No. 30-03-OR *Bill No.* 1120-03

AN ORDINANCE

Revision to the Allegheny County's Portion of the Pennsylvania State Implementation Plan for the Attainment and Maintenance of the National Ambient Air Quality Standards and Allegheny County Health Department Rules and Regulations Article XXI, Air Pollution Control

Whereas, The Board of Health has at a regularly scheduled and advertised meeting, and after a period of public comment, adopted amendments to Article XXI "Air Quality Regulations" and;

Whereas, that Regulation has also been adopted as County Ordinance 16782 and;

Whereas, this Regulation must be submitted to the Pennsylvania Department of Environmental Protection and to the United States Environmental Protection Agency for concurrence and;

Whereas, these amendments will Control the release of volatile organic compounds (VOC's) as precursors to ozone, resulting from the application of surface coatings such as paints and stains and;

Whereas, these amendments will delineate new VOC emission limitations specific to the aerospace, automotive, and wood furniture industries, These new rules would be applicable to all automotive touch-up and repair facilities and certain aircraft maintenance facilities and wood furniture manufacturing facilities that meet or exceed specified emission thresholds. For the aircraft and wood furniture facilities, the new regulations would constitute Reasonably Available Control Technology (RACT) and;

Whereas, these amendments will delineate application techniques.

The Council of the County of Allegheny hereby enacts as follows:

Revision 47: VOC Control, General and Specific Surface Coating Applications

Section 2101.20 Definitions n 2101.20 Definitions
Section 2105.01 Equivalent Compliance Techniques
Section 2105.10 Surface Coating Processes
[NEW] Section 2105.74 Aerospace Manufacturing And Rework
[NEW] Section 2105.75 Mobile Equipment Repair and Refinishing
[NEW] Section 2105.76 Wood Furniture Manufacturing Operations

§2101.20 DEFINITIONS

[NEW] Corresponding with Aerospace Manufacturing and Rework...

"Ablative coating" means a coating that chars when exposed to open flame or extreme temperatures, as would occur during the failure of an engine casing or during aerodynamic heating. The ablative char surface serves as an insulating barrier, protecting adjacent components from the heat or open flame.

"Adhesion promoter" means a very thin coating applied to an aerospace vehicle or component substrate to promote wetting and to form a chemical bond with the subsequently applied material.

"Adhesive bonding primer" means a primer applied in a thin film to aerospace components for the purpose of corrosion inhibition and increased adhesive bond strength by attachment. There are two categories of adhesive bonding primers:

a. Primers with a design cure at 250 °F or below; and
b. Primers with a design cure above 250 °F.

"Adhesive primer" means a coating applied to an aerospace vehicle or component that does one of the following:

a. Inhibits corrosion and serves as a primer when applied to bare metal or other surfaces prior to adhesive application; or
b. Is applied to surfaces that can be expected to contain fuel, with the exception of fuel tanks.

"Aerosol coating" means a coating expelled from a hand-held pressurized, nonrefillable container in a finely divided spray when a valve on the container is depressed.

"Aerospace coating operation" means an operation using a spray booth, tank or other enclosure of an area, such as a hangar for applying a single type of coating (for example, primer). Using the same spray booth for applying another type of coating--for example, a topcoat--constitutes a separate coating operation for which compliance determinations are performed separately.

"Aerospace coating unit" means a series of one or more coating applicators and any associated drying area or oven wherein a coating is applied, dried, and cured. A coating unit ends at the point where the coating is dried or cured, or prior to a subsequent application of a different coating. It is not necessary to have an associated oven or flashoff area to be included in this definition.

"Aerospace primer" means the first layer and subsequent layers of identically formulated coating applied to the surface of an aerospace vehicle or component. Primers are typically used for corrosion prevention, protection from the environment, functional fluid resistance, or adhesion of subsequent coatings. The term does not include primers that are defined as specialty coatings.

"Aerospace surface preparation" means the removal of contaminants from the surface of an aerospace vehicle or component or the activation or reactivation of the surface in preparation for the application of a coating.

"Aerospace touch-up and repair operation" means that portion of the coating operation that is the incidental application of coating used to cover minor imperfections in the coating finish or to achieve complete coverage. The term includes out-of-sequence or out-of-cycle coating.

"Aerospace vehicle or component" means a fabricated part, processed part, assembly of parts or completed unit, with the exception of electronic components, of any aircraft including, but not limited to, airplanes, helicopters, missiles, rockets, and space vehicles.

"Aircraft fluid systems" means systems that handle hydraulic fluids, fuel, cooling fluids or oils.

