metal parts surface coating process or miscellaneous plastic parts surface coating process, or both, additional costs or savings commensurate with those for the private sector, as set forth above in response to Questions 17 and 19, may be experienced.

**(21) Provide a specific estimate of the costs and/or savings to state government associated with the implementation of the regulation, including any legal, accounting, or consulting procedures which may be required. Explain how the dollar estimates were derived.**

No miscellaneous metal parts surface coating or miscellaneous plastic parts surface coating facilities have been identified as being owned by state government. If a state government agency does, however, own or operate a miscellaneous metal parts surface coating process or miscellaneous plastic parts surface coating process, or both, , additional costs or savings commensurate with those for the private sector, as set forth above in response to Questions 17 and 19, may be experienced.

**(22) For each of the groups and entities identified in items (19)-(21) above, submit a statement of legal, accounting or consulting procedures and additional reporting, recordkeeping or other paperwork, including copies of forms or reports, which will be required for implementation of the regulation and an explanation of measures which have been taken to minimize these requirements.**

No additional legal, accounting, or consulting procedures are expected for the groups identified in items (19)-(21) above.

**(23) In the table below, provide an estimate of the fiscal savings and costs associated with implementation and compliance for the regulated community, local government, and state government for the current year and five subsequent years.**

	Current FY Year  14/15	FY+1 Year  15/16	FY+2 Year  16/17	FY+3 Year  17/18	FY+4 Year  18/19	FY+5 Year  19/20
<b>SAVINGS:</b>	\$	\$	\$	\$	\$	\$
<b>Regulated Community</b>		0.00	0.00	0.00	0.00	0.00
<b>Local Government</b>	0.00	0.00	0.00	0.00	0.00	0.00
<b>State Government</b>		0.00	0.00	0.00	0.00	0.00
<b>Total Savings</b>	0.00	0.00	0.00	0.00	0.00	0.00
<b>COSTS:</b>	\$	\$	\$	\$	\$	\$
<b>Regulated Community</b>	0.00	0.00	0.73 million to 1.4 million	1.46 million to 2.8 million	1.46 million to 2.8 million	1.46 million to 2.8 million
<b>Local Government</b>	0.00	0.00	0.00	0.00	0.00	0.00

State Government	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Costs</b>	0.00	0.00	0.73 million to 1.4 million	1.46 million to 2.8 million	1.46 million to 2.8 million	1.46 million to 2.8 million
<b>REVENUE LOSSES:</b>	\$	\$	\$	\$	\$	\$
Regulated Community	0.00	0.00	0.00	0.00	0.00	0.00
Local Government	0.00	0.00	0.00	0.00	0.00	0.00
State Government	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Revenue Losses</b>	0.00	0.00	0.00	0.00	0.00	0.00

**(23a) Provide the past three year expenditure history for programs affected by the regulation.**

Program	FY-3 (11/12)	FY-2 (12/13)	FY-1 (13/14)	Current FY (14/15)
Environmental Program Management (161-10382)	\$27,755,000	\$24,965,000	\$25,733,000	\$28,517,000
Clean Air Fund Major Emission Facilities (215-20077)	\$20,055,000	\$18,464,000	\$16,340,000	\$20,874,000
Clean Air Fund Mobile and Area Facilities (233-20084)	\$2,710,000	\$10,198,000	\$7,703,000	\$10,581,000

**(24) For any regulation that may have an adverse impact on small businesses (as defined in Section 3 of the Regulatory Review Act, Act 76 of 2012), provide an economic impact statement that includes the following:**

**(a) An identification and estimate of the number of small businesses subject to the regulation.**

The proposed rulemaking would apply to the owner and operator of a miscellaneous metal part surface coating process or miscellaneous plastic part surface coating process, or both. The Department reviewed its databases and identified 160 facilities whose owners and operators may be subject to the proposed rulemaking. Of the 160 potentially subject facilities, the owners and operators of 99 facilities were identified as small businesses under the SBA Small Business Size Regulations under 13 CFR Chapter 1, Part 121, and the owners and operators of three facilities were identified as not being small businesses. Data could not be found for the remaining 58 facilities to determine if the owners and operators were considered a small business.

The SBDC EMAP provided the Department with a list of 6,624 small business-sized facilities in this Commonwealth identified by the NAICS codes provided in the EPA's final rule notices promulgating the 2004 NESHAPs. Using the percentages developed from the list of facilities generated by its databases and described in the response to Question 15, the Department assumed that 46.5% of the 6,624 facilities on the list provided by the SBDC EMAP do miscellaneous metal parts surface coating or miscellaneous plastic parts surface coating. Accordingly, the owners and operators of 3,080 facilities (46.5% of 6,624 facilities)

identified as small businesses would potentially be subject to the proposed rulemaking. It should be noted that the owners and operators of many of the 3,080 small business-sized facilities assumed to be subject to the proposed rulemaking may not do surface coating of miscellaneous metal parts or miscellaneous plastic parts, or may do surface coating that would be subject to another surface coating regulation in *25 Pa. Code*, Chapter 129 and therefore not be subject to the proposed rulemaking. Therefore, the projected number of 3,080 potentially subject small business-sized facilities is likely higher than the number of small business-sized facilities that would actually be subject to the proposed rulemaking.

It is possible that the proposed rulemaking would also apply to owners and operators of other facilities that have not yet been identified. If the proposed rulemaking would apply to other facilities, they would likely also be small businesses.

**(b) The projected reporting, recordkeeping, and other administrative costs required for compliance with the proposed regulation, including the type of professional skills necessary for preparation of the report or record.**

The recordkeeping and reporting requirements for owners and operators at, above and below the threshold for control measures should be minimal because the records required by the proposed rulemaking are in line with what the industry currently tracks for inventory purposes or in current permits. The owner or operator of a facility subject to the proposed rulemaking would be required to maintain records sufficient to demonstrate compliance with the applicable requirements. The records would be maintained on site for 2 years, unless a longer period is required by an order, plan approval or operating permit issued under Chapter 127. Records maintained for compliance demonstrations may include purchase, use, production and other records. There are no further legal, accounting or consulting procedures established in the proposed rulemaking.

**(c) A statement of probable effect on impacted small businesses.**

Implementation of the proposed rulemaking provisions should have minimal impact on the owners and operators of affected small business-sized facilities. The proposed rulemaking provides as one compliance option the use of individual compliant coating materials in proposed § 129.52d(d)(1). Coatings that are compliant with the HAP content limits of the 2004 NESHAPs and with the proposed rulemaking VOC content limits and emission rate limits are readily available to the owners and operators of all sizes of subject facilities. The proposed rulemaking would provide flexibility in compliance through the second option of using a combination of VOC content limit compliant coating materials and specified high-transfer-efficient application methods with a VOC emissions capture system and add-on air pollution control device in subsection (d)(2). A third compliance option, the use of a VOC emissions capture system and add-on air pollution control device with an overall control efficiency of at least 90%, instead of the use of complying coating materials and specified high-transfer-efficient application methods, is provided in subsection (d)(3). However, because of the wide availability and lower cost (compared to installation and operation of a VOC emission capture system and add-on air pollution control device) of compliant VOC content coating materials and high-transfer-efficient coating application methods, compliant coating materials and specified high-transfer-efficient coating application methods are generally expected to be used by affected owners and operators to reduce VOC emissions from miscellaneous metal parts surface coating processes and miscellaneous plastic parts surface coating processes. Many owners or operators may already be using complying coatings or may be complying through the use of an existing VOC emission capture system and add-on air pollution control device and would not incur additional costs to implement the requirements of the proposed rulemaking.

**(d) A description of any less intrusive or less costly alternative methods of achieving the purpose of the proposed regulation.**

There are no less intrusive or less costly alternative regulatory provisions available. The Department included flexibilities within the proposed rulemaking, but the proposed rulemaking must satisfy the Federal RACT requirements. RACT regulations are a Federal CAA requirement, applicable to the owners and operators of all subject sources that meet the applicable VOC emission thresholds regardless of business size. In accordance with sections 172(c)(1), 182(b)(2)(A) and 184(b)(1)(B) of the CAA, the proposed rulemaking establishes the VOC emission limitations and other requirements of the EPA 2008 Miscellaneous Metal and Plastic Parts Coatings CTG as RACT for these sources in this Commonwealth. See *Consumer and Commercial Products, Group IV: Control Techniques Guidelines in Lieu of Regulations for Miscellaneous Metal Products Coatings, Plastic Parts Coatings, Auto and Light-Duty Truck Assembly Coatings, Fiberglass Boat Manufacturing Materials, and Miscellaneous Industrial Adhesives*, 73 FR 58481, 58483.

**(25) List any special provisions which have been developed to meet the particular needs of affected groups or persons including, but not limited to, minorities, the elderly, small businesses, and farmers.**

Minorities, the elderly, small businesses, and farmers who are not owners or operators of a subject facility that performs surface coating of miscellaneous metal parts or miscellaneous plastic parts, would not be affected by the proposed rulemaking. For those that might be owners or operators of a subject facility, no special provisions are necessary. As explained above in the response to Question 15, compliant low-VOC content materials are readily available to the owners and operators of all sizes of affected facilities and are widely in use.

**(26) Include a description of any alternative regulatory provisions which have been considered and rejected and a statement that the least burdensome acceptable alternative has been selected.**

The proposed rulemaking is considered the least burdensome acceptable method of ensuring compliance with the Federal RACT mandate. In accordance with sections 172(c)(1), 182(b)(2)(A) and 184(b)(1)(B) of the CAA, the proposed rulemaking establishes the VOC emission limitations and other requirements of the EPA 2008 Miscellaneous Metal and Plastic Parts Coatings CTG as RACT for these sources in this Commonwealth. See *Consumer and Commercial Products, Group IV: Control Techniques Guidelines in Lieu of Regulations for Miscellaneous Metal Products Coatings, Plastic Parts Coatings, Auto and Light-Duty Truck Assembly Coatings, Fiberglass Boat Manufacturing Materials, and Miscellaneous Industrial Adhesives*, 73 FR 58481, 58483 (October 7, 2008).

The proposed rulemaking provides as one compliance option the use of individual compliant coating materials in proposed § 129.52d(d)(1). Coatings that are compliant with the HAP content limits and emission rate limits of the 2004 NESHAPs and with the proposed rulemaking VOC content limits and emission rate limits are readily available to the owners and operators of all sizes of subject facilities. The proposed rulemaking would provide flexibility in compliance through the second option of using a combination of VOC content limit compliant coating materials and specified high-transfer-efficient application methods with a VOC emissions capture system and add-on air pollution control device in subsection (d)(2). A third compliance option, the use of a VOC emissions capture system and add-on air pollution control device with an overall control efficiency of at least 90%, instead of the use of complying coating materials and specified high-transfer-efficient application methods, is provided in subsection (d)(3). However, because of the wide availability and lower cost (compared to installation and operation of VOC emissions capture systems and add-on air pollution control devices) of compliant VOC content coating materials and high-transfer-efficient coating application methods, compliant coating materials and specified

high-transfer-efficient coating application methods are generally expected to be used by affected owners and operators of a subject facility to reduce VOC emissions from miscellaneous metal parts surface coating processes or miscellaneous plastic parts surface coating processes.

**(27) In conducting a regulatory flexibility analysis, explain whether regulatory methods were considered that will minimize any adverse impact on small businesses (as defined in Section 3 of the Regulatory Review Act, Act 76 of 2012), including:**

**(a) The establishment of less stringent compliance or reporting requirements for small businesses.**

Minimal adverse impact is expected for the owners and operators of small business-sized facilities because compliant VOC content coating materials are readily available. Less stringent compliance requirements are not available, as the proposed rulemaking is and must be designed to achieve the RACT requirements of the CAA. The EPA set forth its recommendations for RACT for this industry in its *Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings*, EPA 453/R-08-003, Office of Air Quality Planning and Standards, EPA, September 2008. The Department included the least stringent recordkeeping and reporting requirements available that would ensure compliance with the proposed rulemaking. Recordkeeping is minimal and reporting is only necessary upon Department request.

**(b) The establishment of less stringent schedules or deadlines for compliance or reporting requirements for small businesses.**

Minimal adverse impact is expected for the owners and operators of small business-sized facilities. As explained in response to Question 9, the proposed rulemaking is overdue to the EPA for approval as a SIP revision. Further delay of implementation would not be feasible. The proposed rulemaking provides ample time for the owners and operators of facilities that might be subject to the rulemaking to comply.

**(c) The consolidation or simplification of compliance or reporting requirements for small businesses.**

Minimal adverse impact is expected for the owners and operators of small business-sized facilities. The compliance options in the proposed rulemaking should allow the owners and operators of small business-sized facilities to find an acceptable method of compliance appropriate to their operations.

**(d) The establishment of performing standards for small businesses to replace design or operational standards required in the regulation.**

The proposed rulemaking includes performance standards. If an owner or operator of an affected facility, including a small business, chooses not to comply solely by using low-VOC content coating materials, the owner or operator may comply by using some low-VOC content coating materials or using a VOC emission capture system and add-on air pollution control device, or both, that meet a specified emission rate. In other words, the proposed rulemaking provides three different ways to achieve the desired emission levels. Minimal adverse impact is expected for the owners and operators of small business-sized facilities. Low-VOC content coating materials are likely to be readily available at a cost that is not significantly greater than the high-VOC content coating materials they replace as a result of the development of NESHAP-compliant low-HAP content coating materials, since lower HAP content usually means lower VOC content.

**(e) The exemption of small businesses from all or any part of the requirements contained in the regulation.**

RACT regulations are a Federal CAA requirement, applicable to the owners and operators of all sources that meet the applicable VOC emission thresholds regardless of business size. The owner and operator of a facility may be classified as a small business under the Federal Small Business Size Regulations under 13 CFR Chapter 1, Part 121, while still emitting sufficient emissions of VOC to be subject to regulations designed to implement measures for the control of those VOC emissions.

The owners and operators of small businesses may not be exempted from the proposed requirements by state regulation. Nor is there a need to exempt the owners and operators of small businesses from this proposed rulemaking, as compliant low-VOC content materials are readily available and widely in use.

**(28) If data is the basis for this regulation, please provide a description of the data, explain in detail how the data was obtained, and how it meets the acceptability standard for empirical, replicable and testable data that is supported by documentation, statistics, reports, studies or research. Please submit data or supporting materials with the regulatory package. If the material exceeds 50 pages, please provide it in a searchable electronic format or provide a list of citations and internet links that, where possible, can be accessed in a searchable format in lieu of the actual material. If other data was considered but not used, please explain why that data was determined not to be acceptable.**

As explained above in the responses to Questions 9 and 10, the Commonwealth's SIP must include regulations to control VOC emissions from miscellaneous metal and plastic parts coatings. Section 183(e) of the CAA directed the EPA to conduct a study of VOC emissions from the use of consumer and commercial products to assess their potential to contribute to violations of the NAAQS for ozone and to list for regulation those categories of products that account for at least 80% of the VOC emissions, on a reactivity-adjusted basis, from consumer and commercial products in areas that violate the NAAQS for ozone (namely, ozone nonattainment areas). The EPA published the initial list at 60 FR 15264 (March 23, 1995). The EPA included miscellaneous metal products coatings and plastic parts coatings in this initial list.

Recommended controls for VOC emissions from these materials are covered by a CTG issued by the EPA under the following notice, which lists the EPA's determination of product categories for which the EPA would produce CTGs instead of National regulations and which indicated that the EPA was simultaneously issuing final CTGs for these product categories: *Consumer and Commercial Products, Group IV: Control Techniques Guidelines in Lieu of Regulations for Miscellaneous Metal Products Coatings, Plastic Parts Coatings, Auto and Light-Duty Truck Assembly Coatings, Fiberglass Boat Manufacturing Materials, and Miscellaneous Industrial Adhesives*, 73 FR 58481 (October 7, 2008). The CTG applicable to this proposed rulemaking is *Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings*, EPA-453/R-08-003, EPA, September 2008.

