

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

DIVISION OF AIR AND WASTE MANAGEMENT

Statutory Authority: 7 Delaware Code, Chapter 60, (7 Del.C. Ch. 60)
7 DE Admin. Code 1138

FINAL

Secretary's Order No.: 2010-A-0007

1138, Emission Standards for Hazardous Air Pollutants for Source Categories, Section 14.0: "Area Source Miscellaneous Parts or Products Surface Coating Operations".

Date of Issuance: March 11, 2010

Effective Date of the Amendment: April 11, 2010

Under the authority vested in the Secretary of the Department of Natural Resources and Environmental Control ("Department" or "DNREC") the following findings, reasons and conclusions are entered as an Order of the Secretary in the above-referenced rulemaking proceeding.

Background and Procedural History

This Order considers the proposed regulatory amendments to 7 DE Admin. Code 1138, Emission Standards for Hazardous Air Pollutants for Source Categories, Section 14.0, "Area Source Miscellaneous Parts or Products Surface Coating Operations". The proposed new Section 14.0 will affect surface coating operations that spray-apply coatings which contain any compounds of cadmium, chromium, lead, manganese or nickel. This proposed new section is based upon a federal rule that the U.S. Environmental Protection Agency (EPA) promulgated at 40 CFR Part 63, Subpart HHHHHH, as well as existing requirements found in similar area source standards found throughout Regulation 1138.

The purpose of this proposed regulatory action is to provide increased protection for Delaware citizens against potential adverse health effects linked to a long-term exposure to cadmium, chromium, lead, manganese, or nickel compounds. Additionally, many of these compounds, except the manganese compounds, are classified as either known or probable human carcinogens by the EPA. It should be noted that this proposed amendment does not apply to facilities that apply surface coatings to motor vehicles (auto body shops) or mobile equipment, as the Department plans to address these sources in the near future with separate regulatory promulgations.

The Department's Air Quality Management (AQM) Section of the Divisions of Air and Waste Management (DAWM) commenced the regulatory development process with Start Action Notice 2009-09. The Department published the proposed regulatory amendments in the December 1, 2009 Delaware Register of Regulation and held a public hearing on January 5, 2010. The Department's presiding hearing officer, Lisa A. Vest, prepared a Hearing Officer's Report dated March 1, 2010 (Report). The Report recommends certain findings and the adoption of the proposed Amendment as attached to the Report as Appendix A.

Findings and Discussion

I find that the proposed Amendment is well-supported by the record developed by the Department, and adopt the Report to the extent it is consistent with this Order. The Department's experts developed the record and drafted the proposed Amendment. Throughout the entire regulatory development process regarding this promulgation, the Department received public comments from the regulated community, as noted in the Report, and considered and responded to all timely and relevant public comments in making its determination.

I find that the Department's experts in the AQM Section of the DAWM fully developed the record to support adoption of these Amendments. With the adoption of the regulation amendment to 7 DE Admin. Code 1138, Emission Standards for Hazardous Air Pollutants for Source Categories, Section 14.0, "Area Source Miscellaneous Parts or Products Surface Coating Operations", Delaware will be able to mirror the recently issued federal rule promulgated by the U.S. Environmental Protection Agency (EPA) at 40 CFR Part 63, Subpart HHHHHH and provide increased protection for Delaware citizens against potential adverse health effects linked to a long-term exposure to cadmium, chromium, lead, manganese, or nickel compounds, a number of which have been classified as either known or probable human carcinogens by the EPA.

In conclusion, the following findings and conclusions are entered:

- 1.) The Department has jurisdiction under its statutory authority to issue an Order adopting these proposed Amendments as final;
- 2.) The Department provided adequate public notice of the proposed Amendment, and provided the public with an adequate opportunity to comment on the proposed Amendment, including at a public hearing;
- 3.) The Department held a public hearing on January 5, 2010 on the proposed Amendment in order to consider public comments before making any final decision, and fully considered and responded to all timely and relevant comments received from the regulated community concerning this matter;
- 4.) The Department's Hearing Officer's Report, including its recommended record and the recommended Amendment as set forth in Appendix A, are adopted to provide additional reasons and findings for this Order;
- 5.) The recommended Amendment does not reflect any substantive change from the proposed regulation Amendment as published in the December 1, 2009, Delaware Register of Regulations;
- 6.) The recommended Amendment should be adopted as final regulation Amendments because Delaware will then be enabled to (1) mirror the recently issued federal rule promulgated by the U.S. Environmental Protection Agency (EPA) at 40 CFR Part 63, Subpart HHHHHH; and (2) provide increased protection for Delaware citizens against potential adverse health effects linked to a long-term exposure to cadmium, chromium, lead, manganese, or nickel compounds, a number of which have been classified as either known or probable human carcinogens by the EPA. Moreover, the regulation amendment is well supported by documents in the record; and
- 7.) The Department shall submit this Order approving the final regulation to the Delaware Register of Regulations for publication in its next available issue, and provide such other notice as the law and regulation require and the Department determines is appropriate.

Collin P. O'Mara, Secretary

1138 Emission Standards for Hazardous Air Pollutants for Source Categories

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<u>14.0</u>	<u>Emission Standards for Hazardous Air Pollutants for Area Source Miscellaneous Parts or Products Surface Coating Operations</u>	<u>Subpart HHHHHH</u>

(Break in Continuity of Sections)

13.0 (Reserved)

(04/11/10)

14.0 Emission Standards for Hazardous Air Pollutants for Area Source Miscellaneous Parts or Products Surface Coating Operations

14.1 Applicability.

14.1.1 Except as provided in 14.1.2 of this regulation, the provisions of 14.0 of this regulation apply to each area source miscellaneous parts or products surface coating facility that performs spray application of coatings that contain [target hazardous air pollutants] (target HAPs) to any part or product made of plastic, metal, or combination of plastic and metal that are not motor vehicles or mobile equipment.

14.1.2 Activities described in 14.1.2.1 through 14.1.2.8 of this regulation are exempt from the provisions of 14.0 of this regulation.

14.1.2.1 Surface coating performed on site at installations owned or operated by the Armed Forces of the United States (including the Coast Guard and the Delaware National Guards), the National Aeronautics and Space Administration, or the National Nuclear Security Administration.

