

<h1 style="text-align: center;">Regulatory Analysis Form</h1> <p style="text-align: center;">(Completed by Promulgating Agency)</p> <p>(All Comments submitted on this regulation will appear on IRRC's website)</p>		<p>INDEPENDENT REGULATORY REVIEW COMMISSION</p>
<p>(1) Agency Environmental Protection</p>		
<p>(2) Agency Number: Identification Number: 7-491</p>		<p>IRRC Number:</p>
<p>(3) PA Code Cite: 25 Pa. Code Chapter 129</p>		
<p>(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</p>		
<p>(5) Agency Contacts (List Telephone Number and Email Address):</p> <p>Primary Contact: Laura Edinger, 783-8727, ledinger@pa.gov Secondary Contact: Hayley Book, 783-8727, hbook@pa.gov</p>		
<p>(6) Type of Rulemaking (check applicable box):</p> <p><input checked="" type="checkbox"/> Proposed Regulation <input type="checkbox"/> Final Regulation <input type="checkbox"/> Final Omitted Regulation</p>		<p><input type="checkbox"/> Emergency Certification Regulation <input type="checkbox"/> Certification by the Governor <input type="checkbox"/> Certification by the Attorney General</p>
<p>(7) Briefly explain the regulation in clear and nontechnical language. (100 words or less)</p> <p>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.</p> <p>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.</p>		

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_x, 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_x 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.

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). 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_x 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. 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)

(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.

No other regulations promulgated by this agency or other state agencies would be affected.

(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.¹

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.

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.

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

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.² 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 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.

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

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.³

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.⁴ 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

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

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

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.

(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.⁵ 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

⁵ 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/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 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
SAVINGS:	\$	\$	\$	\$	\$	\$
Regulated Community		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
Total Savings	0.00	0.00	0.00	0.00	0.00	0.00
COSTS:	\$	\$	\$	\$	\$	\$
Regulated Community	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
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
Total Costs	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
REVENUE LOSSES:	\$	\$	\$	\$	\$	\$
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
Total Revenue Losses	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.

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.

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 M (relating to National emission standards for hazardous air pollutants for surface coating of miscellaneous metal parts and products) (2004 NESHA), 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>1st Quarter 2015</u> |
| B. The date or dates on which public meetings or hearings will be held: | <u>1st Quarter 2015</u> |
| C. The expected date of promulgation of the proposed regulation as a final-form regulation: | <u>4th Quarter 2015</u> |
| D. The expected effective date of the final-form regulation: | <u>4th Quarter 2015</u> |
| E. The date by which compliance with the final-form regulation will be required: | <u>January 1, 2016</u> |
| 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.