According to the EPA, the information that the agency used for determining the recommended RACT measures for the control of VOC emissions from miscellaneous metal and plastic parts coatings contained in the 2008 CTG includes: source VOC emission data; a comprehensive review of current state and local VOC emission reduction approaches for miscellaneous metal and plastic parts coatings; the 1978 CTG for controlling VOC emissions from surface coating of Miscellaneous Metal Parts and Products (EPA-450/2-78-015); the 1988 New Source Performance Standards (NSPS) for Surface Coating of Plastic Parts for Business Machines; the 1994 Alternative Control Techniques Document: Surface Coating of Automotive/Transportation and Business Machine Plastic Parts; and background information, including the

costs of the HAP control approaches, gathered for the 2004 NESHAP for Surface Coating of Miscellaneous Metal Parts and Products, 40 CFR Part 63, Subpart MMMM and the 2004 NESHAP for Surface Coating of Plastic Parts and Products, 40 CFR Part 63, Subpart PPPP. The EPA also used the 2002 National Emissions Inventory (NEI) database to estimate the number of miscellaneous metal product and plastic part manufacturing facilities in the United States and the total amount of actual VOC emissions from these facilities. See *Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings*, EPA-453/R-08-003, Office of Air Quality Planning and Standards, EPA, September 2008, pages 5 and 39.

The Department reviewed the information provided by the EPA in the CTG for establishing RACT for these sources and believes that the data used by the EPA to develop the RACT recommendations meet the acceptability standard for empirical, replicable and testable data. Additionally, according to the EPA's website, at <http://www.rlch.org/open-for-comment/epas-scientific-integrity-policy-available-comment>, the agency adheres to the 2002 Office of Management and Budget (OMB) Information Quality Guidelines, the 2005 OMB Information Quality Bulletin for Peer Review, the EPA's Quality Policy (CIO 2106) for assuring the collection and use of sound, scientific data and information, the EPA's Peer Review Handbook for internal and external review of scientific products, and the EPA's Information Quality Guidelines for maximizing the transparency, integrity and utility of information published on the agency's websites.

The following list provides more complete citations for data sources referenced in this Regulatory Analysis Form:

*Alternative Control Techniques Document: Surface Coating of Automotive/Transportation and Business Machine Plastic Parts*. EPA-453/R-94-017. U.S. Environmental Protection Agency, Research Triangle Park, NC, February 1994. <http://www.epa.gov/airquality/ozonepollution/SIPToolkit/ctgs.html>

*Consumer and Commercial Products, Group IV: Control Techniques Guidelines in Lieu of Regulations for Miscellaneous Metal Products Coatings, Plastic Parts Coatings, Auto and Light-Duty Truck Assembly Coatings, Fiberglass Boat Manufacturing Materials, and Miscellaneous Industrial Adhesives*, 73 FR 58481 (October 7, 2008). <http://www.gpo.gov/fdsys/browse/collection.action?collectionCode=FR>

*Control Technique Guidelines for Automobile and Light-Duty Truck Assembly Coatings*, EPA 453/R-08-006, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, EPA, September 2008. [www.epa.gov/airquality/ozonepollution/SIPToolkit/ctgs.html](http://www.epa.gov/airquality/ozonepollution/SIPToolkit/ctgs.html).

*Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings*, EPA 453/R-08-003, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, EPA, September 2008. [www.epa.gov/airquality/ozonepollution/SIPToolkit/ctgs.html](http://www.epa.gov/airquality/ozonepollution/SIPToolkit/ctgs.html).

*Control Technique Guidelines for Miscellaneous Metal and Plastic Part Coatings – Industry request for reconsideration*, June 1, 2010, EPA memorandum, Stephen D. Page, Director, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, NC, 27711.

*Guideline Series: Control of Volatile Organic Emissions from Existing Stationary Sources – Volume VI: Surface Coating of Miscellaneous Metal Parts and Products*. EPA-450/2-78-015. U.S. Environmental Protection Agency, Research Triangle Park, NC, June 1978. <http://www.epa.gov/airquality/ozonepollution/SIPToolkit/ctgs.html>

*National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products*, 40 CFR Part 63, Subpart MMMM (relating to National emission standards for

hazardous air pollutants for surface coating of miscellaneous metal parts and products) (2004 NESHAP), set forth at 40 CFR 63.3880—63.3981.

<http://www.gpo.gov/fdsys/browse/collectionCfr.action?collectionCode=CFR>

*National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products*, 40 CFR Part 63, Subpart PPPP (relating to National emission standards for hazardous air pollutants for surface coating of plastic parts and products) (2004 NESHAP), set forth at 40 CFR 63.4480—63.4581. <http://www.gpo.gov/fdsys/browse/collectionCfr.action?collectionCode=CFR>

North American Industry Classification Standards, <http://www.census.gov/eos/www/naics/> and <http://www.naics.com/>.

Pennsylvania Hardwoods Development Council Biennial Report, 2009-2010, Pennsylvania Hardwoods Development Council, Department of Agriculture. Copy available from the Bureau of Air Quality upon request.

*Standards of Performance for Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines. Applicable to affected facilities for which construction, modification, or reconstruction begins after January 8, 1986.* 40 CFR 60 Subpart TTT.

<http://www.gpo.gov/fdsys/browse/collectionCfr.action?collectionCode=CFR>

*State Implementation Plans; General Preamble for Proposed Rulemaking on Approval of Plan Revisions for Nonattainment Areas—Supplement (on Control Techniques Guidelines)*, 44 FR 53761 (September 17, 1979).

**(29) Include a schedule for review of the regulation including:**

- |   |  |
|---|--|
| A. The date by which the agency must receive public comments:                               | <u>4th Quarter 2015</u>  |
| B. The date or dates on which public meetings or hearings will be held:                     | <u>3rd Quarter 2015</u>  |
| C. The expected date of promulgation of the proposed regulation as a final-form regulation: | <u>2nd Quarter 2016</u>  |
| D. The expected effective date of the final-form regulation:                                | <u>Date of publication</u>   |
| E. The date by which compliance with the final-form regulation will be required:            | <u>January 1, 2016*</u>  |
|   | *Please see response to Question 13 regarding an alternative compliance date upon which the Department is seeking comment. |
| F. The date by which required permits, licenses or other approvals must be obtained:        | <u>NA</u>  |

**(30) Describe the plan developed for evaluating the continuing effectiveness of the regulations after its implementation.**

This regulation will be reviewed in accordance with the sunset review schedule published by the Department to determine whether the regulation effectively fulfills the goals for which it was intended.



FACE SHEET  
FOR FILING DOCUMENTS  
WITH THE LEGISLATIVE REFERENCE  
BUREAU

(Pursuant to Commonwealth Documents Law)

DO NOT WRITE IN THIS SPACE

Copy below is hereby approved as to form and legality.  
Attorney General

By: Amy M. Elliott  
(Deputy Attorney General)

JUN 23 2015  
DATE OF APPROVAL

Check if applicable  
Copy not approved. Objections attached.

Copy below is hereby certified to be true and  
correct copy of a document issued, prescribed or  
promulgated by:

DEPARTMENT OF ENVIRONMENTAL  
PROTECTION  
ENVIRONMENTAL QUALITY BOARD

(AGENCY)

DOCUMENT/FISCAL NOTE NO. 7-491

DATE OF ADOPTION October 21, 2014

BY: [Signature]

TITLE DANA K. AUNKST  
ACTING CHAIRPERSON

EXECUTIVE OFFICER CHAIRMAN OR SECRETARY

Copy below is hereby approved as to form and legality  
Executive or Independent Agencies

BY: [Signature]

MAY 28 2015

DATE OF APPROVAL

(Executive Deputy General Counsel)  
(~~Chief Counsel, Independent Agency~~)  
(Strike inapplicable title)

Check if applicable. No Attorney General Approval  
or objection within 30 days after submission.

2015 JUL 13 PM 3:46

RECEIVED  
IRRC

NOTICE OF PROPOSED RULEMAKING

DEPARTMENT OF ENVIRONMENTAL PROTECTION  
ENVIRONMENTAL QUALITY BOARD

Control of VOC Emissions from Miscellaneous Metal Parts Surface Coating Processes,  
Miscellaneous Plastic Parts Surface Coating Processes and  
Pleasure Craft Surface Coatings

25 Pa. Code, Chapter 129



**PROPOSED RULEMAKING  
ENVIRONMENTAL QUALITY BOARD  
[25 PA CODE CH. 129]**

**Control of Volatile Organic Compound Emissions from Miscellaneous Metal Parts Surface Coating Processes, Miscellaneous Plastic Parts Surface Coating Processes and Pleasure Craft Surface Coatings**

2015 JUL 13 PM 4:13

RECEIVED  
IRRC

The Environmental Quality Board (Board) proposes to amend Chapter 129 (relating to standards for sources) to read as set forth in Annex A. The proposed rulemaking would add § 129.52d (relating to control of VOC emissions from miscellaneous metal parts surface coating processes, miscellaneous plastic parts surface coating processes and pleasure craft surface coatings) to adopt reasonably available control technology (RACT) requirements and RACT emission limitations for stationary sources of volatile organic compound (VOC) emissions from miscellaneous metal parts surface coating processes and miscellaneous plastic parts surface coating processes. These processes include surface coating of automotive and transportation plastic parts, business machine plastic parts, pleasure craft, and bodies or body parts for new heavier vehicles, and surface coating performed on a separate coating line at an automobile and light-duty truck assembly coating facility on which coatings are applied to other parts intended for use in new automobiles or new light-duty trucks or to aftermarket repair or replacement parts for automobiles or light-duty trucks, as well as related cleaning activities. The proposed rulemaking would also add terms and definitions to § 129.52d to support the interpretation of the proposed measures and amend §§ 129.51, 129.52, 129.67 and 129.75 to support the addition of § 129.52d.

This proposed rulemaking will be submitted to the United States Environmental Protection Agency (EPA) for approval as a revision to the Commonwealth's State Implementation Plan (SIP) following promulgation of the final-form regulation.

This proposed rulemaking is given under Board order at its meeting of October 21, 2014.

*A. Effective Date*

This proposed rulemaking will be effective upon final-form publication in the *Pennsylvania Bulletin*.

*B. Contact Persons*

For further information, contact Kirit Dalal, Chief, Division of Air Resource Management, Bureau of Air Quality, Rachel Carson State Office Building, P.O. Box 8468, Harrisburg, PA 17105-8468, (717) 772-3436; or Kristen Furlan, Assistant Director, Bureau of Regulatory Counsel, Rachel Carson State Office Building, P.O. Box 8464, Harrisburg, PA 17105-8464, (717) 787-7060. Information regarding submitting comments on this proposed rulemaking appears in Section J of this preamble. Persons with a disability may use the Pennsylvania AT&T Relay Service, (800) 654-5984 (TDD users) or (800) 654-5988 (voice users). This proposed rulemaking is available on the Department of Environmental Protection's (Department) web site at [www.dep.state.pa.us](http://www.dep.state.pa.us) ("Public Participation Center;" select "Environmental Quality Board").

### C. Statutory Authority

The proposed rulemaking is authorized under section 5(a)(1) of the Air Pollution Control Act (act) (35 P.S. § 4005(a)(1)), which grants the Board the authority to adopt rules and regulations for the prevention, control, reduction and abatement of air pollution in this Commonwealth. Section 5(a)(8) of the act also grants the Board the authority to adopt rules and regulations designed to implement the provisions of the Clean Air Act (CAA) (42 U.S.C.A. §§ 7401—7671q).

### D. Background and Purpose

The purpose of this proposed rulemaking is to implement control measures to reduce VOC emissions from miscellaneous metal parts surface coating processes and miscellaneous plastic parts surface coating processes. These processes include surface coating of automotive and transportation plastic parts, business machine plastic parts, pleasure craft, and bodies or body parts for new heavier vehicles, and surface coating performed on a separate coating line at an automobile and light-duty truck assembly coating facility on which coatings are applied to other parts intended for use in new automobiles or new light-duty trucks or to aftermarket repair or replacement parts for automobiles or light-duty trucks, as well as related cleaning activities.

Miscellaneous metal parts and products and miscellaneous plastic parts and products include metal and plastic components of the following types of products as well as the products themselves: fabricated metal products, molded plastic parts, small and large farm machinery, commercial and industrial machinery and equipment, automotive or transportation equipment, interior or exterior automotive parts, construction equipment, motor vehicle accessories, bicycles and sporting goods, toys, recreational vehicles, pleasure craft (recreational boats), extruded aluminum structural components, railroad cars, heavier vehicles, lawn and garden equipment, business machines, laboratory and medical equipment, electronic equipment, steel drums, metal pipes, and numerous other industrial and household products.

VOCs are precursors for ground-level ozone formation. Ground-level ozone, a public health and welfare hazard, is not emitted directly to the atmosphere from these sources, but is formed by a photochemical reaction between VOCs and nitrogen oxides (NO<sub>x</sub>) in the presence of sunlight. In accordance with sections 172(c)(1), 182(b)(2)(A) and 184(b)(1)(B) of the CAA (42 U.S.C.A. §§ 7502(c)(1), 7511a(b)(2)(A) and 7511c(b)(1)(B)), the proposed rulemaking establishes the VOC emission limitations and other requirements of the EPA 2008 Miscellaneous Metal and Plastic Parts Coatings Control Techniques Guidelines (CTG) for these sources in this Commonwealth. See *Consumer and Commercial Products, Group IV: Control Techniques Guidelines in Lieu of Regulations for Miscellaneous Metal Products Coatings, Plastic Parts Coatings, Auto and Light-Duty Truck Assembly Coatings, Fiberglass Boat Manufacturing Materials, and Miscellaneous Industrial Adhesives*, 73 FR 58481, 58483 (October 7, 2008).

The EPA is responsible for establishing National Ambient Air Quality Standards (NAAQS) for six criteria pollutants considered harmful to public health and the environment: ground-level ozone; particulate matter; NO<sub>x</sub>; carbon monoxide; sulfur dioxide; and lead. Section 109 of the CAA (42 U.S.C.A. § 7409) established two types of NAAQS: primary standards, which are set

to protect public health; and secondary standards, which are set to protect public welfare and the environment, including protection against visibility impairment and from damage to animals, crops, vegetation and buildings. The EPA established primary and secondary ground-level ozone NAAQS to protect public health and welfare.

Ground-level ozone is a highly reactive gas, which at sufficiently high concentrations can produce a wide variety of harmful effects. At elevated concentrations, ground-level ozone can adversely affect human health, animal health, vegetation, materials, economic values, and personal comfort and well-being. It can cause damage to important food crops, forests, livestock and wildlife. Repeated exposure to ozone pollution may cause a variety of adverse health effects for both healthy people and those with existing conditions, including difficulty in breathing, chest pains, coughing, nausea, throat irritation and congestion. It can worsen bronchitis, heart disease, emphysema and asthma, and reduce lung capacity. Asthma is a significant and growing threat to children and adults. High levels of ground-level ozone affect animals in ways similar to humans. High levels of ground-level ozone can also cause damage to buildings and synthetic fibers, including nylon, and reduced visibility on roadways and in natural areas. The implementation of additional measures to address ozone air quality nonattainment in this Commonwealth is necessary to protect the public health and welfare, animal and plant health and welfare and the environment.

In July 1997, the EPA promulgated primary and secondary ozone standards at a level of 0.08 part per million (ppm) averaged over 8 hours. See 62 FR 38856 (July 18, 1997). In 2004, the EPA designated 37 counties in this Commonwealth as 8-hour ozone nonattainment areas for the 1997 8-hour ozone NAAQS. Based on the ambient air monitoring data for the 2013 ozone season, all monitored areas of the Commonwealth are attaining the 1997 8-hour ozone NAAQS. The Department must ensure that the 1997 ozone standard is attained and maintained by implementing permanent and enforceable control measures to ensure violations of the standard do not occur for the next decade.

In March 2008, the EPA lowered the primary and secondary ozone standard to 0.075 ppm averaged over 8 hours to provide even greater protection for children, other at-risk populations and the environment against the array of ozone-induced adverse health and welfare effects. See 73 FR 16436 (March 27, 2008). In April 2012, the EPA designated five areas in this Commonwealth as nonattainment for the 2008 ozone NAAQS. See 77 FR 30088, 30143 (May 21, 2012). These areas include all or a portion of Allegheny, Armstrong, Berks, Beaver, Bucks, Butler, Carbon, Chester, Delaware, Fayette, Lancaster, Lehigh, Montgomery, Northampton, Philadelphia, Washington and Westmoreland Counties. The Commonwealth must ensure that these areas attain the 2008 ozone standard by 2015 and that they continue to maintain the standard thereafter.