"Aircraft transparency" means an aircraft windshield, canopy, passenger window, lens, or another component that is constructed of transparent materials.

"Antichafe coating" means a coating applied to areas of moving aerospace components that may rub during normal operations or installation.

"Antique aerospace vehicle or component" means an antique aircraft, as defined by 14 CFR Part 45 (relating to identification and registration marking), or components thereof. An antique aerospace vehicle would not routinely be in commercial or military service in the capacity for which it was designed.

"Aqueous cleaning solvent" means a solvent in which water is at least 80% by weight of the solvent. Aqueous cleaning solvents solutions have a flash point greater than 93°C (200°F) (as reported by the manufacturer) and the solution is miscible with water.

"Bonding maskant" means a temporary coating used to protect selected areas of aerospace parts from strong acid or alkaline solutions during processing for bonding.

"CARC (chemical agent resistant coating)" means an exterior topcoat applied to aerospace vehicles or components designed to withstand exposure to chemical warfare agents or the decontaminants used on these agents.

"Chemical milling maskant" means a coating that is applied directly to aluminum aerospace vehicles or components to protect surface areas when chemically milling the component with a Type II etchant. The term does not include maskants used with Type I etchants, bonding maskants, line sealers, and critical use and seal coat maskants. Additionally, maskants that must be used on an individual part or subassembly with a combination of Type II etchants and any of these types of maskants--for example, Type I compatible, bonding, line sealers and critical use and seal coat.

"Cleaning operation" means spray-gun, hand-wipe and flush cleaning operations.

"Cleaning solvent" means a liquid material used for hand-wipe spray gun or flush cleaning. The term includes solutions that contain VOCs.

"Closed-cycle depainting system" means a dust free, automated process that removes a permanent coating in small sections at a time, and maintains a continuous vacuum around the area being depainted to capture emissions.

"Commercial exterior aerodynamic structure primer" means an aerospace vehicle or component primer used on aerodynamic components and structures that protrude from the fuselage, such as wings and attached components, control surfaces, horizontal stabilizers, vertical fins, wing-to-body fairings, antennae and landing gear and doors, for the purpose of extended corrosion protection and enhanced adhesion.

"Commercial interior adhesive" means materials used in the bonding of passenger cabin interior components which meet the Federal Aviation Administration (FAA) fireworthiness requirements.

"Compatible epoxy primer" means an aerospace vehicle or component primer that is compatible with the filled elastomeric coating and is epoxy based. The compatible substrate primer is an epoxy-polyamide primer used to promote adhesion of elastomeric coatings such as impact-resistant coatings.

"Compatible substrate primer" means either compatible epoxy primer or adhesive primer applied to aerospace vehicles or components.

"Confined space" means a space that is the following:

a. Large enough and so configured that an employee can enter and perform assigned work;
b. Has limited or restricted means for entry or exit--for example, fuel tanks, fuel vessels, and other spaces that have limited means of entry; and
c. Not suitable for continuous employee occupancy.

"Corrosion prevention system" means a coating system applied to aerospace vehicles or components that provides corrosion protection by displacing water and penetrating mating surfaces, forming a protective barrier between the metal surface and moisture. Coatings containing oils or waxes are excluded from this category.

"Critical use and line sealer maskant" means a temporary coating applied to aerospace vehicles or components, not covered under other maskant categories, used to protect selected areas of aerospace parts from strong acid or alkaline solutions such as those used in anodizing, plating, chemical milling and processing of magnesium, titanium or high strength steel, high precision aluminum chemical milling of deep cuts and aluminum chemical milling of complex shapes. The term includes materials used for repairs or to bridge gaps left by scribing operations--that is, a line sealer.

"Cryogenic flexible primer" means a primer applied to aerospace vehicles or components designed to provide corrosion resistance, flexibility and adhesion of subsequent coating systems when exposed to loads up to and surpassing the yield point of the substrate at cryogenic temperatures (-275°F and below).

"Cryoprotective coating" means a coating applied to aerospace vehicles or components that:

a. Insulates cryogenic or subcooled surfaces to limit propellant boil-off;
b. Maintains structural integrity of metallic structures during ascent or reentry; or
c. Prevents ice formation.

"Cyanoacrylate adhesive" means a fast-setting, single component adhesive that cures at room temperature. The term is also known as "super glue."

"Electric or radiation-effect coating" means a coating or coating system applied to aerospace vehicles or components engineered to interact, through absorption or reflection, with specific regions of the electromagnetic energy spectrum, such as the ultraviolet, visible, infrared, or microwave regions. Uses include, but are not limited to, lightning strike protection, electromagnetic pulse (EMP) protection, and radar avoidance. The term excludes coatings that have been designated "classified" by the Department of Defense.