14.1.2.2 Surface coating of military munitions manufactured by or for the Armed Forces of the United States (including the Coast Guard and the Delaware National Guards) or equipment directly and exclusively used for the purposes of transporting military munitions.

14.1.2.3 Surface coating performed by individuals on their possessions or property, excluding motor vehicles or mobile equipment, either as a hobby or for maintenance of their possessions or property. Surface coating of others' possessions or property, excluding motor vehicles or mobile equipment, without compensation is also exempt from 14.0 of this regulation.

14.1.2.4 Surface coating of space vehicles.

14.1.2.5 Surface coating associated with facility maintenance activities.

14.1.2.6 Surface coating [~~conducted~~ associated] with research and laboratory activities.

14.1.2.7 Surface coating associated with quality control activities.

14.1.2.8 Surface coating activities that are covered under another area source standard in 40 CFR Part 63, other than 40 CFR Part 63 Subpart HHHHHH, or under another section of this regulation.

14.1.3 An area source is a source of hazardous air pollutants (HAPs) that is not a major source of HAPs, is not located at a major source of HAPs, and is not part of a major source of HAP emissions. A major source of HAP emissions is any 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 aggregate, 10 tons per year or more of any HAP or 25 tons per year or more of any combination of HAPs.

14.1.4 The affected source is the collection of items listed in 14.1.4.1 through 14.1.4.5 of this regulation. Not all affected sources will have all of the items listed in 14.1.4.1 through 14.1.4.5.

14.1.4.1 Mixing rooms and equipment.

14.1.4.2 Spray booths, ventilated preparation stations, curing ovens, and associated equipment.

14.1.4.3 Spray guns and associated equipment.

14.1.4.4 Spray gun cleaning equipment.

14.1.4.5 Equipment used for storage, handling, recovery, or recycling of cleaning solvents or waste [paints coatings].

14.1.5 The provisions of 14.0 of this regulation apply to each new, reconstructed, and existing area source miscellaneous parts or products surface coating operation that performs spray application of coatings that contain target HAPs to miscellaneous parts or products, with the exception of those activities exempted in 14.1.2 of this regulation.

14.1.6 An affected source is a new source if it meets the criteria in 14.1.6.1 and 14.1.6.2 of this regulation.

14.1.6.1' The owner or operator commenced the construction of the affected source after September 17, 2007 by installing new miscellaneous parts or products surface coating equipment. If the owner or operator of an existing source purchases and installs spray booths, enclosed spray gun cleaners, or purchases new spray guns to comply with 14.0 of this regulation, these actions would not make the existing affected source a new source.

14.1.6.2 The new miscellaneous parts or products surface coating equipment is used at an area source of HAPs that was not actively engaged in miscellaneous parts or products surface coating operations prior to September 17, 2007.

14.1.7 An affected source is reconstructed if it meets the definition of reconstruction in 3.2 of this regulation.

14.1.8 An affected source is an existing source if it is not a new source or a reconstructed source.

14.1.9 The owner or operator of an area source, subject to 14.0 of this regulation, is exempt from the obligation to obtain a Title V operating permit under 7 DE Admin. Code 1130 of State of Delaware "Regulations Governing the Control of Air Pollution", if the owner or operator is not required to obtain a Title V operating permit under 3.1 of 7 DE Admin. Code 1130 for a reason other than owner or operator's status as an area source under 14.0. Notwithstanding the previous sentence, the owner or operator shall continue to comply with the provisions of 14.0.

14.2 Definitions.

Unless defined below, all terms in 14.0 of this regulation have the meaning given them in the Act or in 3.2 of this regulation.

"Administrator" means the Administrator of the U.S. Environmental Protection Agency.

"Aerospace vehicle" means any aircraft including but not limited to airplanes, helicopters, missiles, rockets, and space vehicles.

"Airless spray" or "Air-assisted airless spray" means any [paint coating] spray technology that relies solely on the fluid pressure of the [paint coating] to create an atomized [paint coating] spray pattern and does not apply any atomizing compressed air to the [paint coating] before it leaves the [paint coating] nozzle. Air-assisted airless spray uses compressed air to shape and distribute the fan of atomized [paint coating], but still uses fluid pressure to create the atomized [paint coating].

"Appurtenance" means any accessory to a stationary structure coated at the site of installation, whether installed or detached, including but not limited to: bathroom and kitchen fixtures; cabinets; concrete forms; doors; elevators; fences; hand railings; heating equipment, air conditioning equipment, and other fixed mechanical equipment or stationary tools; lamp posts; partitions; pipes and piping systems; rain gutters and downspouts; stairways, fixed ladders, catwalks, and fire escapes; and window screens.

“Cleaning material” means a solvent used to remove contaminants and other materials, such as dirt, grease, or oil, from a substrate before or after coating application or from equipment associated with a coating operation, such as spray booths, spray guns, racks, tanks, and hangers. Thus, it includes any cleaning material used on substrates or equipment or both.

“Coating” means, for the purposes of 14.0 of this regulation, a material spray-applied to a substrate for decorative, protective, or functional purposes. For the purposes of 14.0, coating does not include the following materials.

- Decorative, protective, or functional materials that consist only of protective oils for metal, acids, bases, or any combination of these substances.
- Paper film or plastic film that may be pre-coated with an adhesive by the film manufacturer.
- Adhesives, sealants, maskants, or caulking materials.
- Temporary protective coatings, lubricants, or surface preparation materials.
- In-mold coatings that are spray-applied in the manufacture of reinforced plastic composite parts.

“Coatings that contain target HAPs” means coatings that contains any individual target HAP that is an Occupational Safety and Health Administration (OSHA) -defined carcinogen as specified in 29 CFR 1988.1200(d)(4) at a concentration greater than 0.1% by mass, or greater than 1.0% by mass for any other individual target HAP. For the purpose of determining whether materials the owner or operator uses contain the target HAPs, the owner or operator may rely on formulation data provided by the manufacturer or supplier, such as the material safety data sheet, as long as it represents each target HAP in the material that is present at 0.1% by mass or more for OSHA-defined carcinogens as specified in 29 CFR 1988.1200(d)(4) and at 1.0% by mass or more for other target HAPs.

“Compliance date” means the date by which the owner or operator shall be in compliance with the applicable requirements of 14.0 of this regulation.

“Deviation” means any instance in which an affected source, subject to 14.0 of this regulation, or an owner or operator of such a source fails to meet any applicable requirement or obligation established in 14.0.