There are no Federal statutory or regulatory RACT limits for VOC emissions from these miscellaneous metal parts surface coating processes and miscellaneous plastic parts surface coating processes. In 2004, however, the EPA promulgated 40 CFR Part 63, Subpart MMMM and 40 CFR Part 63, Subpart PPPP (relating to National emission standards for hazardous air pollutants for surface coating of miscellaneous metal parts and products; and National emission standards for hazardous air pollutants for surface coating of plastic parts and products). See 69 FR 130

(January 2, 2004) and 69 FR 20968 (April 19, 2004). These are collectively referred to as the 2004 NESHAPs in this preamble. These 2004 NESHAPs established organic hazardous air pollutant (HAP) emission limits based on low-HAP-content coatings and low-volatile-emitting (non-atomizing) coating application technology for the respective surface coating categories.

When developing the control measure recommendations included in its 2008 Miscellaneous Metal and Plastic Parts Coatings CTG for reducing VOC emissions from these sources, the EPA took into account the HAP emission reduction measures of the 2004 NESHAPs for the metal parts and products and the plastic parts and products coating industries. Many HAPs are VOCs, but not all VOCs are HAPs. The requirements of the 2004 NESHAPs apply to "major sources" of HAP emissions from miscellaneous metal parts and products coating facilities and plastic parts and products coating facilities. For the purpose of regulating HAPs, a "major source" is considered to be a stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year (tpy) or more of any single listed HAP or 25 tpy or more of any combination of HAPs. See section 112(a)(1) of the CAA (42 U.S.C.A. § 7412(a)(1)). See 69 FR 130, 131 and 69 FR 20968, 20969. Most of the Federal recommendations for control of VOC emissions included in the 2008 Miscellaneous Metal and Plastic Parts Coatings CTG are based on the HAP content and emission rate limits for surface coating of miscellaneous metal parts and products and surface coating of plastic parts and products and other requirements in the 2004 NESHAPs for these categories.

For pleasure craft coatings, the EPA took into account California regulations when developing the CTG. California was the only state at that time with regulations governing VOC emissions from pleasure craft coatings. After the EPA finalized the CTG, the pleasure craft coatings industry asserted to the EPA that three of the VOC emission limits in the CTG were too low considering the performance requirements of the pleasure craft coatings and that the VOC emission limits recommended did not represent RACT for the National pleasure craft coatings industry. The industry suggested several options for revision. The EPA did not take action on the concerns, but left it up to the states to address the concerns. On June 1, 2010, the EPA issued a memorandum entitled, "Control Technique Guidelines for Miscellaneous Metal and Plastic Part Coatings – Industry Request for Reconsideration," in which the EPA stated that each state could determine what would be appropriate for the pleasure craft coatings industry in its jurisdiction.

State regulations to control VOC emissions from miscellaneous metal parts surface coating processes and miscellaneous plastic parts surface coating processes, as well as the related cleaning activities, are required under Federal law. The state regulations will be reviewed by the EPA and will be approved by the EPA if the provisions meet the RACT requirements of the CAA and its implementing regulations. See 73 FR 58481, 58483. 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." See *State Implementation Plans; General Preamble for Proposed Rulemaking on Approval of Plan Revisions for Nonattainment Areas—Supplement (on Control Techniques Guidelines)*, 44 FR 53761 (September 17, 1979).

Section 110(a) of the CAA (42 U.S.C.A. § 7410(a)) provides that each state shall adopt and submit to the EPA a plan to implement measures [State Implementation Plan or “SIP”] to enforce the NAAQS or revision to the NAAQS promulgated under section 109(b) of the CAA. Section 172(c)(1) of the CAA provides that SIPs for nonattainment areas must include “reasonably available control measures,” including RACT, for sources of emissions. Section 182(b)(2) of the CAA provides that for moderate ozone nonattainment areas, states must revise their SIPs to include RACT for sources of VOC emissions covered by a CTG document issued by the EPA prior to the area’s date of attainment. More importantly, section 184(b)(1)(B) of the CAA requires that states in the Ozone Transport Region (OTR), including the Commonwealth, submit a SIP revision requiring implementation of RACT for all sources of VOC emissions in the state covered by a specific CTG.

Section 183(e) of the CAA (42 U.S.C.A. § 7511b(e)) directs the EPA to list for regulation those categories of products that account for at least 80% of the VOC emissions from consumer and commercial products in ozone nonattainment areas. Section 183(e)(3)(C) of the CAA further provides that the EPA may issue a CTG document in place of a National regulation for a product category where the EPA determines that the CTG will be “substantially as effective as regulations” in reducing emissions of VOC in ozone nonattainment areas. In 1995, the EPA listed miscellaneous metal products coatings and plastic parts coatings on its section 183(e) list and, in 2008, issued a CTG for these product categories. See 60 FR 15264, 15267 (March 23, 1995) and 73 FR 58481. See *Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings*, EPA-453/R-08-003, Office of Air Quality Planning and Standards, EPA, September 2008. The 2008 Miscellaneous Metal and Plastic Parts Coatings CTG document is available on the EPA web site at [www.epa.gov/airquality/ozonepollution/SIPToolkit/ctgs.html](http://www.epa.gov/airquality/ozonepollution/SIPToolkit/ctgs.html).

In the 2008 notice of final determination and availability of final CTGs, the EPA determined that the recommendations of the 2008 Miscellaneous Metal and Plastic Parts Coatings CTG would be substantially as effective as National regulations in reducing VOC emissions from the miscellaneous metal products coatings and plastic parts coatings product categories in ozone nonattainment areas. See 73 FR 58481. The CTG provides states with the EPA’s recommendation of what constitutes RACT for the covered category. States can use the Federal recommendations provided in the CTG to inform their own determination as to what constitutes RACT for VOC emissions from the covered category. State air pollution control agencies may implement other technically-sound approaches that are consistent with the CAA requirements and the EPA’s implementing regulations or guidelines.

The Department reviewed the recommendations included in the 2008 Miscellaneous Metal and Plastic Parts Coatings CTG for their applicability to the ground-level ozone reduction measures necessary for this Commonwealth. The Bureau of Air Quality determined that the VOC emission reduction measures provided in the 2008 Miscellaneous Metal and Plastic Parts Coatings CTG are appropriate to be implemented in this Commonwealth as RACT for these categories. The Bureau of Air Quality determined that three VOC content limits applicable to the pleasure craft coatings industry should be altered slightly from the CTG to represent RACT for that industry, based on the June 1, 2010, memorandum from the EPA entitled, “Control Technique Guidelines for Miscellaneous Metal and Plastic Part Coatings – Industry Request for

Reconsideration.” The EPA wrote the memorandum in response to input from the pleasure craft coatings industry following the EPA’s publication of the CTG.

This proposed rulemaking would apply to the owner and operator of a facility that manufactures metal parts or products or plastic parts or products, including automotive and transportation plastic parts, business machine plastic parts, pleasure craft, or bodies or body parts for new heavier vehicles, on which subject surface coatings are applied by the owner and operator, as well as to the owner and operator of a facility that applies subject surface coatings to affected parts and products on a contractual basis. This proposed rulemaking would also apply to the owner and operator of a separate coating line at an automobile and light-duty truck assembly coating facility on which subject surface coatings are applied to other parts intended for use in new automobiles or new light-duty trucks or to aftermarket repair or replacement parts for automobiles or light-duty trucks.

The Board is aware of 160 manufacturing facilities in this Commonwealth whose owners and operators may be subject to the proposed VOC emission reduction measures. The owners and operators of as many as 139 of these facilities may emit 2.7 tons or more of actual VOC emissions per 12-month rolling period threshold, including related cleaning activities and before consideration of controls, and would likely be required to implement the proposed VOC emission control measures, work practice standards, and recordkeeping requirements. The owners and operators of the remaining 21 affected facilities with actual VOC emissions below the 2.7 tons per 12-month rolling period threshold, including related cleaning activities and before consideration of controls, would be subject only to the recordkeeping requirements and, if requested by the Department, reporting requirements of the proposed rulemaking. It is possible that the owners and operators of additional facilities that have not been identified could be subject to the proposed rulemaking control measures.

Implementation of the recommended control measures could generate reductions of as much as 1,586 tons of VOC emissions per 12-month rolling period from the 139 facilities. The estimated total maximum annual costs to the affected regulated industry could be up to \$2.8 million. The range of cost per regulated facility for implementing the proposed VOC emission control measures is estimated to be \$10,500 to \$20,000 per facility. The range of cost effectiveness to the regulated industry would be approximately \$920 per ton of VOC emissions reduced to \$1,758 per ton reduced on an annual basis.

The ground-level ozone reduction measures included in this proposed rulemaking would achieve VOC emission reductions locally and would also reduce the transport of VOC emissions and ground-level ozone to downwind states, if implemented for sources of VOC emissions from surface coating processes subject to the proposed rulemaking, as well as the related cleaning activities. Adoption of VOC emission requirements for these sources is part of the Commonwealth’s strategy, in concert with other OTR jurisdictions, to further reduce transport of VOC ozone precursors and ground-level ozone throughout the OTR to attain and maintain the 8-hour ground-level ozone NAAQS.

The proposed rulemaking is required under the CAA and is reasonably necessary to attain and maintain the health- and welfare-based 8-hour ground-level ozone NAAQS and to satisfy related

CAA requirements in this Commonwealth. If published as a final-form regulation in the *Pennsylvania Bulletin*, this proposed rulemaking will be submitted to the EPA as a revision to the Commonwealth's SIP.

The Air Quality Technical Advisory Committee and the Small Business Compliance Advisory Committee were briefed on the proposed rulemaking on February 20, 2014, and April 23, 2014, respectively. Both committees voted unanimously to concur with the Department's recommendation to move the proposed rulemaking forward to the Board for consideration. In addition, the proposed rulemaking was discussed with the Citizens Advisory Council (CAC) Policy and Regulatory Oversight Committee on March 12, 2014. On the recommendation of the Policy and Regulatory Oversight Committee, on March 18, 2014, the CAC concurred with the Department's recommendation to forward the proposed rulemaking to the Board.

#### *E. Summary of Regulatory Requirements*

§ 129.52d. Control of VOC emissions from miscellaneous metal parts surface coating processes, miscellaneous plastic parts surface coating processes and pleasure craft surface coatings.

Under proposed subsection (a)(1), the proposed rulemaking would apply Statewide to the owner and operator of a miscellaneous metal part surface coating process or miscellaneous plastic part surface coating process, or both, if the total actual VOC emissions from all miscellaneous metal part coating units and miscellaneous plastic part coating units, including related cleaning activities, at the facility are equal to or greater than 2.7 tons per 12-month rolling period, before consideration of controls. As with all RACT regulations, an owner or operator would remain subject to the regulation even if the throughput or VOC emissions fall below the applicability threshold.

Proposed subsection (a)(2) specifies that the proposed rulemaking would apply Statewide to the owner and operator of a miscellaneous metal part surface coating process or miscellaneous plastic part surface coating process, or both, if the total actual VOC emissions from all miscellaneous metal part coating units and miscellaneous plastic part coating units, including related cleaning activities, at the facility are below 2.7 tons per 12-month rolling period, before consideration of controls. The only requirements that would apply to an owner or operator subject to subsection (a)(2) would be recordkeeping requirements and, if requested by the Department, reporting requirements.

Proposed subsection (a)(3) specifies that compliance with the VOC emission limits and other requirements of this section assures compliance with the VOC emission limits and other requirements of § 129.52 (relating to surface coating processes) for the miscellaneous metal parts and products surface coating processes as specified in Table I Category No. 10 (relating to miscellaneous metal parts & products) of § 129.52.

Proposed subsection (a)(4) specifies that if an owner or operator elects to comply with § 129.52e (relating to control of VOC emissions from automobile and light-duty truck assembly surface coating operations and heavier vehicle coating operations) under § 129.52e(a)(2) or (3), then § 129.52e instead of this section applies to the separate coating line at the facility, or to the

coating of a body or body part for a new heavier vehicle at the facility, or both, for which the election is made. This effectuates the recommendations in the EPA's *Control Techniques Guidelines for Automobile and Light-Duty Truck Assembly Coatings*, EPA-453/R-08-006, Office of Air Quality Planning and Standards, EPA, September 2008, that a state consider giving an owner or operator of a separate coating line at an automobile and light-duty truck assembly coating facility the option of complying with the state's regulation adopted under the 2008 Automobile and Light-Duty Truck Assembly Coatings CTG instead of the 2008 Miscellaneous Metal and Plastic Parts Coatings CTG; and that a state give an owner or operator of a facility that coats bodies or body parts for new heavier vehicles the option to comply with the state's regulation adopted under the 2008 Miscellaneous Metal and Plastic Parts Coatings CTG or the 2008 Automobile and Light-Duty Truck Assembly Coatings CTG. See 2008 Automobile and Light-Duty Truck Assembly Coatings CTG, p. 4 and 2008 Miscellaneous Metal and Plastic Parts Coatings CTG, p. 4.

Proposed subsection (a)(5) specifies that the proposed rulemaking would not apply to an affected owner or operator in the use or application of coatings under certain operating circumstances.

Under proposed subsection (b), the proposed rulemaking establishes 72 definitions to support this section.

Under proposed subsection (c), the proposed rulemaking establishes that the requirements of this section would supersede the requirements of a RACT permit issued under §§ 129.91—129.95 (relating to stationary sources of NO<sub>x</sub> and VOCs) to the owner or operator of a source subject to subsection (a) prior to January 1, 2016, except to the extent the RACT permit contains more stringent requirements.

Under proposed subsection (d), the proposed rulemaking establishes emission limitations beginning January 1, 2016, for a person subject to subsection (a)(1). Three options for meeting the emission limitations are proposed: in subsection (d)(1), use of compliant materials that meet the VOC content limit for the applicable coating category specified in the applicable table of VOC content limits in Tables I—V; in subsection (d)(2), a combination of one or more VOC-containing coatings, as applied, that meet the emission rate limits for the applicable coating category specified in the applicable table of emission rate limits in Tables VI—IX, and one or more VOC emissions capture systems and one or more add-on air pollution control devices that meet the requirements of subsection (e)(2); or in subsection (d)(3), use of a VOC emissions capture system and add-on air pollution control device that is acceptable under § 129.51(a) (relating to general) and meets the requirements of subsection (e)(2). Under the third option, the overall control efficiency of a control system, as determined by the test methods and procedures specified in Chapter 139 (relating to sampling and testing), may be no less than 90%.

Under proposed subsection (d)(4), the proposed rulemaking establishes that if more than one VOC content limit or VOC emission rate limit applies to a specific coating, then the least restrictive VOC content limit or VOC emission rate limit applies.

Under proposed subsection (d)(5), the proposed rulemaking establishes that for a miscellaneous metal part or miscellaneous plastic part coating that does not meet the coating categories listed in

Table I, II, VI or VII, the VOC content limit or VOC emission rate limit shall be determined by classifying the coating as a general one component coating or general multi-component coating. The corresponding general one component coating or general multi-component coating limit applies.

Under proposed subsection (d)(6), the proposed rulemaking establishes that for a pleasure craft coating that does not meet the coating categories listed in Table IV or IX, the VOC content limit or VOC emission rate limit shall be determined by classifying the coating as an “all other pleasure craft surface coatings for metal or plastic.” The “all other pleasure craft surface coatings for metal or plastic” limit applies.

Under proposed subsection (e), compliance and monitoring requirements are established.

Under proposed subsection (f), recordkeeping and reporting requirements are established.

Under proposed subsection (g), the proposed rulemaking establishes that a person subject to subsection (a)(1) may not cause or permit the emission into the outdoor atmosphere of VOCs from a miscellaneous metal part coating unit or miscellaneous plastic part coating unit, or both, unless the coatings are applied using one or more specified coating application methods.

Under proposed subsection (h), exempt coatings and exempt coating unit operations are established.

Under proposed subsection (i), work practice requirements for coating-related activities are established.

Under proposed subsection (j), work practice requirements for cleaning materials are established.