"Electrostatic discharge and electromagnetic interference (EMI) coating" means a coating applied to space vehicles, missiles, aircraft radomes, and helicopter blades to disperse static energy or reduce electromagnetic interference.

"Elevated temperature skydrol resistant commercial primer" means a primer, applied primarily to commercial aircraft (or commercial aircraft adapted for military use), that must withstand immersion in phosphate-ester (PE) hydraulic fluid (skydrol 500B or equivalent) at the elevated temperature of 150°F for 1,000 hours.

"Epoxy polyamide topcoat" means a coating applied to aerospace vehicles or components when harder films are required or in some areas where engraving is accomplished in camouflage colors.

"Exempt solvent" means specified organic compounds that have been designated by the EPA as having negligible photochemical reactivity and are listed in 40 CFR 51.100 (relating to requirements for preparation, adoption and submittal of implementation plans).

"Fire-resistant (interior) coating" means:

a. For civilian aircraft, fire-resistant interior coatings are used on passenger cabin interior parts that are subject to the Federal Aviation Administration fireworthiness requirements;
b. For military aircraft, fire-resistant interior coatings are used on parts that are subject to the flammability requirements of MIL-STD-1630A and MIL-A-87721; and
c. For space applications, these coatings are used on parts that are subject to the flammability requirements of SE-R-0006 and SSP 30233.

"Flexible primer" means a primer applied to aerospace vehicles or components that meets flexibility requirements such as those needed for adhesive bond primed fastener heads or on surfaces expected to contain fuel. The flexible coating is required because it provides a compatible, flexible substrate over bonded sheet rubber and rubber-type coatings as well as a flexible bridge between the fasteners, skin and skin-to-skin joints on outer aircraft skins. This flexible bridge allows more topcoat flexibility around fasteners and decreases the chance of the topcoat cracking around the fasteners. The result is better corrosion resistance.

"Flight test coating" means a coating applied to aircraft other than missiles or single-use aircraft prior to flight testing to protect the aircraft from corrosion and to provide required marking during flight test evaluation.

"Flush cleaning" means removal of contaminants such as dirt, grease, oil and coatings from an aerospace vehicle or component or coating equipment by passing solvent over, into or through the item being cleaned. The solvent simply may be poured into the item being cleaned and then drained or assisted by air or hydraulic pressure or by pumping. The term does not include hand-wipe cleaning operations where wiping, scrubbing, mopping or other hand action is used.

"Fuel tank adhesive" means an adhesive used to bond aerospace vehicle components exposed to fuel and which must be compatible with fuel tank coatings.

"Fuel tank coating" means a coating applied to aerospace vehicle fuel tank components for the purpose of corrosion or bacterial growth inhibition and to assure sealant adhesion in extreme environmental conditions.

"Hand-wipe cleaning operation" means removing contaminants such as dirt, grease, oil and coatings from an aerospace vehicle or component by physically rubbing it with a material such as a rag, paper or cotton swab that has been moistened with a cleaning solvent.

"High temperature coating" means an aerospace vehicle or component coating designed to withstand temperatures of more than 350°F.

"Insulation covering" means a material that is applied to foam insulation to protect the insulation from mechanical or environmental damage.

"Intermediate release coating" means a thin coating applied beneath topcoats on aerospace vehicles or components to assist in removing the topcoat in depainting operations and generally to allow the use of less hazardous depainting methods.

"Lacquer" means a clear or pigmented coating formulated with a nitrocellulose or synthetic resin to dry by evaporation without a chemical reaction. Lacquers are resoluble in their original solvent.

"Limited access space" means internal surfaces or passages of an aerospace vehicle or component to which coatings cannot be applied without the aid of an airbrush or a spray gun extension for the application of coatings.

"Metalized epoxy coating" means a coating applied to aerospace vehicles or components that contains relatively large quantities of metallic pigmentation for appearance or added protection, or both.

"Mold release" means a coating applied to an aerospace vehicle or component mold surface to prevent the molded piece from sticking to the mold as it is removed.

"Nonstructural adhesive" means an adhesive applied to aerospace vehicles or components that bonds nonload bearing aerospace components in noncritical applications and is not included in any other specialty adhesive categories.

"Operating parameter value" means a minimum or maximum value established for a control equipment or process parameter that, if achieved by itself or in combination with one or more other operating parameter values, determines whether an owner or operator has complied with an applicable emission limitation.