“Electrostatic application” means any method of coating application where an electrostatic attraction is created between the part or product to be coated and the atomized [~~paint~~ coating] particles.

“Equipment cleaning” means the use of an organic solvent or cleaning material to remove coating residue from the surfaces of [~~paint~~ coating] spray guns and other [~~painting~~ coating] related equipment, including, but not limited to stir sticks, paint cups, brushes, and spray booths.

“Facility maintenance” means, for the purposes of 14.0 of this regulation, surface coating performed as part of the routine repair or renovation of the tools, equipment, machinery, and structures that comprise the infrastructure of the affected source and that are necessary for the facility to function in its intended capacity. Facility maintenance also includes surface coating associated with the installation of new equipment or structures, and the application of any surface coating as part of janitorial activities. Facility maintenance includes the application of coatings to stationary structures or their appurtenances at the site of installation, to portable buildings at the site of installation, to pavements, or to curbs.

“High volume, low pressure (HVLP)” means spray equipment that is permanently labeled as such and used to apply any coating by means of a spray gun which is designed and operated between 0.1 and 10 pounds per square inch gauge air atomizing pressure measured dynamically at the center of the air cap and at the air horns.

“Initial startup” means the first time equipment is brought online in a miscellaneous parts or products surface coating operation, and miscellaneous parts or products surface coating is first performed.

“Military munitions” means all ammunition products and components produced or used by or for the U.S. Department of Defense (DoD) or for the U.S. Armed Services for national defense and security, including military munitions under the control of the DoD, the U.S. Coast Guard, the National Nuclear Security Administration, U.S. Department of Energy, and National Guard personnel. The term military munitions includes: confined gaseous, liquid, and solid propellants, explosives, pyrotechnics, chemical

and riot control agents, smokes, and incendiaries used by DoD components, including bulk explosives and chemical warfare agents, chemical munitions, biological weapons, rockets, guided and ballistic missiles, bombs, warheads, mortar rounds, artillery ammunition, small arms ammunition, grenades, mines, torpedoes, depth charges, cluster munitions and dispensers, demolition charges, nonnuclear components of nuclear weapons, wholly inert ammunition products, and all devices and components of any items listed in this definition.

“**Miscellaneous parts or products**” mean any part or product made of metal or plastic, or combinations of metal and plastic that is not a motor vehicle or mobile equipment.

“**Miscellaneous parts or products surface coating facility**” means any shop, business, location, or parcel of land where miscellaneous parts or products surface coating operations are conducted.

“**Miscellaneous parts or products surface coating operation**” means the collection of equipment used to apply surface coating to miscellaneous parts or products, including applying cleaning solvents to prepare the surface before coating application, mixing coatings before application, applying coating to a surface, drying or curing the coating after application, and cleaning coating application equipment, but not plating. A single surface coating operation may include any combination of these types of equipment, but always includes at least the point at which a coating material is applied to a given part or product. A miscellaneous parts or products surface coating operation includes all other steps (such as surface preparation with solvent and equipment cleaning) in the affected source where HAPs are emitted from the coating of a part or product. The use of solvent to clean parts or products (for example, to remove grease during a mechanical repair) does not constitute a miscellaneous parts or products surface coating operation if no coatings are applied. A single affected source may have multiple miscellaneous parts or products surface coating operations. Surface coatings applied to wood, leather, rubber, ceramics, stone, masonry, or substrates other than metal and plastic are not considered miscellaneous parts or products surface coating operations for the purposes of 14.0 of this regulation.

“**Mobile equipment**” means any device that may be drawn and/or driven on a roadway including, but not limited to, heavy-duty trucks, truck trailers, fleet delivery trucks, buses, mobile cranes, bulldozers, street cleaners, agriculture equipment, motor homes, and other recreational vehicles (including camping trailers and fifth wheels). For the purposes of Section 14, mobile equipment includes, but is not limited to, assembled mobile equipment, mobile equipment parts or subassemblies, and accessories for mobile equipment.

“**Motor vehicle**” means any self-propelled vehicle, including, but not limited to, automobiles, light duty trucks, golf carts, vans, and motorcycles. For the purposes of Section 14, motor vehicles include, but are not limited to, assembled motor vehicles, motor vehicle parts or subassemblies, and accessories for motor vehicles.

“**Painter**” means any person who spray applies coatings.

“**Plastic**” refers to substrates containing one or more resins and may be solid, porous, flexible, or rigid. Plastics include fiber reinforced plastic composites.

“**Protective oil**” means organic material that is applied to metal for the purpose of providing lubrication or protection from corrosion without forming a solid film. This definition of protective oil includes, but is not limited to, lubricating oils, evaporative oils (including those that evaporate completely), and extrusion oils.

“**Quality control activities**” means surface coating activities that meet all of the following criteria.

- The activities associated with a surface coating operation are intended to detect and correct defects in the final product by selecting a limited number of samples from the operation and comparing the samples against specific performance criteria.
- The activities do not include the production of an intermediate or final product for sale or exchange for commercial profit; for example, parts or products that are surface coated are not sold and do not leave the facility.
- The activities are not a normal part of the surface coating operation.
- The activities do not involve surface coating of the tools, equipment, machinery, and structures that comprise the infrastructure of the affected source and that are necessary for

the facility to function in its intended capacity; that is, the activities are not facility maintenance.

“Research and laboratory activities” means surface coating activities that meet one of the following criteria.

- Activities conducted at a laboratory to analyze air, soil, water, waste, or product samples for contaminants or environmental impact.
- Activities conducted to test more efficient production processes, including alternative surface coating materials or application methods or methods for preventing or reducing adverse environmental impacts, provided that the activities do not include the production of an intermediate or final product for sale or exchange for commercial profit.
- Activities conducted at a research or laboratory facility that is operated under the close supervision of technically trained personnel, the primary purpose of which is to conduct research and development into new processes and products and that is not engaged in the manufacture of products for sale or exchange for commercial profit.

“Solvent” means a fluid containing organic compounds used to perform surface preparation or cleaning of surface coating equipment.

“Space vehicles” means vehicles designed to travel beyond the limit of the earth’s atmosphere, including but not limited to satellites, space stations, and the Space Shuttle System (including orbiter, external tanks, and solid rocket boosters).