Under proposed subsection (k), requirements for measurements and calculations are established.

Proposed § 129.52d contains nine tables. Tables I and II propose surface coating VOC content limits for the overarching surface coating categories of “metal parts and products” and “plastic parts and products,” respectively. Tables III—V propose surface coating VOC content limits for the miscellaneous metal and plastic parts surface coating categories of automotive/transportation and business machine plastic parts, pleasure craft, and motor vehicle materials. These tables (Tables I—V) would be used to meet the first option for complying with emission limitations, in proposed subsection (d)(1), namely the use of compliant materials. Tables VI—IX propose surface coating VOC *emission rate* limits for the same surface coating categories as Tables I—V, though there is not a table of VOC *emission rate* limits specific to motor vehicle materials coatings. Tables VI—IX would be used to meet the second or third option for complying with emission limitations in proposed subsection (d)(2) or (3). The second option, described above, is use of a combination of complying coating materials, a VOC emissions capture system and an add-on air pollution control device. The third option, described above, is use of a VOC emissions capture system and an add-on air pollution control device.

Three VOC content limits in Table IV differ from the CTG and reflect the input the EPA received from the pleasure craft coatings industry regarding technological infeasibility following the EPA's publication of the final CTG. These VOC content limits are for Antifoulant Sealer/Tiecoat (not in CTG), Extreme High-gloss Topcoat (more stringent in CTG) and Other Substrate Antifoulant Coating (more stringent in CTG). The Board expects that these revised VOC content limits for the pleasure craft surface coatings would have a *de minimis* impact on the amount of VOC emission reductions achieved from the implementation of the proposed rulemaking.

The proposed rulemaking would make minor clarifying changes to §§ 129.51, 129.52, 129.67 and 129.75 to support the addition of § 129.52d.

#### F. *Benefits, Costs and Compliance*

##### *Benefits*

The Statewide implementation of the VOC emission control measures in the proposed rulemaking would benefit the health and welfare of the approximately 12 million residents and the numerous animals, crops, vegetation and natural areas of this Commonwealth by reducing emissions of VOCs, which are precursors to the formation of ground-level ozone air pollution. Exposure to high concentrations of ground-level ozone is a serious human and animal health threat, causing respiratory illnesses and decreased lung function, leading to a lower quality of life. Reduced ambient concentrations of ground-level ozone would reduce the incidences of hospital admissions for respiratory ailments including asthma and improve the quality of life for citizens overall. While children, the elderly and those with respiratory problems are most at risk, even healthy individuals may experience increased respiratory ailments and other symptoms when they are exposed to high levels of ambient ground-level ozone while engaged in activities that involve physical exertion. High levels of ground-level ozone affect animals including pets, livestock, and wildlife, in ways similar to humans.

In addition to causing adverse human and animal health effects, the EPA has concluded that high levels of ground-level ozone affects vegetation and ecosystems, leading to reductions in agricultural crop and commercial forest yields by destroying chlorophyll; reduced growth and survivability of tree seedlings; and increased plant susceptibility to disease, pests, and other environmental stresses, including harsh weather. In long-lived species, these effects may become evident only after several years or even decades and have the potential for long-term adverse impacts on forest ecosystems. Ozone damage to the foliage of trees and other plants can decrease the aesthetic value of ornamental species used in residential landscaping, as well as the natural beauty of parks and recreation areas.

The economic value of some welfare losses due to high concentrations of ground-level ozone can be calculated, such as crop yield loss from both reduced seed production and visible injury to some leaf crops, including lettuce, spinach and tobacco, as well as visible injury to ornamental plants, including grass, flowers and shrubs. Other types of welfare loss may not be quantifiable, such as the reduced aesthetic value of trees growing in heavily visited parks. The Commonwealth's 62,000 farm families are the stewards of more than 7.7 million acres of

farmland, with \$6.8 billion in cash receipts annually from production agriculture. In addition to production agriculture, the industry also raises revenue and supplies jobs through support services such as food processing, marketing, transportation, and farm equipment. In total, production agriculture and agribusiness contributes nearly \$68 billion to the Commonwealth's economy. (Source: Department of Agriculture.)

The Department of Conservation and Natural Resources (DCNR) is the steward of the state-owned forests and parks. DCNR awards millions of dollars in construction contracts each year to build and maintain the facilities in its parks and forests. Timber sales on state forest lands contribute to the \$5 billion a year timber industry. Hundreds of concessions throughout the park system help complete the park experience for both state and out-of-state visitors. (Source: Department of Conservation and Natural Resources.) Further, the Commonwealth leads the Nation in growing volume of hardwood species, with 17 million acres in forest land. As the leading producer of hardwood lumber in the United States, the Commonwealth also leads in the export of hardwood lumber, exporting nearly \$800 million annually in lumber, logs, furniture products and paper products to more than 70 countries around the world. Recent United States Forest Service data shows that the State's forest growth-to-harvest rate is better than 2 to 1. This vast renewable resource puts the hardwoods industry at the forefront of manufacturing in this Commonwealth. Through 2006, the total annual direct economic impact generated by the Commonwealth's wood industry was \$18.4 billion. The industry employed 128,000 people, with \$4.7 billion in wages and salaries earned. Production was 1.1 billion board feet of lumber annually. (Source: Strauss, Lord, Powell; PSU, June 2007, cited in Pennsylvania Hardwoods Development Council Biennial Report, 2009-2010.)

Through deposition, ground-level ozone also contributes to pollution in the Chesapeake Bay. These effects can have adverse impacts including loss of species diversity and changes to habitat quality and water and nutrient cycles. High levels of ground-level ozone can also cause damage to buildings and synthetic fibers, including nylon, and reduced visibility on roadways and in natural areas. The reduction of ground-level ozone air pollution concentrations directly benefits the human and animal populations of the Commonwealth with improved ambient air quality and healthier environments. The agriculture and timber industries and related businesses benefit directly from reduced economic losses that result from damage to crops and timber. Likewise, the natural areas and infrastructure within this Commonwealth and downwind benefit directly from reduced environmental damage and economic losses.

This proposed rulemaking is designed to adopt the standards and recommendations in the EPA's 2008 Miscellaneous Metal and Plastic Parts Coatings CTG to meet the requirements of sections 172(c)(1), 182(b)(2) and 184(b)(1)(B) of the CAA. The proposed rulemaking would apply the standards and recommendations in the CTG across this Commonwealth, as required under section 184(b)(1)(B) of the CAA.

The Statewide implementation of the VOC emission control measures in the proposed rulemaking could generate reductions of as much as 1,586 tons of VOC emissions per 12-month rolling period from the 139 potentially affected facilities identified by the Department in its databases, depending on the level of compliance already demonstrated by the owners and operators of these potentially affected facilities. These projected estimated reductions in VOC

emissions and the subsequent reduced formation of ozone would help ensure that the owners and operators of regulated facilities, farms and agricultural enterprises, hardwoods and timber industries and tourism-related businesses, and residents of labor communities, citizens and the environment of this Commonwealth experience the benefits of improved ground-level ozone air quality. Commonwealth residents would also potentially benefit from improved groundwater quality through reduced quantities of VOCs and HAPs from low VOC-content and low HAP-content miscellaneous metal parts and miscellaneous plastic parts coatings and cleaning materials. Although the proposed rulemaking is designed primarily to address ozone air quality, the reformulation of high-VOC content coating materials to low-VOC content coating materials or substitution of low-VOC content coating materials, to meet the VOC content limits applicable to users may also result in reduction of HAP emissions, which are also a serious health threat. The reduced levels of high-VOC content and high-HAP content solvents would benefit groundwater quality through reduced loading on water treatment plants and in reduced quantities of high-VOC content and high-HAP content solvents leaching into the ground and streams and rivers.

The Statewide implementation of the proposed rulemaking control measures would assist the Commonwealth in reducing VOC emissions locally and the resultant local formation of ground-level ozone in this Commonwealth from surface coating processes subject to the proposed rulemaking. The Statewide implementation of the proposed rulemaking control measures would also assist the Commonwealth in reducing the transport of VOC emissions and ground-level ozone to downwind states. Statewide implementation would also facilitate implementation and enforcement of the proposed rulemaking in this Commonwealth. The measures in the proposed rulemaking are reasonably necessary to attain and maintain the health- and welfare-based 8-hour ground-level ozone NAAQS and to satisfy related CAA requirements in this Commonwealth.

The proposed rulemaking may create economic opportunities for VOC emission control technology innovators, manufacturers and distributors through an increased demand for new or improved equipment. In addition, the owners and operators of regulated facilities may be required to install and operate an emissions monitoring system or equipment necessary for an emissions monitoring method in order to comply with the rulemaking, thereby creating an economic opportunity for the emissions monitoring industry.

#### *Compliance costs*

The Department reviewed its air quality databases and identified 160 manufacturing facilities in this Commonwealth whose owners and operators may be subject to the proposed rulemaking. According to the Department databases, the actual VOC emissions from these 160 facilities assumed to be subject to the proposed rulemaking totaled 4,552 tons in 2012. Of the 160 facilities reporting VOC emissions in 2012, the owners and operators of 139 of these facilities reported VOC emissions totaling 2.7 tons or more; their combined reported emissions totaled 4,531 tons in 2012. Accordingly, the owners and operators of these 139 facilities would be assumed to emit 2.7 tons or more of actual VOC emissions per 12-month rolling period threshold, including related cleaning activities and before consideration of controls, and would be required to implement VOC emission reduction measures, work practice standards and recordkeeping requirements. The records would be submitted to the Department in an acceptable

format upon receipt of a written request from the Department. The owners and operators of the remaining 21 manufacturing facilities reported VOC emissions below 2.7 tons; their combined reported emissions totaled 21 tons in 2012. The owners and operators of these 21 facilities would be subject only to the recordkeeping requirements and, if requested by the Department, reporting requirements of the proposed rulemaking.

The Board anticipates that implementation of the proposed rulemaking provisions would have minimal financial impact on the owners and operators of affected facilities. The Board expects that the owners and operators of facilities subject to the applicability threshold of 15 pounds per day or the equivalent 2.7 tons per 12-month rolling period, including related cleaning activities and before consideration of controls, will use the reformulation of high-VOC content coating materials to low-VOC content coating materials option because it is more cost effective than installation and operation of VOC emission capture systems and add-on air pollution control devices. The owner and operator of a subject facility that already complies with the requirements of the 2004 NESHAPs or other applicable Best Available Technology permitting requirements through the use of VOC emission capture systems and add-on air pollution control devices may already comply with the requirements of this proposed rulemaking and, if so, might have no additional annual costs.

The EPA based its cost effectiveness information in the CTG on the analysis it performed for the 2004 NESHAPs. The EPA assumed that the owners and operators of facilities subject to the CTG applicability threshold of 2.7 tons per 12-month rolling period would use the reformulation of high-VOC content coating materials to low-VOC content coating materials control option because reformulation of coatings is more cost effective than the installation and operation of VOC emission capture systems and add-on air pollution control devices. The EPA used the 2004 NESHAP costs for reformulation of high-HAP content coating materials to low-HAP content coating materials because these costs are thought to be similar to the costs of reformulating high-VOC content coating materials to low-VOC content coating materials. The EPA estimated the cost averaged across all sizes of facilities subject to the 2004 NESHAPs to be \$10,500 per facility, based on the reformulation of high-HAP content coating materials to low-HAP content coating materials and use of low-HAP content coating materials. The EPA applied the NESHAP-derived cost of \$10,500 per facility to the number of facilities it identified Nationwide as subject to the CTG to calculate a cost effectiveness for implementation of the VOC emission control measures. The EPA estimated a cost effectiveness of \$1,758 per ton of VOC emissions reduced.

The EPA stated in the CTG for these categories that it estimates that implementing the recommended control measures would reduce the emissions of VOC from those facilities at or above the threshold of 15 pounds per day by 35%. See 2008 Miscellaneous Metal and Plastic Parts Coatings CTG, page 32. Therefore, the Board estimates that implementation of the recommended control measures could generate reductions of as much as 1,586 tons (4,531 tons x 35%) of VOC emissions per 12-month rolling period from the 139 facilities identified by the Department in its databases as emitting at or above the 2.7 tons per 12-month rolling period threshold, including related cleaning activities and before consideration of controls, and therefore required to implement the proposed VOC emission reduction control measures. Using the EPA's cost effectiveness of \$1,758/ton of VOC emissions reduced, the Board estimates that the total

maximum annual costs to the affected regulated industry in this Commonwealth could be up to \$2.8 million (\$1,758/ton VOC emissions reduced x 1,586 tons). The approximate annual cost per facility could be as high as \$20,000 (\$2.8 million/139 facilities). This estimated cost of \$20,000 per facility is higher than the EPA's estimate of \$10,500 per facility. This difference in cost may be due in part to the Commonwealth-specific emission data used in the calculation.

The Board also calculated the cost effectiveness for the owners and operators of the 139 potentially affected facilities in this Commonwealth using the EPA's cost of \$10,500 per facility. The estimated total maximum anticipated annual costs to the affected regulated industry could be up to \$1.46 million (\$10,500 x 139 facilities). Therefore, the cost effectiveness for the reductions of 1,586 tons of VOC emissions would be approximately \$920 per ton of VOC emissions reduced (\$1.46 million/1,586 tons) on an annual basis, which is lower than the EPA estimate of \$1,758 per ton of VOC emissions reduced on an annual basis. Again, this may be due in part to the Commonwealth-specific emission data used in the calculation. The Board therefore estimates that the range of cost effectiveness to the regulated industry for implementing the proposed rulemaking is \$920 per ton VOC emissions reduced to \$1,758 per ton reduced. The range of cost per regulated facility for implementing the proposed VOC emission control measures is estimated to be \$10,500 to \$20,000 per year per facility. The Board expects that the costs to the regulated industry in this Commonwealth will be at the lower end of these ranges because low-VOC content coating materials are likely to be readily available at a cost that is not significantly greater than the high-VOC content coating materials they replace as a result of the development of NESHAP-compliant low-HAP content coating materials, since lower HAP content usually means lower VOC content. Therefore, the research and development of low-VOC content coating materials should already be complete and these expenses would not be a factor in the cost of complying with the proposed rulemaking VOC emission control measures.

The compliance cost per facility may be even lower given that the proposed rulemaking provides as one compliance option the use of individual compliant coating materials in proposed § 129.52d(d)(1). Coatings that are compliant with the HAP content limits of the 2004 NESHAPs and with the proposed rulemaking VOC content limits are readily available to the owners and operators of all sizes of subject facilities. The proposed rulemaking would provide flexibility in compliance through the second option of using a combination of VOC content limit compliant coating materials and specified high-transfer-efficient application methods with a VOC emissions capture system and add-on air pollution control device in subsection (d)(2). The third compliance option, the use of a VOC emissions capture system and add-on air pollution control device with an overall control efficiency of at least 90%, instead of the use of complying coating materials and specified high-transfer-efficient application methods, is provided in subsection (d)(3). However, because of the wide availability and lower cost (compared to installation and operation of a VOC emission capture system and add-on air pollution control device) of compliant VOC content coating materials and high-transfer-efficient coating application methods, compliant coating materials and specified high-transfer-efficient coating application methods are generally expected to be used by affected owners and operators to reduce VOC emissions from miscellaneous metal parts surface coating processes and miscellaneous plastic parts surface coating processes.

The implementation of the work practices for the use and application of cleaning materials is expected to result in a net cost savings. The recommended work practices for cleaning activities should reduce the amounts of cleaning materials used by reducing the amounts that are lost to evaporation, spillage and waste.

Emission limitations established by this proposed rulemaking would not require the submission of applications for amendments to existing operating permits. These requirements would be incorporated as applicable requirements at the time of permit renewal, if less than 3 years remain in the permit term, as specified under § 127.463(c) (relating to operating permit revisions to incorporate applicable standards). If 3 years or more remain in the permit term, the requirements would be incorporated as applicable requirements in the permit within 18 months of the promulgation of the final-form rulemaking, as required under § 127.463(b).

New legal, accounting or consulting procedures would not be required.