"Optical antireflection coating" means a coating, applied to aerospace vehicles or components, with a low reflectance in the infrared and visible wavelength ranges that is used for antireflection

on or near optical and laser hardware.

"Part marking coating" means a coating or ink used to make identifying markings on aerospace materials, components and assemblies. These markings may be either permanent or temporary.

"Pretreatment coating" means an organic coating that contains at least 0.5% acids by weight and is applied directly to metal surfaces of aerospace vehicles and components to provide surface etching, corrosion resistance, adhesion and ease of stripping.

"Radome" means the nonmetallic protective housing for aerospace electromagnetic transmitters and receivers--for example, radar, electronic countermeasures.

"Rain erosion resistant coating" means the coating or coating system used to protect the leading edges of parts such as flaps, stabilizers, radomes, and engine inlet nacelles against erosion caused by rain impact during flight.

"Rocket motor bonding adhesive" means an adhesive used in rocket motor bonding applications.

"Rocket motor nozzle coating" means a catalyzed epoxy coating system used in elevated temperature applications on rocket motor nozzles.

"Rubber-based adhesive" means a quick setting contact cement applied to aerospace vehicles and components that provides a strong, yet flexible, bond between two mating surfaces that may be of dissimilar materials.

"Scale inhibitor" means a coating that is applied to the surface of an aerospace vehicle component prior to thermal processing to inhibit the formation of scale.

"Screen print ink" means an ink used in screen printing processes during fabrication of decorative laminates and decals for aerospace vehicles and components.

"Sealant" means a material used to prevent the intrusion of water, fuel, air, or other liquids or solids from certain areas of aerospace vehicles or components. There are two categories of sealants:

a. Extrudable/rollable/brushable sealants; and
b. Sprayable sealants.

"Seal coat maskant" means a coating applied over a maskant on aerospace vehicles and components to improve abrasion and chemical resistance during production operations.

"Self-priming topcoat" means a topcoat that is applied directly to an uncoated aerospace vehicle or component for purposes of corrosion prevention, environmental protection and functional fluid resistance. More than one layer of identical coating formulation may be applied to the vehicle or component. The coating is not subsequently topcoated with any other product

formulation.

"Semiaqueous cleaning solvent" means a solution in which water is a primary ingredient (>60% by weight of the solvent solution as applied is water).

"Silicone insulation material" means an insulating material applied to exterior metal surfaces of aerospace vehicles for protection from high temperatures caused by atmospheric friction or engine exhaust. These materials differ from ablative coatings in that they are not designed to be purposefully exposed to open flame or extreme heat and charred.

"Solids" means the nonvolatile portion of the coating that after drying makes up the dry film.

"Solid film lubricant" means a very thin coating, applied to aerospace vehicles or components, consisting of a binder system which contains as its chief pigment material one or more of the following:

a. Molybdenum;
b. Graphite;
c. Polytetrafluoroethylene (PTFE); or
d. Other solids that act as a dry lubricant between faying surfaces.

"Space vehicle" means a manmade device, either manned or unmanned, designed for operation beyond earth's atmosphere. The term includes integral equipment, such as models, mock-ups, prototypes, molds, jigs, tooling, hardware jackets, and test coupons. The term also includes auxiliary equipment associated with test, transport and storage, that through contamination can compromise the space vehicle performance.

"Specialty coating" means a coating applied to aerospace vehicles or components that, even though it meets the definition of a primer, topcoat, or self-priming topcoat, has additional performance criteria beyond those of primers, topcoats, and self-priming topcoats for specific applications. These performance criteria may include, but are not limited to, temperature or fire resistance, substrate compatibility, antireflection, temporary protection or marking, sealing, adhesively joining substrates, or enhanced corrosion protection.

"Specialized function coating" means a coating applied to aerospace vehicles or components that fulfills extremely specific engineering requirements that are limited in application and are characterized by low volume usage. This category excludes coatings included in other specialty coating categories.

"Spray gun" means a device that atomizes a coating or other material and projects the particulates or other material onto a substrate.

"Structural autoclavable adhesive" means an adhesive, cured by heat and pressure in an autoclave, that is used to bond load carrying aerospace components.

"Structural nonautoclavable adhesive" means an adhesive that is cured under ambient conditions that is used to bond load carrying aerospace components or other critical functions, such as nonstructural bonding in the proximity of engines.

"Temporary protective coating" means a coating applied to provide scratch or corrosion protection during manufacturing, storage or transportation of aerospace vehicles or components. The term includes peelable protective coatings and alkaline removable coatings. These materials are not intended to protect against strong acid or alkaline solutions. The term does not include coatings that provide protection from acid or alkaline chemical processing.