“Spray-applied coating” means coatings that are applied using a hand-held device that creates an atomized mist of coating and deposits the coating on a substrate. For the purposes of 14.0 of this regulation, spray-applied coatings do not include the following materials or activities.

- Coatings applied from a hand-held device with a paint cup capacity that is equal to or less than 3.0 fluid ounces (89 cubic centimeters).
- Surface coating application using powder coatings, hand-held non-refillable aerosol containers, or non-atomizing application technology, including, but not limited to, paint brushes, rollers, hand wiping, flow coating, dip coating, electrodeposition coating, web coating, coil coating, touch-up markers, or marking pens.
- Thermal spray operations (also known as metallizing, flame spray, plasma arc spray, and electric arc spray, among other names) in which solid metallic or non-metallic material is heated to a molten or semi-molten state and propelled to the work piece or substrate by compressed air or other gas, where a bond is produced upon impact.

“Surface preparation” means use of a cleaning material on a portion of or all of a substrate prior to the application of a coating.

“Target HAPs” are compounds of cadmium, chromium, lead, manganese, or nickel.

“Transfer efficiency” means the amount of coating solids adhering to the object being coated divided by the total amount of coating solids sprayed, expressed as a percentage. Coating solids means the nonvolatile portion of the coating that makes up the dry film.

14.3 Compliance dates.

14.3.1 The owner or operator of a new or reconstructed affected source that has an initial startup on or before January 9, 2008 shall be in compliance with the applicable provisions of 14.0 of this regulation no later than ~~March~~ April 11, 2010.

14.3.2 The owner or operator of a new or reconstructed affected source that has an initial startup after January 9, 2008 shall be in compliance with the applicable provisions of 14.0 of this regulation immediately upon startup or ~~March~~ April 11, 2010, whichever is later.

14.3.3 The owner or operator of an existing affected source shall be in compliance with the applicable provisions of 14.0 of this regulation no later than January 10, 2011.

14.4 Standards.

14.4.1 The owner or operator of a miscellaneous parts or products surface coating operation shall be in compliance with the applicable requirements in 14.4.1.1 through 14.4.1.6 of this regulation.

- 14.4.1.1 The spray application of coatings that contain target HAPs is prohibited by persons who are not certified as having completed the training described in 14.4.2 of this regulation. All painters shall be certified that they have completed training in the proper spray application of surface coatings and the proper setup and maintenance of spray equipment. The minimum requirements for training and certification are described in 14.4.2. The requirements of 14.4.1.1 of this regulation do not apply to the students of an accredited surface coating training program who are under the direct supervision of an instructor who meets the requirements of 14.4.1.1.
- 14.4.1.2 All spray-applied coatings that contain target HAPs shall be applied in a spray booth, preparation station, or mobile enclosure that meets the requirements of 14.4.1.2.1 and 14.4.1.2.2 of this regulation.
- 14.4.1.2.1 All spray booths, preparation stations, and mobile enclosures shall be fitted with a type of filter technology that is demonstrated to achieve at least 98% capture of **[paint coating]** overspray. The filter efficiency shall be demonstrated according to the test method in 14.6.1 of this regulation. The requirements of 14.4.1.2.1 of this regulation do not apply to waterwash spray booths that are operated and maintained according to the manufacturer's specifications.
- 14.4.1.2.2 Spray-applied coatings that contain target HAPs shall only be applied when the differential pressure drop across the filter of the spray booth, preparation station, or mobile enclosure is within the operating range specified by the filter manufacturer.
- 14.4.1.3 All spray-applied coatings that contain target HAPs shall be applied in a spray booth, preparation station, or mobile enclosure that meets the requirements of either 14.4.1.3.1 or 14.4.1.3.2 of this regulation.
- 14.4.1.3.1 Spray booths and preparation stations that are used to coat miscellaneous parts or products shall have a full roof, at least three complete walls or complete side curtains, and shall be ventilated so that air is drawn into the enclosure. The walls and roof of an enclosure may have openings, if needed, to allow for conveyors and parts or products to pass through the enclosure during the coating process.
- 14.4.1.3.2 Mobile ventilated enclosures that are used to perform spot repairs shall enclose and, if necessary, seal against the surface around the area being coated such that **[paint coating]** overspray is retained within the enclosure and directed to a filter to capture **[paint coating]** overspray.
- 14.4.1.4 All spray-applied coatings that contain target HAPs shall be applied with a high volume, low pressure (HVLP) spray gun, electrostatic application, airless spray gun, air-assisted airless spray gun, or an equivalent technology that is demonstrated by the spray gun manufacturer to achieve transfer efficiency comparable to one of the spray gun technologies listed above for a comparable operation, and for which written approval has been obtained from the Administrator. The transfer efficiency of an equivalent technology shall be demonstrated according to the test methods in 14.6.2 of this regulation. The requirements of 14.4.1.4 of this regulation do not apply to **[painting coating]** performed by students and instructors at paint training centers. The requirements of 14.4.1.4 do not apply to the surface coating of aerospace vehicles that involves the coating of components that normally require the use of an airbrush or an extension on the spray gun to properly reach limited access spaces; to the application of coatings on aerospace vehicles that contain fillers that adversely affect atomization with HVLP spray guns; or to the application of coatings on aerospace vehicles that normally have a dried film thickness of less than 0.0013 centimeters (0.0005 inches).
- 14.4.1.5 All **[paint coating]** spray gun cleaning shall be done so that an atomized mist or spray of gun cleaning solvent and **[paint coating]** residue is not created outside of a container that collects used gun cleaning solvent. Spray gun cleaning may be done with, for example, hand cleaning of parts of the disassembled gun in a container of solvent, by flushing solvent through the gun without atomizing the solvent and **[paint coating]** residue, or by

using a fully enclosed spray gun washer. A combination of non-atomizing methods may also be used.

14.4.1.6 As provided in 3.6.7 of this regulation, the Administrator may choose to grant an owner or operator permission to use an alternative to the emission standards in 14.4 of this regulation after an owner or operator has requested approval to do so according to the provisions of 3.6.7.2 of this regulation.

14.4.2 The owner or operator of a miscellaneous parts or products surface coating operation shall ensure and certify that all new and existing painters, including contract painters, who spray apply coatings that contain target HAPs, are trained in the proper application of surface coatings as required in 14.4.1.1 of this regulation. The training program shall include, at a minimum, the items listed in 14.4.2.1 through 14.4.2.3 of this regulation.