#### *Compliance assistance plan*

The Department plans to educate and assist the public and regulated community in understanding the proposed requirements and how to comply with them. This would be accomplished through the Department's ongoing compliance assistance program. The Department would also work with the Small Business Assistance Program to aid the facilities less able to handle permitting matters with their in-house staff.

#### *Paperwork requirements*

The recordkeeping and reporting requirements for owners and operators of affected facilities at, above or below the threshold for control measures should be minimal because the records required by the proposed rulemaking are in line with what the industry currently tracks for inventory purposes or is required in current permits. The owner or operator of a facility subject to the proposed rulemaking is required to maintain records sufficient to demonstrate compliance with the applicable requirements. Records maintained for compliance demonstrations may include purchase, use, production and other records. The records would be maintained on site for 2 years, unless a longer period is required by an order, plan approval or operating permit issued under Chapter 127 (relating to construction, modification, reactivation and operation of sources).

#### *G. Pollution Prevention*

The Pollution Prevention Act of 1990 (42 U.S.C.A. §§ 13101—13109) established a National policy that promotes pollution prevention as the preferred means for achieving state environmental protection goals. The Department encourages pollution prevention, which is the reduction or elimination of pollution at its source, through the substitution of environmentally friendly materials, more efficient use of raw materials and the incorporation of energy efficiency strategies. Pollution prevention practices can provide greater environmental protection with greater efficiency because they can result in significant cost savings to facilities that permanently achieve or move beyond compliance.

Statewide implementation of the VOC emission control measures in the proposed rulemaking could generate reductions of as much as 1,586 tons of VOC emissions per 12-month rolling period from the 139 facilities identified by the Department in its databases, depending on the level of compliance already demonstrated by the owners and operators of these facilities. These projected estimated reductions in VOC emissions and the subsequent reduced formation of ozone would help ensure that the owners and operators of regulated facilities, farms and agricultural enterprises, hardwoods and timber industries and tourism-related businesses, and residents of labor communities and citizens and the environment of this Commonwealth experience the benefits of improved ground-level ozone air quality. Commonwealth residents would also potentially benefit from improved groundwater quality through reduced quantities of VOCs and HAPs from low-VOC content and low-HAP content miscellaneous metal parts and miscellaneous plastic parts coatings and cleaning materials. Although the proposed rulemaking is designed primarily to address ozone air quality, the reformulation of high-VOC content coating materials to low-VOC content coating materials or substitution of low-VOC content coating materials to meet the VOC content limits applicable to users may also result in reduction of HAP emissions, which are also a serious health threat. The reduced levels of high-VOC content and high-HAP content solvents would benefit groundwater quality through reduced loading on water treatment plants and in reduced quantities of high-VOC content and high-HAP content solvents leaching into the ground, streams and rivers.

The proposed rulemaking provides as one compliance option the use of individual compliant coating materials in proposed § 129.52d(d)(1). Coatings that are compliant with the HAP content limits and emission rate limits of the 2004 NESHAPs and with the proposed rulemaking VOC content limits and emission rate limits are readily available to the owners and operators of all sizes of subject facilities. The proposed rulemaking would provide flexibility in compliance through the second option of using a combination of VOC content limit compliant coating materials and specified high-transfer-efficient application methods with a VOC emissions capture system and add-on air pollution control device in subsection (d)(2). A third compliance option, the use of a VOC emissions capture system and add-on air pollution control device with an overall control efficiency of at least 90%, instead of the use of complying coating materials and specified high-transfer-efficient application methods, is provided in subsection (d)(3). However, because of the wide availability and lower cost (compared to installation and operation of VOC emissions capture systems and add-on air pollution control devices) of compliant VOC content coating materials and high-transfer-efficient coating application methods, compliant coating materials and specified high-transfer-efficient coating application methods are generally expected to be used by affected owners and operators to reduce VOC emissions from surface coating processes subject to this proposed rulemaking.

The implementation of the work practices for the use and application of cleaning materials is expected to result in a net cost savings. The recommended work practices for cleaning activities should reduce the amounts of cleaning materials used by reducing the amounts that are lost to evaporation, spillage and waste.

#### H. *Sunset Review*

This regulation will be reviewed in accordance with the sunset review schedule published by the Department to determine whether it effectively fulfills the goals for which it was intended.

#### I. *Regulatory Review*

Under section 5(a) of the Regulatory Review Act (71 P.S. § 745.5(a)), on July 13, 2015, the Department submitted a copy of this proposed rulemaking and a copy of a Regulatory Analysis Form to the Independent Regulatory Review Commission (IRRC) and to the Chairpersons of the House and Senate Environmental Resources and Energy Committees. A copy of this material is available to the public upon request.

Under section 5(g) of the Regulatory Review Act, IRRC may convey any comments, recommendations or objections to the proposed rulemaking within 30 days of the close of the public comment period. The comments, recommendations or objections must specify the regulatory review criteria which have not been met. The Regulatory Review Act specifies detailed procedures for review, prior to final publication of the rulemaking, by the Department, the General Assembly and the Governor of comments, recommendations or objections raised.

#### J. *Public Comments*

It is noted in this preamble that this rulemaking proposes to establish requirements in subsections (c) and (d)(1) that suggest a compliance date of January 1, 2016. The Board is particularly interested in receiving comments regarding this date, with consideration of establishing a compliance date of May 1, 2016, instead, in the final rulemaking. For more information, please refer to Section E. *Summary of Regulatory Requirements*.

Interested persons are invited to submit written comments, suggestions or objections regarding the proposed rulemaking to the Board. Comments, suggestions or objections must be received by the Board by October 13, 2015. In addition to the submission of comments, interested persons may also submit a summary of their comments to the Board. The summary may not exceed one page in length and must also be received by the Board by October 13, 2015. The one-page summary will be distributed to the Board and available publicly prior to the meeting when the final rulemaking will be considered.

Comments including the submission of a one-page summary of comments may be submitted to the Board online, by email, by mail or express mail as follows. If an acknowledgement of comments submitted online or by email is not received by the sender within 2 working days, the comments should be retransmitted to the Board to ensure receipt. Comments submitted by facsimile will not be accepted.

Comments may be submitted to the Board by accessing the eComment system at <http://www.ahs.dep.pa.gov/eComment>.

Comments may be submitted to the Board by email at [RegComments@pa.gov](mailto:RegComments@pa.gov). A subject heading of the proposed rulemaking and a return name and address must be included in each transmission.

Written comments should be mailed to the Environmental Quality Board, P.O. Box 8477, Harrisburg, PA 17105-8477. Express mail should be sent to the Environmental Quality Board, Rachel Carson State Office Building, 16<sup>th</sup> Floor, 400 Market Street, Harrisburg, PA 17101-2301.

#### *K. Public Hearings*

The Board will hold three public hearings for the purpose of accepting comments on this proposed rulemaking. The hearings will be held at 10:00 a.m. on the following dates:

September 8, 2015    Department of Environmental Protection  
Southeast Regional Office  
Schuylkill Conference Room  
2 East Main Street  
Norristown, PA 19401

September 9, 2015    Department of Environmental Protection  
Rachel Carson State Office Building  
Conference Room 105  
400 Market Street  
Harrisburg, PA 17105

September 10, 2015    Department of Environmental Protection  
Southwest Regional Office  
Monongahela Conference Room  
400 Waterfront Drive  
Pittsburgh, PA 15222

Persons wishing to present testimony at a hearing are requested to contact the Environmental Quality Board, P.O. Box 8477, Harrisburg, PA 17105-8477, (717) 787-4526 at least 1 week in advance of the hearing to reserve a time to present testimony. Oral testimony is limited to 10 minutes for each witness. Witnesses are requested to submit three written copies of their oral testimony to the hearing chairperson at the hearing. Organizations are limited to designating one witness to present testimony on their behalf at each hearing.

Persons in need of accommodations as provided for in the Americans with Disabilities Act of 1990 should contact the Board at (717) 787-4526 or through the Pennsylvania AT&T Relay Service at (800) 654-5984 (TDD) or (800) 654-5988 (voice users) to discuss how the Board may accommodate their needs.

JOHN QUIGLEY,  
Chairperson

PROPOSED RULEMAKING  
Annex A  
TITLE 25. ENVIRONMENTAL PROTECTION  
PART I. DEPARTMENT OF ENVIRONMENTAL PROTECTION  
SUBPART C. PROTECTION OF NATURAL RESOURCES  
ARTICLE III. AIR RESOURCES

CHAPTER 129. STANDARDS FOR SOURCES

SOURCES OF VOCs

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§ 129.51. General.

(a) *Equivalency.* Compliance with §§ 129.52, 129.52a, 129.52b, 129.52c, 129.52d [and ~~129.54-129.73~~] 129.54-129.69, 129.71-129.73 and 129.77 may be achieved by alternative methods if the following exist:

\* \* \* \* \*

(3) Compliance by a method other than the use of a low VOC coating, adhesive, sealant, adhesive primer, sealant primer, surface preparation solvent, cleanup solvent or ink which meets the applicable emission limitation in §§ 129.52, 129.52a, 129.52b, 129.52c, 129.52d, 129.67, 129.73 and 129.77 shall be determined on the basis of equal volumes of solids.

\* \* \* \* \*

(6) The alternative compliance method is incorporated into a plan approval or operating permit, or both, reviewed by the EPA, including the use of an air cleaning device to comply with § 129.52, § 129.52a, § 129.52b, § 129.52c, § 129.52d, § 129.67, § 129.68(b)(2) and (c)(2), § 129.73 or § 129.77.

\* \* \* \* \*

§ 129.52. Surface coating processes.

\* \* \* \* \*

(g) The records shall be maintained on site for 2 years [and], unless a longer period is required by an order, plan approval or operating permit issued under Chapter 127 (relating to construction, modification, reactivation and operation of sources). The records shall be submitted to the Department in an acceptable format on a schedule reasonably prescribed by the Department.

\* \* \* \* \*

[*Editor's note: Section 129.52d is new and printed in regular type to enhance readability.*]

**§ 129.52d. Control of VOC emissions from miscellaneous metal parts surface coating processes, miscellaneous plastic parts surface coating processes and pleasure craft surface coatings.**

(a) *Applicability.* This section applies as follows:

(1) This section applies to the owner and operator of a miscellaneous metal part surface coating process or miscellaneous plastic part surface coating process, or both, if the total actual VOC emissions from all miscellaneous metal part coating units and miscellaneous plastic part coating units, including related cleaning activities, at the facility are equal to or greater than 2.7 tons per 12-month rolling period, before consideration of controls.

(2) This section applies, as specified, to the owner and operator of a miscellaneous metal part surface coating process or miscellaneous plastic part surface coating process, or both, if the total actual VOC emissions from all miscellaneous metal part coating units and miscellaneous plastic part coating units, including related cleaning activities, at the facility are below 2.7 tons per 12-month rolling period, before consideration of controls.

(3) Compliance with the VOC emission limits and other requirements of this section assures compliance with the VOC emission limits and other requirements of § 129.52 (relating to surface coating processes) for the miscellaneous metal parts and products surface coating processes as specified in Table I Category No. 10 (relating to miscellaneous metal parts & products) of § 129.52.

(4) If an owner or operator elects to comply with § 129.52e (relating to control of VOC emissions from automobile and light-duty truck assembly surface coating operations and heavier vehicle coating operations) under § 129.52e(a)(2) or (3), then § 129.52e instead of this section applies to the separate coating line at the facility, or to the coating of a body or body part for a new heavier vehicle at the facility, or both, for which the election is made. (*Editor's Note:* Section 129.52e will be adopted on or before the date of final adoption of this proposed rulemaking.)

(5) This section does not apply to an owner or operator in the use or application of the following:

- (i) Aerosol coatings.
- (ii) Aerospace coatings.
- (iii) Architectural coatings.
- (iv) Automobile refinishing coatings.
- (v) Auto and light-duty truck assembly coatings.

(vi) Can, coil or magnet wire coatings.

(vii) Coating applied to a test panel or coupon, or both, in research and development, quality control or performance testing activities, if records are maintained as required under subsections (e) and (f).

(viii) Fiberglass boat manufacturing materials.

(ix) Flat wood paneling coatings.

(x) Large appliance coatings.

(xi) Metal furniture coatings.

(xii) Miscellaneous industrial adhesives.

(xiii) Paper, film, and foil coatings.

(xiv) Shipbuilding and repair coatings.

(xv) Wood furniture coatings.

(b) *Definitions.* The following words and terms, when used in this section, have the following meanings unless the context clearly indicates otherwise:

*Adhesion primer*—A coating applied to a polyolefin part to promote the adhesion of a subsequent coating. This type of coating is clearly identified on its accompanying material safety data sheet by this term or as an adhesion promoter.

*Air-dried coating*—A coating that is cured or dried at a temperature below 90°C (194°F).

*Antifoulant or antifouling coating*—A coating applied to the underwater portion of a pleasure craft to prevent or reduce the attachment of biological organisms, and registered with the United States Environmental Protection Agency (EPA) as a pesticide under the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C.A. § 136).

*Appurtenance*—An accessory to a stationary structure that is coated at the facility. The term includes:

(i) Bathroom and kitchen fixtures.

(ii) Cabinets.

(iii) Concrete forms.

- (iv) Doors.
- (v) Elevators.
- (vi) Fences.
- (vii) Hand railings.
- (viii) Heating equipment, air conditioning equipment, and other fixed mechanical equipment or stationary tools.
- (ix) Lampposts.
- (x) Partitions.
- (xi) Pipes and piping systems.
- (xii) Rain gutters and downspouts.
- (xiii) Stairways.
- (xiv) Fixed ladders.
- (xv) Catwalks and fire escapes.
- (xvi) Window screens.

*Baked coating*—A coating cured at a temperature at or above 90°C (194°F).

*Black coating*—A coating that meets either of the following:

- (i) Both of the following criteria, which are based on Cielab color space, 0/45 geometry:
  - (A) Maximum lightness: 23 units.
  - (B) Saturation: less than 2.8, where saturation equals the square root of  $A^2 + B^2$ .
- (ii) For spherical geometry, specular included, maximum lightness is 33 units.

*Business machine*—A device that uses an electronic or mechanical method to process information, perform calculations, print or copy information or convert sound into electrical impulses for transmission. The term includes the following:

- (i) Devices listed in *Standard Industrial Classification Codes* 3572, 3573, 3574, 3579 and 3661.

(ii) Photocopy machines, a subcategory of *Standard Industrial Classification Code* 3861.

*Camouflage coating*—A coating used principally by the military to conceal equipment from detection.

*Cleaning material* or *cleaning solvent*—A material used during cleaning activities or cleaning operations to remove residue or other unwanted materials from equipment.

*Clear coating*—A colorless coating that contains binders, but no pigment, and is formulated to form a transparent film. The term includes a transparent coating that uses the undercoat as a reflectant base or undertone color.

*Clear wood finishes*—A clear or semi-transparent topcoat applied to a wood substrate to provide a transparent or translucent film.

*Coating*—A material applied onto or into a substrate for protective, decorative or functional purposes.

(i) The term includes paints, sealants, caulks, primers, inks and maskants.

(ii) The term does not include protective oils, acids or bases or combinations of these materials.

*Coating unit*—A series of one or more coating applicators and associated drying area or oven or both wherein a coating is applied and dried or cured, or both. The unit ends at the point where the coating is dried or cured, or prior to subsequent application of a different coating.

*Drum*—A cylindrical metal shipping container larger than 12 gallons capacity but not larger than 110 gallons capacity.

*EMI/RFI shielding coating*—A coating used on electrical or electronic equipment to provide shielding against electromagnetic interference, radio frequency interference or static discharge.

*Electric dissipating coating*—A coating that rapidly dissipates a high voltage electric charge.

*Electric-insulating varnish*—A non-convertible-type coating applied to electric motors, components of electric motors or power transformers, to provide electrical, mechanical or environmental protection or resistance.

*Electrostatic prep coating*—A coating applied to a plastic part solely to provide conductivity for the subsequent application of a primer, a topcoat or other coating through the use of electrostatic application methods. This term is clearly identified as an electrostatic prep coat on its accompanying material safety data sheet.

*Etching filler*—A coating that contains less than 23% solids by weight and at least 0.5% acid by weight, and is used instead of applying a pretreatment coating followed by a primer.