"Thermal control coating" means a coating formulated with specific thermal conductive or radiative properties to permit temperature control of the aerospace vehicle or component substrate.

"Type I chemical etchant" means a chemical milling etchant which contains varying amounts of dissolved sulfur but which does not contain amines.

"Type I chemical milling maskant" means a coating that is applied directly to aluminum aerospace vehicles and components to protect surface areas when chemically milling the aerospace vehicle or component with a Type I etchant.

"Type II chemical etchant" means a chemical milling etchant that is a strong sodium hydroxide solution containing amines.

"Type II chemical milling maskant" means a coating that is applied directly to aluminum aerospace vehicles and components to protect surface areas when chemically milling the aerospace vehicle or component with a Type II etchant.

"VOC composite vapor pressure" means the sum of the partial pressures of the compounds defined as VOCs and is determined by the following calculation:

$$PP_c = \sum_{i=1}^{n} \frac{\frac{W_i}{MW_i} \times VP_i}{\frac{W_w}{MW_w} + \frac{\sum_{i=1}^{n} W_e}{MW_e} + \sum_{i=1}^{n} \frac{W_i}{MW_i}}$$

where:

W_i = Weight of the "i"th VOC compound, grams.
W_w = Weight of water, grams.
W_e = Weight of non-HAP, non-VOC compound, grams.
MW_i = Molecular weight of the "i"th VOC compound, g/g-mole.
MW_w = Molecular weight of water, g/g-mole.
MW_e = Molecular weight of exempt compound, g/g-mole.
PP_c = VOC composite partial pressure at 20°C, mmHg.
VP_i = Vapor pressure of the "i"th VOC compound at 20°C, mmHg.

"Waterborne (water-reducible) coating" means a coating that contains more than 5% water by weight in its volatile fraction, as applied.

"Wet fastener installation coating" means a primer or sealant applied to aerospace vehicles or components by dipping, brushing or daubing on fasteners which are installed before the coating is cured.

"Wing coating" means a corrosion-resistant topcoat applied to aerospace vehicles or components that is resilient enough to withstand the flexing of the wings.

[NEW] Corresponding with Mobile Equipment Repair and Refinishing...

"Airless spray" means a spray coating method in which the coating is atomized by forcing it through a small nozzle opening at high pressure. The coating is not mixed with air before exiting from the nozzle opening.

"Antique motor vehicle" means a motor vehicle, but not a reproduction thereof, manufactured more than 25 years prior to the current year which has been maintained in or restored to a condition which is substantially in conformance with manufacturer specifications.

"Automotive elastomeric coating" means a coating designed for application over surfaces of flexible mobile equipment and mobile equipment components, such as elastomeric bumpers.

"Automotive impact-resistant coating" means a coating designed to resist chipping caused by road debris.

"Automotive jambing clearcoat" means a fast-drying, ready-to-spray clearcoat applied to surfaces such as door jambs and trunk and hood edges to allow for quick closure.

"Automotive lacquer" means a thermoplastic coating applied directly to bare metal surfaces of mobile equipment and mobile equipment components which dries primarily by solvent evaporation, and which is resoluble in its original solvent.

"Automotive low-gloss coating" means a coating which exhibits a gloss reading less than or equal to 25 on a 60° glossmeter.

"Automotive multicolored topcoat" means a topcoat that exhibits more than one color, is packaged in a single container, and camouflages surface defects on areas of heavy use, such as cargo beds and other surfaces of trucks and other utility vehicles.

"Automotive pretreatment" means a primer that contains a minimum of 0.5% acid, by weight, that is applied directly to bare metal surfaces of mobile equipment and mobile equipment components to provide corrosion resistance and to promote adhesion of subsequent coatings.

"Automotive primer-sealer" means a coating applied to mobile equipment and mobile equipment components prior to the application of a topcoat for the purpose of providing corrosion resistance, promoting the following:

a. Adhesion of subsequent coatings;
b. Color uniformity; or
c. The ability of the undercoat to resist penetration by the topcoat.

"Automotive primer-surfacer" means a coating applied to mobile equipment and mobile equipment components prior to the application of topcoat for the purpose of:

a. Filling surface imperfections in the substrate;
b. Providing corrosion resistance; or
c. Promoting adhesion of subsequent coatings.

"Automotive specialty coating" means coatings, including, but not limited to, elastomeric coatings, adhesion promoters, low gloss coatings, bright metal trim repair coatings, automotive jambing clearcoats, impact resistant coatings, rubberized asphaltic underbody coatings, uniform finish blenders, weld-through primers applied to automotive surfaces, and lacquer topcoats applied to a classic motor vehicle or to an antique motor vehicle.