14.4.2.1 A list of all current painters by name and job description who are required to be trained.

14.4.2.2 Hands-on and classroom instruction that addresses, at a minimum, the initial and refresher training in the topics listed in 14.4.2.2.1 through 14.4.2.2.4 of this regulation.

14.4.2.2.1 Spray gun equipment selection, set up, and operation, including measuring coating viscosity, selecting the proper fluid tip or nozzle, and achieving the proper spray pattern, air pressure and volume, and fluid delivery rate.

14.4.2.2.2 Spray technique for different types of coatings to improve transfer efficiency and minimize coating usage and overspray, including maintaining the correct spray gun distance and angle to the part or product, using proper banding and overlap, and reducing lead and lag spraying at the beginning and end of each stroke.

14.4.2.2.3 Routine spray booth and filter maintenance, including filter selection and installation.

14.4.2.2.4 Environmental compliance with the requirements of 14.0 of this regulation.

14.4.2.3 A description of the methods to be used at the completion of initial or refresher training to demonstrate, document, and provide certification of successful completion of the required training. An owner or operator who can show by documentation or certification that a painter's work experience or training has resulted in training equivalent to the training required in 14.4.2.2 of this regulation is not required to provide the initial training required in 14.4.2.2 to these painters.

14.4.3 As required in 14.4.1.1 of this regulation, all new and existing painters at a miscellaneous parts or products surface coating operation, including contract painters, who spray apply coatings that contain target HAPs shall be trained by the dates specified in 14.4.3.1 and 14.4.3.2 of this regulation. Employees who transfer within a company to a position as a painter are subject to the same requirements as a new hire.

14.4.3.1 All painters located at a new or reconstructed affected source shall be trained and certified no later than 180 days after hiring or no later than ~~March~~ April 11, 2010, whichever is later. Painter training that was completed within five years prior to the date training is required, and that meets the requirements specified in 14.4.2.2 of this regulation satisfies this requirement and is valid for a period not to exceed five years after the date the training was completed.

14.4.3.2 All painters located at an existing affected source shall be trained and certified no later than 180 days after hiring or no later than January 10, 2011, whichever is later. Painter training that was completed within five years prior to the date training is required, and that meets the requirements specified in 14.4.2.2 of this regulation satisfies this requirement and is valid for a period not to exceed five years after the date the training was completed.

14.4.4 Training and certification shall be valid for a period not to exceed five years after the date the training was completed, and all painters shall receive refresher training that meets the requirements of 14.4 of this regulation and be re-certified every five years.

14.5 Monitoring requirements.

The owner or operator of a miscellaneous parts or products surface coating operation shall install, maintain, and operate a pressure drop monitoring device to measure the differential pressure drop

across each filter during all times that any spray booth, preparation station, or mobile enclosure is operating. The differential pressure drop shall be recorded at least once per day. If a differential pressure drop is observed outside of the operating range specified by the filter manufacturer, the owner or operator shall take immediate corrective action. The owner or operator shall also record the incident and the corrective actions taken.

14.6 Test methods.

14.6.1 Filter efficiency. The test method used to demonstrate the filter efficiency shall be consistent with the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Method 52.1, "Gravimetric and Dust-Spot Procedures for Testing Air-Cleaning Devices Used in General Ventilation for Removing Particulate Matter, June 4, 1992". The test coating for measuring filter efficiency shall be a high solids bake enamel delivered at a rate of at least 135 grams per minute from a conventional (non-HVLP) air-atomized spray gun operating at 40 pounds per square inch gauge air pressure; the air flow rate across the filter shall be 150 feet per minute. The owner or operator may use published filter efficiency data provided by filter manufacturers to demonstrate compliance with the requirement of 14.4.1.2.1 of this regulation and is not required to perform this demonstration.

14.6.2 Spray gun transfer efficiency. The test methods used to demonstrate that an alternative spray gun transfer efficiency is equivalent to that of an HVLP spray gun in 14.4.1.4 of this regulation shall be equivalent to the California South Coast Air Quality Management District's "Spray Equipment Transfer Efficiency Test Procedure for Equipment User, May 24, 1989" and "Guidelines for Demonstrating Equivalency with District Approved Transfer Efficient Spray Guns, September 26, 2002".

14.7 Notification requirements.

14.7.1 Initial notification. The owner or operator of a miscellaneous parts or products surface coating operation, subject to 14.0 of this regulation, shall submit the initial notification required by 3.9.2 of this regulation. For a new or reconstructed affected source, the owner or operator shall submit the initial notification no later than 180 days after initial startup or ~~March~~ **April** 11, 2010, whichever is later. For an existing affected source, the owner or operator shall submit the initial notification no later than ~~March~~ **April** 11, 2010. The initial notification shall provide the applicable information specified in 14.7.1.1 through 14.7.1.8 of this regulation.

14.7.1.1 The company's name.

14.7.1.2 The address (i.e., physical location) of the affected source and the address where compliance records are maintained, if different.

14.7.1.3 The name and mailing address of the owner or operator of the affected miscellaneous parts or products surfacing coating operation.

14.7.1.4 An identification of the relevant standard (i.e., 14.0 of 7 **DE Admin. Code** 1138).

14.7.1.5 A brief description of the miscellaneous parts or products surface coating operation. The owner or operator shall indicate the number of spray booths and preparation stations and the number of painters usually employed at the operation.

14.7.1.6 A statement of whether the source is already in compliance with all the applicable requirements of 14.0 of this regulation or whether the source will be brought into compliance by the compliance date.

14.7.1.7 If the affected source is a new or reconstructed source, the owner or operator shall certify in the initial notification whether the source is in compliance with all the applicable requirements in 14.0 of this regulation. The owner or operator shall include a statement by a responsible official that the source is in compliance with all the applicable requirements in 14.0 and that this initial notification also serves as the notification of compliance status. The owner or operator shall also provide the official's name, title, phone number, e-mail address (if available) and signature, certifying the truth, accuracy, and completeness of the notification.