*Extreme high-gloss coating*—A coating that achieves the following:

(i) For miscellaneous metal part surface coatings or miscellaneous plastic part surface coatings, other than pleasure craft surface coatings, a coating when tested by the American Society for Testing Material Test Method D-523-08, shows a reflectance of at least 75% on a 60° meter.

(ii) For pleasure craft surface coatings, a coating that shows a reflectance of at least 90% on a 60° meter, when tested by American Society for Testing Material Test Method D-523-08.

*Extreme-performance coating*—

(i) A coating used on a metal or plastic surface where the coated surface is, in its intended use, subject to one or more of the following:

(A) Chronic exposure to corrosive, caustic or acidic agents, chemicals, chemical fumes, chemical mixtures or solutions.

(B) Repeated exposure to temperatures in excess of 250°F.

(C) Repeated heavy abrasion, including mechanical wear and repeated scrubbing with industrial grade solvents, cleansers or scouring agents.

(ii) The term includes coatings applied to locomotives, railroad cars, farm machinery or heavy duty trucks.

*Finish primer/surfacer*—A coating applied with a wet film thickness of less than 10 mils prior to the application of a topcoat for purposes of providing corrosion resistance, adhesion of subsequent coatings, a moisture barrier or promotion of a uniform surface necessary for filling in surface imperfections.

*Flexible primer*—A coating required to comply with engineering specifications for impact resistance, mandrel bend or elongation as defined by the original equipment manufacturer.

*Fog coat*—A coating applied to a plastic part, at a thickness of no more than 0.5 mils of coating solids, for the purpose of color matching without masking a molded-in texture.

*Gloss reducer*—A coating applied to a plastic part, at a thickness of no more than 0.5 mils of coating solids, solely to reduce the shine of the part.

*Heat-resistant coating*—A coating that must withstand a temperature of at least 400°F during normal use.

*Heavier vehicle*—A self-propelled vehicle designed for transporting persons or property on a street or highway that has a gross vehicle weight rating over 8,500 pounds.

*High bake coating*—A coating designed to cure only at temperatures of more than 90°C (194°F).

*High build primer/surfacer*—A coating applied with a wet film thickness of 10 mils or more prior to the application of a topcoat for purposes of providing corrosion resistance, adhesion of subsequent coatings, a moisture barrier, or promotion of a uniform surface necessary for filling in surface imperfections.

*High gloss coating*—A coating that achieves at least 85% reflectance on a 60° meter when tested by ASTM Method D-523-08.

*High-performance architectural coating*—A coating used to protect aluminum architectural subsections and which meets the requirements of the American Architectural Manufacturers Association's publication number AAMA 2604 (Voluntary Specification, Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels) or 2605 (Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels), including updates and revisions.

*High-temperature coating*—A coating certified to withstand a temperature of 1000°F for 24 hours.

*Mask coating*—A thin film coating applied through a template to coat a small portion of a substrate.

*Metal particles*—Pieces of a pure elemental metal or a combination of elemental metals.

*Metallic coating*—A coating that contains more than 5 grams of metal particles per liter of coating as applied.

*Military specification coating*—A coating that has a formulation approved by a United States Military Agency for use on military equipment.

*Miscellaneous metal parts and miscellaneous plastic parts*—Metal or plastic components of parts or products, as well as the parts or products themselves, constructed either entirely or partially from metal or plastic, or both, including the following:

- (i) Fabricated metal products.
- (ii) Molded plastic parts.
- (iii) Farm machinery.
- (iv) Commercial and industrial machinery and equipment.

- (v) Automotive or transportation equipment.
- (vi) Interior or exterior automotive parts.
- (vii) Construction equipment.
- (viii) Motor vehicle accessories.
- (ix) Bicycles and sporting goods.
- (x) Toys.
- (xi) Recreational vehicles.
- (xii) Watercraft.
- (xiii) Extruded aluminum structural components.
- (xiv) Railroad cars.
- (xv) Heavier vehicles.
- (xvi) Lawn and garden equipment.
- (xvii) Business machines.
- (xviii) Laboratory and medical equipment.
- (xix) Electronic equipment.
- (xx) Steel drums.
- (xxi) Metal pipes.

*Mold-release coating*—A coating applied to a mold to prevent the molded product from sticking to the mold as it is removed.

*Mold-seal coating*—The initial coating applied to a new or repaired mold to provide a smooth surface, that when coated with a mold-release coating prevents products from sticking to the mold.

*Motor vehicle bedliner*—A multi-component coating, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied to a cargo bed after the application of topcoat to provide additional durability and chip resistance.

*Motor vehicle cavity wax*—A coating, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied into the cavities of the vehicle primarily to enhance corrosion protection.

*Motor vehicle deadener*—A coating, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied to selected vehicle surfaces primarily to reduce the sound of road noise in the passenger compartment.

*Motor vehicle gasket/sealing material*—A fluid, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied to coat a gasket or replace and perform the same function as a gasket. The term includes room temperature vulcanization (RTV) seal material.

*Motor vehicle lubricating wax/compound*—A protective lubricating material, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied to vehicle hubs and hinges.

*Motor vehicle sealer*—A high viscosity material, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied in the paint shop after the body has received an electrodeposition primer coating and before the application of subsequent coatings (for example, a primer/surfacer). The primary purpose of the material is to fill body joints completely so that there is no intrusion of water, gases or corrosive materials into the passenger area of the body compartment. The material is also referred to as sealant, sealant primer or caulk.

*Motor vehicle trunk interior coating*—A coating, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied to the trunk interior to provide chip protection.

*Motor vehicle underbody coating*—A coating, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied to the undercarriage or firewall to prevent corrosion or provide chip protection, or both.

*Multi-colored coating*—A coating that exhibits more than one color when applied and which is packaged in a single container and applied in a single coat.

*Multi-component coating*—A coating requiring the addition of a separate reactive resin, commonly known as a catalyst or hardener, before application to the substrate to form an acceptable dry film.

*One-component coating*—A coating that is ready for application as it comes out of its container to form an acceptable dry film. A thinner may be added to reduce the viscosity, but is not considered a component.

*Optical coating*—A coating applied to an optical lens.

*Pan-backing coating*—A coating applied to the surface of pots, pans or other cooking implements that are exposed directly to a flame or other heating element.

*Pleasure craft*—A vessel that is manufactured or operated primarily for recreational purposes, or leased, rented or chartered to a person or business for recreational purposes.

*Pleasure craft coating*—A marine coating, except unsaturated polyester resin (fiberglass) coatings, applied by brush, spray, roller or other means to a pleasure craft.

*Powder coating*—A coating applied as a dry, finely divided solid that, when melted and fused, adheres to the substrate as a paint film.

*Prefabricated architectural component coating*—A coating applied to a prefabricated metal part or product, if the part or product is to be used as an architectural appurtenance or structure. The appurtenance is detached from the structure when coated in a shop setting.

*Pretreatment coating*—A coating that contains no more than 12% solids by weight and at least 0.5% acid by weight, that is used to provide surface etching and that is applied directly to metal surfaces to provide corrosion resistance, adhesion and ease of stripping.

*Pretreatment wash primer*—A coating that contains no more than 12% solids by weight and at least 0.5% acid by weight, that is used to provide surface etching and that is applied directly to fiberglass and metal surfaces to provide corrosion resistance and adhesion of subsequent coatings.

*Red coating*—A coating that meets the following:

(i) All of the following criteria, which are based on Cielab color space, 0/45 geometry:

(A) Yellow limit: the hue of hostaperm scarlet.

(B) Blue limit: the hue of monastral red-violet.

(C) Lightness limit for metallics: 35% aluminum flake.

(D) Lightness limit for solids: 50% titanium dioxide white.

(E) Solid reds: hue angle of -11 to 38 degrees and maximum lightness of 23 to 45 units.

(F) Metallic reds: hue angle of -16 to 35 degrees and maximum lightness of 28 to 45 units.

(ii) For spherical geometry, specular included, the upper limit is 49 units.

*Repair coating*—A coating used to re-coat portions of a previously coated product that has sustained mechanical damage to the coating following normal coating operations.

*Resist coating*—A coating that is applied to a plastic part before metallic plating to prevent deposits of metal on portions of the plastic part.

*Shock-free coating*—A coating applied to electrical components to protect the user from electric shock. The coating has characteristics of being of low capacitance and high resistance, and being resistant to breaking down under high voltage.

*Silicone-release coating*—A coating which contains silicone resin and is intended to prevent food from sticking to metal surfaces, such as baking pans.

*Solar-absorbent coating*—A coating which has as its prime purpose the absorption of solar radiation.

*Stencil coating*—An ink or coating that is applied onto a template, stamp or stencil to add identifying letters, numbers or decorative designs, or a combination of these, to a metal or plastic part or product.

*Texture coat*—A coating that is applied to a plastic part which, in its finished form, consists of discrete raised spots of the coating.

*Topcoat*—A final coating applied in a surface coating process that applies two or more coatings.

*Touch-up coating*—A coating used to cover minor coating imperfections appearing after the main coating operation.

*Translucent coating*—A coating that contains binders and pigment and is formulated to form a colored, but not opaque, film.

*Two-component coating*—A coating requiring the addition of a separate reactive resin, commonly known as a catalyst, before application to form an acceptable dry film.

*Vacuum-metalizing coating*—A coating meeting either of the following:

(i) An undercoat applied to a substrate on which the metal is deposited prior to a vacuum-metalizing process.

(ii) An overcoat applied directly to the metal film after a vacuum-metalizing process.

*Vacuum-metalizing process*—The process of evaporating metals inside a vacuum chamber and depositing them on a substrate to achieve a uniform metalized layer.

(c) *Existing RACT permit.* The requirements of this section supersede the requirements of a RACT permit issued under §§ 129.91—129.95 (relating to stationary sources of NO<sub>x</sub> and VOCs) to the owner or operator of a source subject to subsection (a) prior to January 1, 2016, to control, reduce or minimize VOCs from a miscellaneous metal part or miscellaneous plastic part surface coating process, except to the extent the RACT permit contains more stringent requirements.

(d) *Emission limitations.* Beginning January 1, 2016, a person subject to subsection (a)(1) may not cause or permit the emission into the outdoor atmosphere of VOCs from a miscellaneous metal part coating unit or miscellaneous plastic part coating unit, or both, unless emissions of VOCs are controlled in accordance with paragraph (1), (2) or (3).

(1) *Compliant materials option.* The VOC content of each miscellaneous metal part coating or each miscellaneous plastic part coating, as applied, excluding water and exempt compounds, is equal to or less than the VOC content limit for the applicable coating category specified in the applicable table of VOC content limits in Table I through Table V.

(2) *Combination of compliant materials, VOC emissions capture system and add-on air pollution control device option.* The combination of one or more VOC-containing coatings, as applied, that meet the emission rate limits for the applicable coating category specified in the applicable table of emission rate limits in Table VI through Table IX, and one or more VOC emissions capture systems and one or more add-on air pollution control devices that meet the requirements of subsection (e)(2).

(3) *VOC emissions capture system and add-on air pollution control device option.* The overall weight of VOCs emitted to the atmosphere is reduced through the use of vapor recovery, oxidation, incineration or another method that is acceptable under § 129.51(a) (relating to general) and meets the requirements of subsection (e)(2). The overall control efficiency of a control system, as determined by the test methods and procedures specified in Chapter 139 (relating to sampling and testing), may be no less than 90%.

(4) *Least restrictive VOC limit.* If more than one VOC content limit or VOC emission rate limit applies to a specific coating, then the least restrictive VOC content limit or VOC emission rate limit applies.

(5) *Coatings not listed in Table I, II, VI or VII.* For a miscellaneous metal part or miscellaneous plastic part coating that does not meet the coating categories listed in Table I, II, VI or VII, the VOC content limit or VOC emission rate limit shall be determined by classifying the coating as a general one component coating or general multi-component coating. The corresponding general one component coating or general multi-component coating limit applies.

(6) *Coatings not listed in Table IV or IX.* For a pleasure craft coating that does not meet the coating categories listed in Table IV or IX, the VOC content limit or VOC emission rate limit shall be determined by classifying the coating as an “all other pleasure craft surface coatings for metal or plastic.” The “all other pleasure craft surface coatings for metal or plastic” limit applies.

(e) *Compliance and monitoring requirements.* This subsection applies as follows:

(1) *All owners and operators.* Regardless of the facility’s VOC emissions, the owner or operator of a miscellaneous metal part surface coating process or miscellaneous plastic part surface coating process, or both, subject to subsection (a)(1) or (a)(2), shall comply with this section as specified throughout this section. For an owner or operator subject only to subsection (a)(2), the compliance requirements are the recordkeeping requirements in subsection (f)(2).

(2) *VOC emissions capture system and add-on air pollution control device.* The owner or operator of a facility subject to subsection (a)(1) that elects to comply with the emission limitations of subsection (d) through installation of a VOC emissions capture system and add-on air pollution control device under subsection (d)(2) or (d)(3) shall submit an application for a plan approval to the appropriate regional office. The plan approval must be approved, in writing, by the Department prior to installation and operation of the emissions capture system and add-on air pollution control device. The plan approval must include the following information:

(i) A description, including location, of each affected source or operation to be controlled with the emissions capture system and add-on air pollution control device.

(ii) A description of the proposed emissions capture system and add-on air pollution control device to be installed.

(iii) A description of the proposed compliance monitoring equipment to be installed.

(iv) A description of the parameters to be monitored to demonstrate continuing compliance.

(v) A description of the records to be kept that will document the continuing compliance.

(vi) A schedule containing proposed interim dates for completing each phase of the required work to install and test the emissions capture system and add-on air pollution control device described in subparagraph (ii) and the compliance monitoring equipment described in subparagraph (iii).

(vii) A proposed interim emission limitation that will be imposed on the affected source or operation until compliance is achieved with the applicable emission limitation.

(viii) A proposed final compliance date that is as soon as possible but not later than 1 year after the start of installation of the approved emissions capture system and add-on air pollution control device and the compliance monitoring equipment.

(f) *Recordkeeping and reporting requirements.* The following recordkeeping and reporting requirements apply:

(1) The owner or operator of a miscellaneous metal part coating unit or miscellaneous plastic part coating unit, or both, subject to subsection (a)(1) shall maintain monthly records sufficient to demonstrate compliance with this section. The records shall include the following information:

(i) The following parameters for each coating, thinner, component and cleaning solvent as supplied:

(A) Name and identification number of the coating, thinner, other component or cleaning solvent.

(B) Volume used.

(C) Mix ratio.

(D) Density or specific gravity.

(E) Weight percent of total volatiles, water, solids and exempt solvents.

(F) Volume percent of total volatiles, water and exempt solvents, for the applicable table of limits in Table I through Table V.

(G) Volume percent of solids for the applicable table of limits in Table VI through Table IX.

(ii) The VOC content of each coating, thinner, other component and cleaning solvent as supplied.

(iii) The VOC content of each as applied coating or cleaning solvent.

(iv) The calculations performed for each applicable requirement under subsections (d) and (e).

(v) The information required in a plan approval issued under subsection (e)(2).

(2) An owner or operator subject to subsection (a)(2), or otherwise claiming an exemption or exception set out in this section, shall maintain records sufficient to verify the applicability of subsection (a)(2), the exemption or exception. Records maintained for compliance demonstrations may include purchase, use, production and other records.

(3) The records shall be maintained on site for 2 years, unless a longer period is required by an order, plan approval or operating permit issued under Chapter 127 (relating to construction, modification, reactivation and operation of sources).

(4) The records shall be submitted to the Department in an acceptable format upon receipt of a written request from the Department.

(g) *Coating application methods.* A person subject to subsection (a)(1) may not cause or permit the emission into the outdoor atmosphere of VOCs from a miscellaneous metal part coating unit or miscellaneous plastic part coating unit, or both, unless the coatings are applied using one or more of the following coating application methods:

(1) Electrostatic coating.

(2) Flow coating.

(3) Dip coating, including electrodeposition.

- (4) Roll coating.
- (5) High volume-low pressure (HVLP) spray coating.
- (6) Airless spray coating.
- (7) Air-assisted airless spray coating.
- (8) Other coating application method, if approved in writing by the Department prior to use.