"Automotive touch-up repair" means the application of automotive topcoat finish materials to cover minor finishing imperfections equal to or less than 1 inch in diameter.

"Classic motor vehicle" means a motor vehicle, but not a reproduction thereof, manufactured at least 15 years prior to the current year which has been maintained in or restored to a condition which is substantially in conformity with manufacturer specifications and appearance.

"Mobile equipment" means equipment which may be driven or is capable of being driven on a roadway including, but not limited to:

a. Automobiles;
b. Trucks, truck cabs, truck bodies and truck trailers;
c. Buses;
d. Motorcycles;
e. Utility bodies;
f. Camper shells;
g. Mobile cranes;
h. Bulldozers;
i. Street cleaners;
j. Golf carts;
k. Ground support vehicles, used in support of aircraft activities airports; and
l. Farm equipment.

[NEW] Corresponding with Wood Furniture Manufacturing and General Coatings...

"Adhesive" means any chemical substance that is applied for the purpose of bonding two surfaces together other than by mechanical means. For purposes of wood furniture manufacturing operations under §2105.76, adhesives are not considered coatings.

"Alternative method" means a method of sampling and analyzing for an air pollutant that is not a reference or equivalent method but has been demonstrated to the satisfaction of the Administrator of the EPA to, in specific cases, produce results adequate for a determination of compliance.

"As applied" means, for purposes of surface coatings, the VOC and solids content of a coating that is actually used to coat the substrate. The term includes the contribution of materials used for in-house dilution of the coating.

"As supplied" means, for purposes of surface coatings, the VOC and solids content of a coating as sold and delivered to the end user.

"Basecoat" means a coat of colored material, usually opaque, that is ordinarily applied before graining inks, glazing coats or other opaque coatings and is usually covered with an application of topcoat for protection.

"CPDS (Certified Product Data Sheet)" means documentation furnished by a coating supplier or an outside laboratory for a coating, strippable spray booth coating, or solvent that provides the VOC content as pounds of VOC per pound of coating solids calculated from data measured using the EPA Reference Method 24 or an equivalent or alternative method. Batch formulation data may be used if it is demonstrated to the satisfaction of the Administrator of the EPA that the coating does not release additional VOC as reaction byproducts during the cure. The VOC content stated should represent the maximum VOC emission potential of the coating, strippable spray booth coating, or solvent.

"Coating solids" (or "solids") means, for purposes of wood furniture manufacturing operations under §2105.76, the part of the coating which remains after the coating is dried or cured. Solids content is determined using data from the EPA Reference Method 24 or an alternative method approved by the Administrator of the EPA.

"Compliant coating" means a coating that meets the applicable emission limits specified in Part E (relating to standards for sources).

"Continuous coater" means a surface coating process that continuously applies coatings onto parts moving along a conveyor. Coatings that are not transferred to the part are recycled to a reservoir. Several types of application methods can be used with a continuous coater including spraying, curtain coating, roller coating, dip coating, and flow coating.

Conventional air spray" means a spray coating application method in which the coating is atomized by mixing it with compressed air and applied at an air pressure greater than 10 pounds per square inch (gauge) at the point of atomization. The term does not include:

a. Airless and air assisted airless spray technologies; and
b. Electrostatic spray technology.

"Cosmetic specialty coatings" means materials including padding stains, shading stains, sap stains, spatter stains, fillers, waxes, and inks applied to enhance wood finishes.

"Dip coating" means the application of a coating by immersing an object into the coating.

"Enamel" means a coat of colored material, usually opaque, that is applied as a protective topcoat over a basecoat, primer, or previously applied enamel coat. Another coating may be applied as a topcoat over the enamel.

"Equivalent method" means a method of sampling and analyzing for an air pollutant that has been demonstrated to the satisfaction of the Administrator of the EPA to have a consistent and quantitatively known relationship to the reference method under specific conditions.

"Final repair coat" means liquids applied to correct imperfections or damage to the topcoat.

"MSDS (Material Safety Data Sheet)" means the documentation required for hazardous

chemicals by the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard--29 CFR Part 1910 (relating to occupational safety and health standards)--for a solvent, cleaning material, coating or other material that identifies select reportable hazardous ingredients of the material, safety and health considerations and handling procedures.

"Nonpermanent final finish" means a material such as a wax, polish, nonoxidizing oil, or similar substance that must be periodically reapplied to a substrate over its lifetime to maintain or restore the material's effect.

"Normally closed container" means a container that is closed unless an operator is actively engaged in activities such as emptying or filling the container.