14.7.1.8 If the affected source is an existing source, the owner or operator may certify in the initial notification that the source is already in compliance with all the applicable requirements in

14.0 of this regulation. If the owner or operator of an existing source is certifying in the initial notification that the source is in compliance with all the applicable requirements in 14.0, then the owner or operator shall include a statement by a responsible official that the source is in compliance with all the applicable requirements in 14.0 and that this initial notification also serves as the notification of compliance status. The owner or operator shall also provide that official's name, title, phone number, e-mail address (if available) and signature, certifying the truth, accuracy, and completeness of the notification.

14.7.2 Notification of compliance status.

14.7.2.1 The owner or operator of a new or reconstructed affected source is not required to submit a separate notification of compliance status in addition to the initial notification specified in 14.7.1 of this regulation provided the owner or operator was able to certify compliance on the date of the initial notification, as part of the initial notification, and the affected source's compliance status has not since changed.

14.7.2.2 If the owner or operator of an existing affected source did not certify in the initial notification that the affected source is already in compliance as specified in 14.7.1 of this regulation, then the owner or operator of an existing affected source shall submit a notification of compliance status.

14.7.2.3 The owner or operator of an existing affected source, required to submit a notification of compliance status in accordance with 14.7.2.2 of this regulation shall submit the notification of compliance status on or before March 11, 2011. The owner or operator shall submit the applicable information specified in 14.7.2.3.1 through 14.7.2.3.5 of this regulation with the notification of compliance status.

14.7.2.3.1 The company's name.

14.7.2.3.2 The address (i.e., physical location) of the affected source and the address where compliance records are maintained, if different.

14.7.2.3.3 The name of the owner or operator of the affected miscellaneous parts or products surface coating operation.

14.7.2.3.4 The date of the notification of compliance status.

14.7.2.3.5 A statement of whether the source is in compliance with all the applicable requirements in 14.0 of this regulation or an explanation of any noncompliance and a description of corrective actions being taken to achieve compliance. The owner or operator shall include a statement by a responsible official certifying the truth, accuracy, and completeness of the notification of compliance status. The owner or operator shall also provide that official's name, title, phone number, e-mail address (if available) and signature.

14.8 Reporting requirements.

14.8.1 Annual notification of changes report. The owner or operator of a miscellaneous parts or products surface coating operation, subject to 14.0 of this regulation, shall submit a report for each calendar year in which information previously submitted in either the initial notification required in 14.7.1 of this regulation, the notification of compliance status required in 14.7.2 of this regulation, or the previous annual notification of changes report submitted under 14.8.1 of this regulation has changed. Deviations from the applicable requirements in 14.0 on the date of the report shall be deemed to be a change.

14.8.2 The annual notification of changes report shall be submitted prior to March 1 of each calendar year when reportable changes have occurred and shall include the information specified in 14.8.2.1 through 14.8.2.5 of this regulation.

14.8.2.1 The company's name.

14.8.2.2 The address (i.e., physical location) of the affected source and the address where compliance records are maintained, if different.

14.8.2.3 The name of the owner or operator of the affected miscellaneous parts or products surface coating operation.

- 14.8.2.4 A brief description of the deviations that occurred during the reporting period. The owner or operator shall describe the deviation and provide the date of the deviation, the affected source where the deviation occurred, and the corrective actions taken to achieve compliance.
- 14.8.2.5 A statement of whether the source is in compliance with all the applicable requirements in 14.0 of this regulation or an explanation of any noncompliance and a description of corrective actions being taken to achieve compliance. The owner or operator shall also include a statement by a responsible official with that official's name, title, phone number, e-mail address (if available) and signature, certifying the truth, accuracy, and completeness of the annual notification of changes report.
- 14.9 Recordkeeping requirements.
 - 14.9.1 The owner or operator of a miscellaneous parts or products surface coating operation shall keep the records specified in 14.9.1.1 through 14.9.1.6 and 14.9.2 of this regulation, as applicable.
 - 14.9.1.1 Certification that each painter has completed the training specified in 14.4.2 of this regulation with the date the initial training was completed and when the most recent refresher training was completed.
 - 14.9.1.2 Documentation of the filter efficiency of the filter material for each spray booth, preparation station, and mobile enclosure, according to the test procedure in 14.6.1 of this regulation.
 - 14.9.1.3 Records of the daily differential pressure drop observations required in 14.5 of this regulation. These records shall include the corrective actions taken whenever the differential pressure drop was observed outside the operating range specified by the filter manufacturer.
 - 14.9.1.4 Documentation from the spray gun manufacturer for each spray gun with a cup capacity equal to or greater than 3.0 fluid ounces that does not meet the definition of an HVLP spray gun, electrostatic application, airless spray gun, or air-assisted airless spray gun, which has been determined by the Administrator to achieve a transfer efficiency equivalent to that of an HVLP spray gun, according to the test procedures in 14.6.2 of this regulation.
 - 14.9.1.5 Copies of any notification submitted as required in 14.7 of this regulation and copies of any report submitted as required in 14.8 of this regulation.
 - 14.9.1.6 Records of any deviation from the applicable requirements in 14.0 of this regulation, including any deviation from the applicable requirements in 3.0 of this regulation. These records shall include the date and time period of the deviation, a description of the nature of the deviation, and the actions taken to correct the deviation.
 - 14.9.2 The owner or operator of an affected source shall maintain records of any assessments of source compliance performed in support of the initial notification, the notification of compliance status, or the annual notification of changes report.
 - 14.9.3 The owner or operator of an affected source shall maintain copies of the records specified in 14.9.1 and 14.9.2 of this regulation for a period of at least five years after the date of each record. Copies of records shall be kept on site and in a printed or electronic form that is readily accessible for inspection for at least the first two years after their date and may be kept off-site after that two year period.
- 14.10 Applicability of general provisions.
The owner or operator of an affected source, subject to the provisions of 14.0 of this regulation, shall also be in compliance with the provisions in 3.0 of this regulation, that are applicable to 14.0 as specified in Table 14-1 of this regulation.
- 14.11 [Reserved].