(i) The coating application method must be capable of achieving a transfer efficiency equivalent to or better than that achieved by HVLP spray coating.

(ii) The owner or operator shall submit the request for approval to the Department in writing.

(h) *Exempt coatings and exempt coating unit operations.*

(1) The requirements of subsections (d) and (g) do not apply to the application of the following coatings to a metal part:

- (i) Stencil coating.
- (ii) Safety-indicating coating.
- (iii) Solid-film lubricant.
- (iv) Electric-insulating and thermal-conducting coating.
- (v) Magnetic data storage disk coating.
- (vi) Plastic extruded onto metal parts to form a coating.
- (vii) Powder coating.

(2) The requirements of subsection (d) do not apply to the application of the following coatings to a plastic part:

- (i) Touch-up and repair coating.
- (ii) Stencil coating applied on a clear or transparent substrate.
- (iii) Clear or translucent coating.
- (iv) Coating applied at a paint manufacturing facility while conducting performance tests on coating.

(v) Reflective coating applied to highway cones.

(vi) Mask coating, if the coating is less than 0.5 millimeter thick (dried) and the area coated is less than 25 square inches.

(vii) EMI/RFI shielding coating.

(viii) Heparin-benzalkonium chloride (HBAC)-containing coating applied to a medical device, provided that the total usage of HBAC-containing coatings does not exceed 100 gallons in 1 calendar year at the facility.

(ix) Powder coating.

(x) An individual coating category used in an amount less than 50 gallons in 1 calendar year, provided that the total usage of all of the coatings, combined, does not exceed 200 gallons per year at the facility. This exception applies only if substitute compliant coatings are not available.

(3) The requirements of subsection (d) do not apply to the application of the following coatings to automotive-transportation and business machine parts:

(i) Texture coat.

(ii) Vacuum-metalizing coating.

(iii) Gloss reducer.

(iv) Texture topcoat.

(v) Adhesion primer.

(vi) Electrostatic prep coat.

(vii) Resist coating.

(viii) Stencil coating.

(ix) Powder coating.

(4) The requirements of subsection (g) do not apply to the following activities:

(i) Application of a touch-up coating, repair coating or textured finish to a metal part.

(ii) Application of a powder coating to the following:

(A) Plastic part.

(B) Automotive-transportation plastic part.

(C) Business machine plastic part.

(iii) Airbrush application of coating to a metal part or plastic part using no more than five gallons of coating per year.

(iv) Use of an add-on air pollution control device to comply with subsection (d).

(v) Application of extreme high-gloss coating in a pleasure craft surface coating operation.

(i) *Work practice requirements for coating-related activities.* The owner or operator of a miscellaneous metal part coating unit or miscellaneous plastic part coating unit, or both, subject to subsection (a)(1) shall comply with the following work practices for coating-related activities:

(1) Store all VOC-containing coatings, thinners or coating-related waste materials in closed containers.

(2) Ensure that mixing and storage containers used for VOC-containing coatings, thinners or coating-related waste materials are kept closed at all times, except when depositing or removing these coatings, thinners, or waste materials.

(3) Minimize spills of VOC-containing coatings, thinners or coating-related waste materials and clean up spills immediately.

(4) Convey VOC-containing coatings, thinners or coating-related waste materials from one location to another in closed containers or pipes.

(j) *Work practice requirements for cleaning materials.* The owner or operator of a miscellaneous metal part coating unit or miscellaneous plastic part coating unit subject to subsection (a)(1) shall comply with the following work practices for cleaning materials:

(1) Store all VOC-containing cleaning materials and used shop towels in closed containers.

(2) Ensure that mixing vessels and storage containers used for VOC-containing cleaning materials are kept closed at all times, except when depositing or removing these materials.

(3) Minimize spills of VOC-containing cleaning materials and clean up spills immediately.

(4) Convey VOC-containing cleaning materials from one location to another in closed containers or pipes.

(5) Minimize VOC emissions from cleaning of application, storage, mixing or conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers.

(k) *Measurements and calculations.* To determine the properties of a coating or component used in a miscellaneous metal parts surface coating process or miscellaneous plastic parts surface coating process, measurements and calculations shall be performed according to one or more of the following:

(1) EPA Reference Method 24, *Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings*, found at 40 CFR 60, Subpart D, Appendix A, including updates and revisions.

(2) Manufacturer's formulation data.

(3) Sampling and testing done in accordance with the procedures and test methods specified in Chapter 139 (relating to sampling and testing).

(4) Other test method demonstrated to provide results that are acceptable for purposes of determining compliance with this section if prior approval is obtained in writing from the Department.

(5) Add-on air pollution control devices shall be equipped with the applicable monitoring equipment according to manufacturers' specifications. The monitoring equipment shall be installed, calibrated, operated and maintained according to manufacturer's specifications at all times the add-on air pollution control device is in use.

(6) EPA calculations information set forth in the following:

(i) *A Guideline for Surface Coating Calculations*, EPA-340/1-86-016, including updates and revisions.

(ii) *Procedures for Certifying Quantity of Volatile Organic Compounds Emitted by Paint, Ink, and Other Coatings*, EPA-450 3-84-019, including updates and revisions.

**Table I: VOC Content Limits for Metal Parts and Products Surface Coatings**

**Weight of VOC per Volume of Coating,  
Less Water and Exempt Compounds, as Applied**

Coating Category	Air Dried		Baked	
	kg VOC/ l coating	lb VOC / gal coating	kg VOC / l coating	lb VOC / gal coating
General One Component	0.34	2.8	0.28	2.3
General Multi-component	0.34	2.8	0.28	2.3
Camouflage	0.42	3.5	0.42	3.5
Electric-insulating Varnish	0.42	3.5	0.42	3.5
Etching Filler	0.42	3.5	0.42	3.5
Extreme High-gloss	0.42	3.5	0.36	3.0
Extreme Performance	0.42	3.5	0.36	3.0
Heat-resistant	0.42	3.5	0.36	3.0
High-performance Architectural	0.74	6.2	0.74	6.2
High-temperature	0.42	3.5	0.42	3.5
Metallic	0.42	3.5	0.42	3.5
Military Specification	0.34	2.8	0.28	2.3
Mold-seal	0.42	3.5	0.42	3.5
Pan-backing	0.42	3.5	0.42	3.5
Prefabricated Architectural Multi-component	0.42	3.5	0.28	2.3
Prefabricated Architectural One-component	0.42	3.5	0.28	2.3
Pretreatment	0.42	3.5	0.42	3.5
Touch-up and Repair	0.42	3.5	0.36	3.0
Silicone-release	0.42	3.5	0.42	3.5
Solar-absorbent	0.42	3.5	0.36	3.0
Vacuum-metalizing	0.42	3.5	0.42	3.5
Drum Coating, New, Exterior	0.34	2.8	0.34	2.8
Drum Coating, New, Interior	0.42	3.5	0.42	3.5
Drum Coating, Reconditioned, Exterior	0.42	3.5	0.42	3.5
Drum Coating, Reconditioned, Interior	0.50	4.2	0.50	4.2

**Table II: VOC Content Limits for Plastic Parts and Products Surface Coatings**

**Weight of VOC per Volume of Coating,  
Less Water and Exempt Compounds, as Applied**

Coating Category	kg VOC/ l coating	lb VOC / gal coating
General One Component	0.28	2.3
General Multi-component	0.42	3.5
Electric Dissipating and Shock-free	0.80	6.7
Extreme Performance (2-pack coatings)	0.42	3.5
Metallic	0.42	3.5
Military Specification (1-pack)	0.34	2.8
Military Specification (2-pack)	0.42	3.5
Mold-seal	0.76	6.3
Multi-colored	0.68	5.7
Optical	0.80	6.7
Vacuum-metalizing	0.80	6.7

**Table III: VOC Content Limits for Automotive/Transportation and Business Machine Plastic Parts Surface Coatings**

**Weight of VOC per Volume of Coating,  
Less Water and Exempt Compounds, as Applied**

<b>Automotive/Transportation Coatings*</b>		
<b>Coating Category</b>	<b>kg VOC / l coating</b>	<b>lb VOC / gal coating</b>
<b>I. High Bake Coatings – Interior and Exterior Parts</b>		
Flexible Primer	0.54	4.5
Non-flexible Primer	0.42	3.5
Basecoat	0.52	4.3
Clear coat	0.48	4.0
Non-basecoat/Clear coat	0.52	4.3
<b>II. Low Bake/Air Dried Coatings – Exterior Parts</b>		
Primer	0.58	4.8
Basecoat	0.60	5.0
Clear coat	0.54	4.5
Non-basecoat/Clear coat	0.60	5.0
<b>III. Low Bake/Air Dried Coatings – Interior Parts</b>	0.60	5.0
<b>IV. Touch-up and Repair</b>	0.62	5.2
<i>*For red, yellow and black automotive coatings, except touch-up and repair coatings, the limit is determined by multiplying the appropriate limit in this table by 1.15.</i>		
<b>Business Machine Coatings</b>		
<b>Coating Category</b>	<b>kg VOC/ l coating</b>	<b>lb VOC / gal coating</b>
Primer	0.35	2.9
Topcoat	0.35	2.9
Texture Coat	0.35	2.9
Fog Coat	0.26	2.2
Touch-up and Repair	0.35	2.9

**Table IV: VOC Content Limits for Pleasure Craft Surface Coatings**

**Weight of VOC per Volume of Coating,  
Less Water and Exempt Compounds, as Applied**

Coating Category	kg VOC/ l coating	lb VOC / gal coating
Extreme High-gloss Topcoat	0.60	5.0
High Gloss Topcoat	0.42	3.5
Pretreatment Wash Primer	0.78	6.5
Finish Primer/Surfacer	0.42	3.5
High Build Primer Surfacer	0.34	2.8
Aluminum Substrate Antifoulant Coating	0.56	4.7
Antifoulant Sealer/Tiecoat	0.42	3.5
Other Substrate Antifoulant Coating	0.40	3.3
All other pleasure craft surface coatings for metal or plastic	0.42	3.5

**Table V: VOC Content Limits for Motor Vehicle Materials Surface Coatings**

**Weight of VOC per Volume of Coating,  
Less Water and Exempt Compounds, as Applied**

Coating Category	kg VOC/ l coating	lb VOC / gal coating
Motor Vehicle Cavity Wax	0.65	5.4
Motor Vehicle Sealer	0.65	5.4
Motor Vehicle Deadener	0.65	5.4
Motor Vehicle Gasket/Gasket Sealing Material	0.20	1.7
Motor Vehicle Underbody Coating	0.65	5.4
Motor Vehicle Trunk Interior Coating	0.65	5.4
Motor Vehicle Bedliner	0.20	1.7
Motor Vehicle Lubricating Wax/Compound	0.70	5.8

**Table VI: VOC Emission Rate Limits for Metal Parts and Products Surface Coatings**

**Weight of VOC per Volume of Coating Solids, as Applied**

Coating Category	Air Dried		Baked	
	kg VOC / l solids	lb VOC / gal solids	kg VOC / l solids	lb VOC / gal solids
General One Component	0.54	4.52	0.40	3.35
General Multi-component	0.54	4.52	0.40	3.35
Camouflage	0.80	6.67	0.80	6.67
Electric-insulating Varnish	0.80	6.67	0.80	6.67
Etching Filler	0.80	6.67	0.80	6.67
Extreme High-gloss	0.80	6.67	0.61	5.06
Extreme Performance	0.80	6.67	0.61	5.06
Heat-resistant	0.80	6.67	0.61	5.06
High-performance Architectural	4.56	38.0	4.56	38.0
High-temperature	0.80	6.67	0.80	6.67
Metallic	0.80	6.67	0.80	6.67
Military Specification	0.54	4.52	0.40	3.35
Mold-seal	0.80	6.67	0.80	6.67
Pan-backing	0.80	6.67	0.80	6.67
Prefabricated Architectural Multi-component	0.80	6.67	0.40	3.35
Prefabricated Architectural One-component	0.80	6.67	0.40	3.35
Pretreatment	0.80	6.67	0.80	6.67
Silicone-release	0.80	6.67	0.80	6.67
Solar-absorbent	0.80	6.67	0.61	5.06
Vacuum-metalizing	0.80	6.67	0.80	6.67
Drum Coating, New, Exterior	0.54	4.52	0.54	4.52
Drum Coating, New, Interior	0.80	6.67	0.80	6.67
Drum Coating, Reconditioned, Exterior	0.80	6.67	0.80	6.67
Drum Coating, Reconditioned, Interior	1.17	9.78	1.17	9.78

**Table VII: VOC Emission Rate Limits for Plastic Parts and Products Surface Coatings**

**Weight of VOC per Volume of Coating Solids, as Applied**

Coating Category	kg VOC / l solids	lb VOC / gal solids
General One Component	0.40	3.35
General Multi-component	0.80	6.67
Electric Dissipating and Shock-free	8.96	74.7
Extreme Performance (2-pack coatings)	0.80	6.67
Metallic	0.80	6.67
Military Specification (1-pack)	0.54	4.52
Military Specification (2-pack)	0.80	6.67
Mold-seal	5.24	43.7
Multi-colored	3.04	25.3
Optical	8.96	74.7
Vacuum-metalizing	8.96	74.7

**Table VIII: VOC Emission Rate Limits for Automotive/Transportation and Business Machine Plastic Parts Surface Coatings**

**Weight of VOC per Volume of Coating Solids, as Applied**

<b>Automotive/Transportation Coatings*</b>		
<b>Coating Category</b>	<b>kg VOC / l solids</b>	<b>lb VOC / gal solids</b>
<b>I. High Bake Coatings – Interior and Exterior Parts</b>		
Flexible Primer	1.39	11.58
Non-flexible Primer	0.80	6.67
Basecoat	1.24	10.34
Clear coat	1.05	8.76
Non-basecoat/Clear coat	1.24	10.34
<b>II. Low Bake/Air Dried Coatings – Exterior Parts</b>		
Primer	1.66	13.80
Basecoat	1.87	15.59
Clear coat	1.39	11.58
Non-basecoat/Clear coat	1.87	15.59
<b>III. Low Bake/Air Dried Coatings – Interior Parts</b>		
	1.87	15.59
<b>IV. Touch-up and Repair</b>		
	2.13	17.72
* For red, yellow and black automotive coatings, except touch-up and repair coatings, the recommended limit is determined by multiplying the appropriate limit in this table by 1.15.		
<b>Business Machine Coatings</b>		
<b>Coating Category</b>	<b>kg VOC / l solids</b>	<b>lb VOC / gal solids</b>
Primer	0.57	4.80
Topcoat	0.57	4.80
Texture Coat	0.57	4.80
Fog Coat	0.38	3.14
Touch-up and Repair	0.57	4.80

**Table IX: VOC Emission Rate Limits for Pleasure Craft Surface Coatings**

**Weight of VOC per Volume of Coating Solids, as Applied**

Coating Category	kg VOC / l solids	lb VOC / gal solids
Extreme High-gloss Topcoat	1.10	9.2
High Gloss Topcoat	0.80	6.7
Pretreatment Wash Primer	6.67	55.6
Finish Primer/Surfacer	0.80	6.7
High Build Primer Surfacer	0.55	4.6
Aluminum Substrate Antifoulant Coating	1.53	12.8
Other Substrate Antifoulant Coating	0.53	4.4
All other pleasure craft surface coatings for metal or plastic	0.80	6.7

**§ 129.67. Graphic arts systems.**

(a) This section applies to facilities whose rotogravure and flexographic printing presses by themselves or in combination with a surface coating operation subject to § 129.52 or § 129.52d (relating to surface coating processes; **and control of VOC emissions from miscellaneous metal parts surface coating processes, miscellaneous plastic parts surface coating processes and pleasure craft surface coatings**) have the potential to emit or have emitted VOCs into the outdoor atmosphere in quantities greater than 1,000 pounds (460 kilograms) per day or 100 tons (90,900 kilograms) per year during any calendar year since January 1, 1987.

\* \* \* \* \*

**§ 129.75. Mobile equipment repair and refinishing.**

\* \* \* \* \*

(b) This section does not apply to a person who applies surface coating to mobile equipment or mobile equipment components under one of the following circumstances:

(1) The surface coating process is subject to the miscellaneous metal parts finishing requirements of § 129.52 (relating to surface coating processes)[.] or the requirements of § 129.52d (relating to the control of VOC emissions from miscellaneous metal parts surface coating processes and miscellaneous plastic parts surface coating processes).