"Operating parameter value" means a minimum or maximum value established for a control equipment process parameter that, if achieved by itself or in combination with one or more other operating parameter values, determines whether an owner or operator has complied with an applicable emission limitation.

"Pollution prevention" means source reduction and other practices that reduce or eliminate the creation of pollutants through changes within the production process, including process modifications, feedstock substitutions, improvements in feedstock purity, shipping and packing modifications, housekeeping and management practices, increases in the efficiency of machinery, and recycling within a process. The term does not include out-of-process recycling, treatment, and safe disposal.

"Sealer" means a coating used to seal the pores of a wood substrate before additional coatings are applied.

"Stain" means, for purposes of wood furniture manufacturing operations under §2105.76, a color coat having a solids content by weight of no more than 8.0% that is applied in single or multiple coats directly to the substrate. The term includes nongrain raising stains, equalizer stains, sap stains, body stains, no-wipe stains, penetrating stains, and toners.

"Strippable spray booth coating" means a coating that meets the following requirements:

a. Is applied to a spray booth wall to provide a protective film to receive overspray during a surface coating process, including wood furniture manufacturing operations;
b. Is subsequently peeled off and disposed; and
c. Reduces or eliminates the need to use solvents to clean spray booth walls by meeting the conditions of a. and b. above.

"Substrate" means the surface onto which a coating is applied or into which a coating is impregnated.

"Thinner" means a volatile liquid that is used to dilute coatings (to reduce viscosity, color strength or solids content or to modify drying conditions). The term includes diluent, makeup solvent, or reducer.

"Touch-up and repair" means the application of coatings to cover minor finishing imperfections.

"Washcoat" means clear liquids having a solids content by weight of 12% or less, applied over stains and toners to protect the color coats and to set the fibers for subsequent sanding or to separate spray stains from wiping stains to enhance color depth.

"Washoff operations" means operations in which solvent is used to remove coating from a substrate.

"Waterborne coating" means a coating that contains more than 5% water by weight in its volatile fraction.

"Wood furniture" means a product made of wood, a wood product such as rattan or wicker or an engineered wood product such as particleboard that is manufactured under the following Standard Industrial Classification Codes: 2434 (Wood kitchen cabinets), 2511 (Wood household furniture, except upholstered), 2512 (Wood household furniture, upholstered), 2517 (Wood television, radio, phonograph, and sewing machine cabinets), 2519 (Household furniture, not elsewhere classified), 2521 (Wood office furniture), 2531 (Public building and related furniture), 2541 (Wood office and store fixtures, partitions, shelving, and lockers), 2599 (Furniture and fixtures, not elsewhere classified) or 5712 (Furniture stores).

"Wood furniture component" means a part that is used in the manufacture of wood furniture. The term includes drawer sides, cabinet doors, seat cushions, and laminated tops.

"Wood furniture manufacturing operations" means the coating, cleaning, and washoff operations associated with the production of wood furniture or wood furniture components.

Revisions to Existing Definitions...

"Coating" a protective, decorative, or functional material applied in a thin layer to a surface. Such materials include, but are not limited to, paints, topcoats, clearcoats, varnishes, sealers, stains, washcoats, basecoats, inks, and temporary protective coatings. Except for purposes of wood furniture manufacturing operations under §2105.76, this term also includes adhesives.

"Miscellaneous metal parts and products" means items made of ferrous or nonferrous metals, including large farm machinery, small farm machinery, small appliances, commercial and industrial machinery, fabricated metal products and items listed under the Standard Industrial Classification Codes 3300–3999. The term does not include cans, coils, automobiles, light-duty trucks, metal furniture, magnet wire, large appliances, aerospace vehicles or components, and automobile refinishing and customized top coating of automobiles and trucks, if production since January 1, 1987, has not exceeded 34 vehicles per day.

"Surface coating process" means the application and solidification of a coating onto or into a substrate as the substrate proceeds through the equipment and activities of the manufacturing process.

"Topcoat" means the last film-building coating that is applied, in one or more layers, to a substrate. For purposes of aerospace manufacturing and rework under §2105.74, a topcoat means a coating that is applied over a primer on an aerospace vehicle or component for appearance, identification, camouflage, or protection and does not include topcoats that are defined as specialty coatings. For purposes of mobile equipment repair and refinishing under §2105.75, a topcoat means a coating or series of coatings applied over an automotive primer-surfacer, automotive primer-sealer, or existing finish on the surface of mobile equipment and mobile equipment components for the purpose of protection or beautification. For purposes of wood furniture manufacturing operations under §2105.76, a topcoat does not include nonpermanent final finishes.