Table 14-1– Applicability of 3.0 to 14.0 of this Regulation

<u>General</u>	
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<u>Provision Reference</u>	<u>Applies to 14.0</u>	<u>Comment</u>
<u>3.1.1.1</u>	<u>Yes</u>	<u>Additional terms defined in 14.2 of this regulation; when overlap between 3.0 and 14.0 of this regulation occurs, 14.0 takes precedence.</u>
<u>3.1.1.2 - 3.1.1.3</u>	<u>Yes</u>	
<u>3.1.1.4</u>	<u>Yes</u>	<u>14.0 of this regulation clarifies the applicability of each provision in 3.0 of this regulation to sources subject to 14.0.</u>
<u>3.1.1.5</u>	<u>No</u>	<u>Reserved.</u>
<u>3.1.1.6</u>	<u>Yes</u>	
<u>3.1.1.7 - 3.1.1.9</u>	<u>No</u>	<u>Reserved.</u>
<u>3.1.1.10 - 3.1.1.12</u>	<u>Yes</u>	
<u>3.1.1.13 - 3.1.1.14</u>	<u>No</u>	<u>Reserved.</u>
<u>3.1.2.1 - 3.1.2.3</u>	<u>Yes</u>	<u>Applicability of 14.0 of this regulation is also specified in 14.1 of this regulation.</u>
<u>3.1.3.1</u>	<u>Yes</u>	<u>14.0 of this regulation clarifies the applicability of each paragraph in 3.0 of this regulation to sources subject to 14.0.</u>
<u>3.1.3.2</u>	<u>Yes</u>	<u>14.1.9 of this regulation exempts area sources from the obligation to obtain Title V operating permits.</u>
<u>3.1.3.3 - 3.1.3.4</u>	<u>No</u>	<u>Reserved.</u>
<u>3.1.3.5</u>	<u>Yes</u>	
<u>3.1.4</u>	<u>No</u>	<u>Reserved.</u>
<u>3.1.5</u>	<u>Yes</u>	<u>14.1.9 of this regulation exempts area sources from the obligation to obtain Title V operating permits.</u>
<u>3.2</u>	<u>Yes</u>	<u>Additional terms defined in 14.2 of this regulation; when overlap between 3.0 and 14.0 of this regulation occurs, 14.0 takes precedence.</u>
<u>3.3</u>	<u>Yes</u>	
<u>3.4.1.1 - 3.4.1.2</u>	<u>Yes</u>	
<u>3.4.1.3 - 3.4.1.5</u>	<u>No</u>	<u>Reserved.</u>
<u>3.4.2 - 3.4.2.2</u>	<u>Yes</u>	
<u>3.4.2.3</u>	<u>No</u>	<u>Reserved.</u>
<u>3.4.3</u>	<u>Yes</u>	
<u>3.5.1 - 3.5.2.1</u>	<u>Yes</u>	
<u>3.5.2.2</u>	<u>No</u>	<u>Reserved.</u>
<u>3.5.2.3 - 3.5.2.4</u>	<u>Yes</u>	
<u>3.5.2.5</u>	<u>No</u>	<u>Reserved.</u>
<u>3.5.2.6</u>	<u>Yes</u>	
<u>3.5.3</u>	<u>No</u>	<u>Reserved.</u>
<u>3.5.4.1.1 - 3.5.4.1.2.8</u>	<u>Yes</u>	
<u>3.5.4.1.2.9</u>	<u>No</u>	<u>Reserved.</u>
<u>3.5.4.1.2.10 - 3.5.4.4</u>	<u>Yes</u>	
<u>3.5.5</u>	<u>Yes</u>	
<u>3.5.6 - 3.5.6.1.1</u>	<u>Yes</u>	
<u>3.5.6.1.2 - 3.5.6.1.4</u>	<u>No</u>	<u>Reserved.</u>

<u>3.5.6.2</u>	<u>Yes</u>	
<u>3.6.1</u>	<u>Yes</u>	
<u>3.6.2 - 3.6.2.5</u>	<u>Yes</u>	<u>14.3 of this regulation specifies the compliance dates.</u>
<u>3.6.2.6</u>	<u>No</u>	<u>Reserved.</u>
<u>3.6.3.1 - 3.6.3.2</u>	<u>Yes</u>	<u>14.3 of this regulation specifies the compliance dates.</u>
<u>3.6.3.3 - 3.6.3.4</u>	<u>No</u>	<u>Reserved.</u>
<u>3.6.3.5</u>	<u>Yes</u>	
<u>3.6.4</u>	<u>No</u>	<u>Reserved.</u>
<u>3.6.5 - 3.6.5.1</u>	<u>Yes</u>	
<u>3.6.5.2</u>	<u>No</u>	<u>Reserved.</u>
<u>3.6.5.3</u>	<u>No</u>	<u>No startup, shutdown, and malfunction plan is required by 14.0 of this regulation.</u>
<u>3.6.6.1</u>	<u>Yes</u>	
<u>3.6.6.2 - 3.6.6.2.2</u>	<u>Yes</u>	
<u>3.6.6.2.3</u>	<u>No</u>	<u>14.0 of this regulation does not require performance testing.</u>
<u>3.6.6.2.4 - 3.6.6.3</u>	<u>Yes</u>	
<u>3.6.7</u>	<u>Yes</u>	
<u>3.6.8</u>	<u>No</u>	<u>14.0 of this regulation does not establish opacity or visible emission standards.</u>
<u>3.6.9 - 3.6.9.6.1.2.1</u>	<u>Yes</u>	
<u>3.6.9.6.1.2.2</u>	<u>No</u>	<u>Reserved.</u>
<u>3.6.9.6.1.2.3 - 3.6.9.6.1.2.4</u>	<u>Yes</u>	
<u>3.6.9.6.1.3 - 3.6.9.6.1.4</u>	<u>No</u>	<u>Reserved.</u>
<u>3.6.9.6.2 - 3.6.9.14</u>	<u>Yes</u>	
<u>3.6.9.15</u>	<u>No</u>	<u>Reserved.</u>
<u>3.6.9.16</u>	<u>Yes</u>	
<u>3.6.10</u>	<u>Yes</u>	
<u>3.7</u>	<u>No</u>	<u>No performance testing is required by 14.0 of this regulation.</u>
<u>3.8</u>	<u>No</u>	<u>14.0 of this regulation does not require the use of continuous monitoring systems.</u>
<u>3.9.1 - 3.9.1.4</u>	<u>Yes</u>	<u>14.7 of this regulation specifies notification requirements.</u>
<u>3.9.1.4.1</u>	<u>No</u>	<u>Reserved.</u>
<u>3.9.1.4.2 - 3.9.2.2.5</u>	<u>Yes</u>	<u>Except that 14.7.1 of this regulation specifies the initial notification requirements.</u>
<u>3.9.2.3</u>	<u>No</u>	<u>Reserved.</u>
<u>3.9.2.4 - 3.9.2.4.1</u>	<u>Yes</u>	
<u>3.9.2.4.2 - 3.9.2.4.4</u>	<u>No</u>	<u>Reserved.</u>
<u>3.9.2.4.5 - 3.9.4</u>	<u>Yes</u>	
<u>3.9.5</u>	<u>No</u>	<u>14.0 of this regulation does not require performance tests.</u>