\* \* \* \* \*

# Small Business Compliance Advisory Committee

to the Pennsylvania Department of Environmental Protection

PO Box 8468

Harrisburg, PA 17105-8468

April 23, 2014

Honorable E. Christopher Abruzzo  
Secretary  
Department of Environmental Protection  
Rachel Carson State Office Building  
P.O. Box 2063  
Harrisburg, PA 17105-2063

2015 JUL 13 PM 3:48

RECEIVED  
IRRC

Re: Proposed Rulemaking for Control of VOC Emissions from Miscellaneous Metal Parts Surface Coating Processes, Miscellaneous Plastic Parts Surface Coating Processes and Pleasure Craft Surface Coatings (*25 Pa. Code*, Chapter 129)

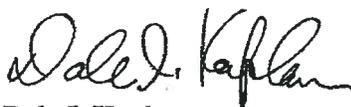
Dear Secretary Abruzzo:

On April 23, 2014, the Small Business Compliance Advisory Committee (Committee) discussed the proposed rulemaking Annex A to amend *25 Pa. Code* Chapter 129 (relating to standards for sources). The proposed rulemaking adds provisions to Chapter 129 to further reduce the emissions of volatile organic compounds (VOC) from miscellaneous metal parts surface coating processes and adds provisions to reduce the VOC emissions from miscellaneous plastic parts surface coating processes and from pleasure craft surface coatings.

The amendments are proposed to meet the Clean Air Act "reasonably available control technology" requirements for ozone nonattainment areas. The proposed VOC content limits and VOC emission rates and work practice standards are consistent with the recommendations of the United States Environmental Protection Agency included in the Control Techniques Guideline document for this source category.

The Committee encourages the Department to consider flexibility for small businesses in the development of the proposed rulemaking. The Committee voted 10-0-0 to concur with the Department's recommendation to present the proposed rulemaking amendments to the Environmental Quality Board for consideration for adoption and publication as a proposed rulemaking for public comment.

Sincerely,



Dale I. Kaplan  
Chair

cc: Joyce Epps, Director, PA DEP BAQ  
Susan Hoyle, PA DEP BAQ  
Susan Foster, PA DEP BAQ

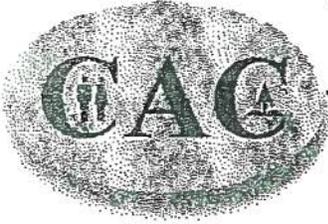
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# Citizens Advisory Council

to the Department of Environmental Protection

P.O. Box 8459 • Rachel Carson State Office Building  
Harrisburg, PA 17105-8459 • 717-787-4527 • Fax 717-787-2878

April 4, 2014

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*Allegheny County*  
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Nancy D. Perkins, Vice Chair  
John J. Walliser, Esq.

*Bedford County*  
William C. Fink

*Carbon County*  
James J. Clauser

*Chester County*  
Donald S. Welsh

*Crawford County*  
Burt A. Waite

*Cumberland County*  
Walter N. Heine  
R. Timothy Weston, Esq.

*Dauphin County*  
David E. Hess  
Seth Mendelsohn, Esq.

*Erie County*  
Pat Lupo, O.S.B.

*Greene County*  
Terry L. Dayton, Chair

*Lehigh County*  
Janet B. Keim

*Tioga County*  
Thaddeus K. Stevens

Ms. Joyce E. Epps  
Director  
Bureau of Air Quality  
P.O. Box 8468  
Harrisburg, PA 17105-8468

Dear Ms. Epps:

On March 12, 2014, staff from the Bureau of Air Quality (Bureau) briefed members of the Citizens Advisory Council (Council) Policy and Regulatory Oversight Committee (Committee) on three draft proposed regulations designed to reduce VOC emissions from certain industrial processes. These rulemakings included the following:

- Fiberglass Boat Manufacturing Materials;
- Miscellaneous Metal Parts Surface Coating Processes, Miscellaneous Plastic Parts Surface Coating Processes, and Pleasure Craft Surface Coatings;
- Industrial Cleaning Solvents

With the exception of the Industrial Cleaning Solvents rulemaking, the Committee recommended to Council at its March 18, 2014, meeting that it concurs with its recommendation that the rulemakings proceed to the Environmental Quality Board (EQB) for action. Regarding the Industrial Cleaning Solvents rulemaking, the Committee suggested to Council that it refrain from recommending that the rulemaking move forward to the EQB until the Bureau could provide Council with additional background information on the rulemaking, including details concerning the number of facilities potentially impacted by the regulation in Pennsylvania, as well as the anticipated implementation costs to the regulated community. Council adopted the recommendations of the Committee at its March 18, 2014, meeting.



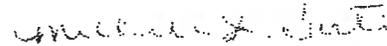
Ms. Joyce E. Epps

- 2 -

April 4, 2014

Council appreciates the Bureau's cooperation in providing briefings on air regulations to the Committee and would be happy to meet with Bureau staff in the near future to further discuss the Industrial Cleaning Solvents rulemaking. If you have any questions regarding Council's action on the above-referenced regulations, please contact me at 717-787-8171 or at [mtate@pa.gov](mailto:mtate@pa.gov).

Sincerely,



Michele L. Tate  
Executive Director  
Citizens Advisory Council

cc: Kirit Dalal  
Randy Bordner  
Susan Hoyle  
Elias Rivera  
Bryan Oshinski  
Laura Edinger

# Air Quality Technical Advisory Committee

to the Pennsylvania Department of Environmental Protection

PO Box 8468

Harrisburg, PA 17105-8468

February 20, 2014

Honorable E. Christopher Abruzzo  
Secretary  
Department of Environmental Protection  
Rachel Carson State Office Building  
P.O. Box 2063  
Harrisburg, PA 17105-2063

2015 JUL 13 PM 3:48

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Re: Proposed Rulemaking for Control of VOC Emissions from Miscellaneous Metal Parts Surface Coating Processes, Miscellaneous Plastic Parts Surface Coating Processes and Pleasure Craft Surface Coatings (Chapter 129)

Dear Secretary Abruzzo:

On February 20, 2014, the Air Quality Technical Advisory Committee (Committee) discussed the proposed rulemaking to amend 25 *Pa. Code* Chapter 129 (relating to standards for sources). The proposed rulemaking adds provisions to Chapter 129 to further reduce the emissions of volatile organic compounds (VOC) from miscellaneous metal parts surface coating processes and to add provisions to reduce the VOC emissions from miscellaneous plastic parts surface coating processes and from pleasure craft surface coatings.

The amendments are proposed to meet the Clean Air Act "reasonably available control technology" requirements for ozone nonattainment areas. The proposed emission limits and work practice standards are consistent with the recommendations of the United States Environmental Protection Agency included in the Control Techniques Guideline document for these source categories.

The Committee voted 10-0-0 to concur with the Department's recommendation to present the proposed rulemaking amendments to the Environmental Quality Board, with the changes discussed at today's meeting, for consideration for adoption and publication as a proposed rulemaking for public comment.

Sincerely,



Patrick K. O'Neill Esq.  
Chair

cc: Joyce Epps, Director, PA DEP BAQ  
Susan Hoyle, PA DEP BAQ

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Vertical stamp: PA DEP BAQ

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July 13, 2015

David Sumner  
Executive Director  
Independent Regulatory Review Commission  
333 Market Street, 14th Floor  
Harrisburg, PA 17120

2015 JUL 13 PM 3:46

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Re: Proposed Rulemaking: Control of VOC Emissions from Miscellaneous Metal Parts Surface Coating Processes, Miscellaneous Plastic Parts Surface Coating Processes and Pleasure Craft Surface Coatings (#7-491)

Dear Mr. Sumner:

Pursuant to Section 5(a) of the Regulatory Review Act, please find enclosed a copy of a proposed regulation for review and comment by the Independent Regulatory Review Commission (Commission). This proposal is scheduled for publication in the *Pennsylvania Bulletin* on August 8, 2015, with a 67-day public comment period. The Environmental Quality Board (Board) adopted this proposal on October 21, 2014.

The Clean Air Act requires the Department of Environmental Protection (DEP) to adopt regulations to implement Control Technique Guidelines (CTG) issued by the U. S. Environmental Protection Agency (EPA) to address volatile organic compound (VOC) emissions in ozone nonattainment areas. The enclosed proposed rulemaking would amend 25 *Pa. Code* Chapter 129 adding § 129.52d to adopt reasonably available control technology (RACT) requirements and RACT emission limitations for stationary sources of VOC emissions from miscellaneous metal parts surface coating processes and miscellaneous plastic parts surface coating processes. The proposal additionally applies to other processes including surface coating of automotive and transportation plastic parts, business machine plastic parts, pleasure craft, and bodies or body parts for new heavier vehicles, as well as related cleaning activities. The proposed rulemaking would also implement VOC emission control measures for a separate coating line at an automobile and light-duty truck assembly coating facility on which coatings are applied to other parts intended for use in new automobiles or new light-duty trucks or to aftermarket repair or replacement parts for automobiles or light-duty trucks, as well as related cleaning activities.

The VOC emission reduction measures included in the 2008 Miscellaneous Metal and Plastic Parts Coatings Control Technique Guidelines issued by the EPA and in the proposed rulemaking are largely based on the hazardous air pollutant emission reduction measures of the Federal 2004 National Emission Standards for Hazardous Air Pollutants: Surface Coating of Miscellaneous Metal Parts and Products and the 2004 National Emission Standards for Hazardous Air Pollutants: Surface Coating of Plastic Parts and Products.



The measures in the proposed rulemaking are reasonably necessary to attain and maintain the health- and welfare-based 8-hour ground-level ozone National Ambient Air Quality Standards and to satisfy related CAA requirements in this Commonwealth. This proposed rulemaking will be submitted to the EPA for approval as a revision to the Commonwealth's State Implementation Plan following promulgation of the final-form regulation.

This proposed rulemaking would apply to the following: (1) the owner and operator of a facility that manufactures metal parts or products or plastic parts or products, including automotive and transportation plastic parts, business machine plastic parts, pleasure craft, or bodies or body parts for new heavier vehicles, on which subject surface coatings are applied; (2) the owner and operator of a separate coating line at an automobile and light-duty truck assembly coating facility, on which subject surface coatings are applied to other parts intended for use in new automobiles or new light-duty trucks or to aftermarket repair or replacement parts for automobiles or light-duty trucks; and (3) the owner and operator of a facility that applies subject coatings to the surfaces of metal parts or products, or plastic parts or products, on a contractual basis.

The proposal provides three compliance options: (1) use of compliant coating materials; (2) use of a combination of compliant coating materials and one or more VOC emission capture systems and add-on air pollution control devices; and (3) use of one or more VOC emissions capture systems and add-on air pollution control devices that meet a minimum overall control efficiency of 90%; compliant coating materials would not be used with the capture systems or control devices.

For two types of coating operations, the proposed rulemaking would provide an option for the owner or operator to elect to be regulated under § 129.52e (relating to control of VOC emissions from automobile and light-duty truck assembly surface coating operations and heavier vehicle coating operations) instead of under this proposed rulemaking. The two types of coating operations are: (1) coating of a body or body part for a new heavier vehicle at the facility; and (2) a separate coating line at an automobile and light-duty truck assembly coating facility on which coatings are applied to other parts intended for use in new automobiles or new light-duty trucks or to aftermarket repair or replacement parts for automobiles or light-duty trucks. The option to comply with § 129.52e is provided to allow these owners and operators flexibility in complying with their permit conditions or to optimize their operations.

DEP identified 160 facilities whose owners and operators may be subject to the proposed VOC emission reduction measures. The owners and operators of as many as 139 of these facilities may emit 2.7 tons or more of actual VOC emissions per 12-month rolling period threshold, including related cleaning activities and before consideration of controls, and would therefore likely be required to implement the proposed VOC emission control measures, work practice standards, and recordkeeping and reporting requirements. The owners and operators of the remaining 21 affected facilities with actual VOC emissions below the 2.7 tons per 12-month rolling period threshold, including related cleaning activities and before consideration of controls, would be subject only to the recordkeeping requirements and, if requested by DEP, reporting requirements of the proposed rulemaking. It is possible that the owners and operators of additional facilities that have not been identified could be subject to the proposed rulemaking control measures.



July 13, 2015

Implementation of the recommended control measures could generate reductions of as much as 1,586 tons of VOC emissions per 12-month rolling period from the 139 facilities. The Department estimates that the range of cost effectiveness to the regulated industry for implementing the proposed rulemaking is \$920/ton VOC emissions reduced to \$1,758/ton reduced. The range of cost per regulated facility for implementing the proposed VOC emission control measures is estimated to be \$10,500 to \$20,000 per facility. DEP expects that the costs to the regulated industry will be at the lower end of these ranges because low-VOC content coating materials are likely to be readily available at a cost that is not significantly greater than the high-VOC content coatings they replace as a result of the development of NESHAP-compliant low-HAP content coating materials, since lower HAP content usually means lower VOC content.

The Air Quality Technical Advisory Committee and the Small Business Compliance Advisory Committee were briefed on the proposed regulation on February 20, 2014, and April 23, 2014, respectively. Both committees voted unanimously to concur with the Department's recommendation to move the proposal forward to the EQB for consideration as proposed rulemaking. In addition, the proposed amendments were discussed with the Citizens Advisory Council (CAC) Policy and Regulatory Oversight Committee on March 12, 2014. On the recommendation of the Policy and Regulatory Oversight Committee, on March 18, 2014, the CAC concurred with the Department's recommendation to forward the proposed rulemaking to the EQB.

The Department will provide the Commission with the assistance required to facilitate a thorough review of this proposal. Section 5(g) of the Regulatory Review Act provides that the Commission may, within 30 days of the close of the comment period, convey to the agency its comments, recommendations and objections to the proposed regulation. The Department will consider any comments, recommendations or suggestions made by the Commission, as well as the Committees and public commentators, prior to final adoption of this rulemaking.

Please contact me by e-mail at [ledinger@pa.gov](mailto:ledinger@pa.gov) or by telephone at 717.783.8727 if you have any questions or need additional information.

Sincerely,



Laura Edinger  
Regulatory Coordinator

Enclosures





**TRANSMITTAL SHEET FOR REGULATIONS SUBJECT TO  
THE REGULATORY REVIEW ACT**

I.D. NUMBER: 7-491 Control of VOC Emissions from Miscellaneous Metal Parts  
 SUBJECT: Surface Coating Processes, Miscellaneous Plastic Parts  
 Surface Coating Processes, and Pleasure Craft Surface Coatings  
 AGENCY: DEPARTMENT OF ENVIRONMENTAL PROTECTION

**TYPE OF REGULATION**

- Proposed Regulation
- Final Regulation
- Final Regulation with Notice of Proposed Rulemaking Omitted
- 120-day Emergency Certification of the Attorney General
- 120-day Emergency Certification of the Governor
- Delivery of Tolled Regulation
  - a.  With Revisions
  - b.  Without Revisions

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**FILING OF REGULATION**

DATE	SIGNATURE	DESIGNATION
7/13/15	<i>Shelly Weaver</i>	Majority Chair, HOUSE COMMITTEE ON ENVIRONMENTAL RESOURCES & ENERGY Representative John Maher
7/13/15	<i>Greg Vitale</i>	Minority Chair, HOUSE COMMITTEE ON ENVIRONMENTAL RESOURCES & ENERGY Representative Greg Vitale
7/13/15	<i>Gene Yaw</i>	Majority Chair, SENATE COMMITTEE ON ENVIRONMENTAL RESOURCES & ENERGY Senator Gene Yaw
7/13/15	<i>John Yudichak</i>	Minority Chair, SENATE COMMITTEE ON ENVIRONMENTAL RESOURCES & ENERGY Senator John Yudichak
7/13/15	<i>David Sumner</i>	INDEPENDENT REGULATORY REVIEW COMMISSION David Sumner ATTORNEY GENERAL (for Final Omitted only)
7/13/15	<i>Courne Inant</i>	LEGISLATIVE REFERENCE BUREAU (for Proposed only)