<u>3.9.6</u>	<u>No</u>	<u>14.0 of this regulation does not have opacity or visible emission standards.</u>
<u>3.9.7</u>	<u>No</u>	<u>14.0 of this regulation does not require the use of continuous monitoring systems.</u>
<u>3.9.8 - 3.9.8.3</u>	<u>Yes</u>	<u>Except that 14.7.2 of this regulation specifies the notification of compliance status requirements.</u>
<u>3.9.8.4</u>	<u>No</u>	<u>Reserved.</u>
<u>3.9.8.5 - 3.9.8.6</u>	<u>Yes</u>	
<u>3.9.9</u>	<u>Yes</u>	
<u>3.9.10</u>	<u>Yes</u>	<u>14.7.2 of this regulation specifies the dates for submitting the notification of changes report.</u>
<u>3.10.1 - 3.10.1.4</u>	<u>Yes</u>	
<u>3.10.1.4.1</u>	<u>No</u>	<u>Reserved.</u>
<u>3.7</u>	<u>No</u>	<u>No performance testing is required by 14.0 of this regulation.</u>
<u>3.8</u>	<u>No</u>	<u>14.0 of this regulation does not require the use of continuous monitoring systems.</u>
<u>3.9.1 - 3.9.1.4</u>	<u>Yes</u>	<u>14.7 of this regulation specifies notification requirements.</u>
<u>3.9.1.4.1</u>	<u>No</u>	<u>Reserved.</u>
<u>3.9.1.4.2 - 3.9.2.2.5</u>	<u>Yes</u>	<u>Except that 14.7.1 of this regulation specifies the initial notification requirements.</u>
<u>3.9.2.3</u>	<u>No</u>	<u>Reserved.</u>
<u>3.9.2.4 - 3.9.2.4.1</u>	<u>Yes</u>	
<u>3.9.2.4.2 - 3.9.2.4.4</u>	<u>No</u>	<u>Reserved.</u>
<u>3.9.2.4.5 - 3.9.4</u>	<u>Yes</u>	
<u>3.9.5</u>	<u>No</u>	<u>14.0 of this regulation does not require performance tests.</u>
<u>3.9.6</u>	<u>No</u>	<u>14.0 of this regulation does not have opacity or visible emission standards.</u>
<u>3.9.7</u>	<u>No</u>	<u>14.0 of this regulation does not require the use of continuous monitoring systems.</u>
<u>3.9.8 - 3.9.8.3</u>	<u>Yes</u>	<u>Except that 14.7.2 of this regulation specifies the notification of compliance status requirements.</u>
<u>3.9.8.4</u>	<u>No</u>	<u>Reserved.</u>
<u>3.9.8.5 - 3.9.8.6</u>	<u>Yes</u>	
<u>3.9.9</u>	<u>Yes</u>	
<u>3.9.10</u>	<u>Yes</u>	<u>14.7.2 of this regulation specifies the dates for submitting the notification of changes report.</u>
<u>3.10.1 - 3.10.1.4</u>	<u>Yes</u>	
<u>3.10.1.4.1</u>	<u>No</u>	<u>Reserved.</u>
<u>3.10.1.4.2 - 3.10.1.7</u>	<u>Yes</u>	
<u>3.10.2.1</u>	<u>Yes</u>	<u>Additional requirements are specified in 14.9 of this regulation.</u>
<u>3.10.2.2.1 - 3.10.2.2.11</u>	<u>No</u>	<u>14.0 of this regulation does not require startup, shutdown, and malfunction plans, performance testing, or CMS.</u>
<u>3.10.2.2.12</u>	<u>Yes</u>	
<u>3.10.2.2.13</u>	<u>No</u>	<u>14.0 of this regulation does not require the use of CEMS.</u>
<u>3.10.2.2.14</u>	<u>Yes</u>	
<u>3.10.2.3</u>	<u>Yes</u>	

<u>3.10.3</u>	<u>No</u>	<u>14.0 of this regulation does not require the use of CMS.</u>
<u>3.10.4.1</u>	<u>Yes</u>	<u>Additional requirements are specified in 14.8 of this regulation.</u>
<u>3.10.4.2 - 3.10.4.3</u>	<u>No</u>	<u>14.0 of this regulation does not require performance tests, or opacity or visible emissions observations.</u>
<u>3.10.4.4</u>	<u>Yes</u>	
<u>3.10.4.5</u>	<u>No</u>	<u>14.0 of this regulation does not require startup, shutdown, and malfunction reports.</u>
<u>3.10.5</u>	<u>No</u>	<u>14.0 of this regulation does not require the use of CMS.</u>
<u>3.10.6</u>	<u>Yes</u>	
<u>3.11</u>	<u>No</u>	<u>14.0 of this regulation does not require the use of flares.</u>
<u>3.12</u>	<u>Yes</u>	

- 1 DE Reg. 1788 (05/01/98)**
- 1 DE Reg. 2003 (06/01/98)**
- 2 DE Reg. 1390 (02/01/99)**
- 2 DE Reg. 1433 (03/01/99)**
- 3 DE Reg. 445 (09/01/99)**
- 4 DE Reg. 707 (10/01/00)**
- 5 DE Reg. 1118 (11/01/01)**
- 5 DE Reg. 2130 (05/01/02)**
- 5 DE Reg. 2177 (06/01/02)**
- 6 DE Reg. 1713 (06/01/03)**
- 6 DE Reg. 1724 (06/01/03)**
- 7 DE Reg. 6 (07/01/03)**
- 11 DE Reg. 221 (08/01/07)**
- 11 DE Reg. 683 (11/01/07)**
- 11 DE Reg. 1489 (05/01/08)**
- 12 DE Reg. 481 (10/01/08)**
- 13 DE Reg. 1347 (04/01/10)**