§2105.01 EQUIVALENT COMPLIANCE TECHNIQUES

Compliance with the requirements of this Part relating to sources of volatile organic compounds may be achieved by alternative methods provided:

a. The alternative method is approved by the Department in an applicable installation permit or operating permit;

b. The resulting emissions are equal to or less than the emissions that would have been discharged by complying with the applicable emission limitation;

c. Compliance by a method other than the use of a coating or ink which complies with the requirements for Surface Coating Processes, Graphic Arts Systems,and Aerospace Manufacturing and Rework under Sections 2105.10, 2105.11, and 2105.74 respectively, of this Article shall be determined on the basis of equal volumes of solids;

d. Adequate records are maintained to ensure enforceability;

e. The alternative compliance method is incorporated into an installation permit or operating permit, reviewed by the EPA and

f. The test methods and procedures used to monitor compliance with the requirements of this Section are either those specified in Part G of this Article or approved by the EPA.

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§2105.10 SURFACE COATING PROCESSES

a. Applicability. This section applies to a surface coating process category, regardless of the size of the facility, which emits or has emitted VOCs into the outdoor atmosphere in quantities greater than 3 pounds (1.4 kilograms) per hour, 15 pounds (7 kilograms) per day, or 2.7 tons (2,455 kilograms) per year during any calendar year since January 1, 1987.

b. Limitations. A person may not cause or permit the emission into the outdoor atmosphere of VOCs from a surface coating process category listed in Table 2105.10, unless one of the following limitations is met:

1. The VOC content of each as applied coating is equal to or less than the standard specified in Table 2105.10.

A. The VOC content of the as applied coating, expressed in units of weight of VOC per volume of coating solids, shall be calculated as follows:

$$VOC = (W_o)(D_c)/V_n$$

Where:

VOC = VOC content in lb VOC/gal of coating solids

W_o = Weight percent of VOC (W_v-W_w-W_{ex})

W_v = Weight percent of total volatiles (100% - weight percent solids)

W_w = Weight percent of water

W_{ex} = Weight percent of exempt solvent(s)

D_c = Density of coating, lb/gal, at 25°C

V_n = Volume percent of solids of the as applied coating

B. The VOC content of a dip coating, expressed in units of weight of VOC per volume of coating solids, shall be calculated on a 30-day rolling average basis using the following equation:

$$VOC_A = \frac{\sum_i (W_{oi} \times D_{ci} \times Q_i) + \sum_J (W_{oJ} \times D_{dJ} \times Q_J)}{\sum_i (V_{ni} \times Q_i)}$$

Where:

VOC_A = VOC content in lb VOC/gal of coating solids for a dip coating, calculated on a 30-day rolling average basis

W_{oi} = Percent VOC by weight of each as supplied coating (i) added to the dip coating process, expressed as a decimal fraction (that is 55% = 0.55)

D_{ci} = Density of each as supplied coating (i) added to the dip coating process, in pounds per gallon

Q_i = Quantity of each as supplied coating (i) added to the dip coating process, in gallons

V_{ni} = Percent solids by volume of each as supplied coating (i) added to the dip coating process, expressed as a decimal fraction

W_{oJ} = Percent VOC by weight of each thinner (J) added to the dip coating process, expressed as a decimal fraction

D_{dJ} = Density of each thinner (J) added to the dip coating process, in pounds per gallon

Q_J = Quantity of each thinner (J) added to the dip coating process, in gallons

C. The VOC content of the as applied coating, expressed in units of weight of VOC per weight of coating solids, shall be calculated as follows:

$$VOC_B = (W_o)/(W_n)$$

Where:

VOC_B = VOC content in lb VOC/lb of coating solids

W_o = Weight percent of VOC (Wv-Ww-Wex)
W_v = Weight percent of total volatiles (100% - weight percent solids)
W_w = Weight percent of water
W_{ex} = Weight percent of exempt solvents
W_n = Weight percent of solids of the as applied coating

D. Sampling and testing shall be done in accordance with the procedures and test methods specified in Part G (Methods).

2. The overall weight of VOCs emitted to the atmosphere is reduced through the use of vapor recovery or incineration or another method which is acceptable under §2105.01 (Equivalent Compliance Techniques). The overall efficiency of a control system, as determined by the test methods and procedures specified in Part G, shall be no less than the equivalent overall efficiency calculated by the following equation:

$$O = (1 - E/V) \times 100$$

Where:

V =	The VOC content of the as applied coating, in lb VOC/gal of coating solids or lb VOC/lb of coating solids
E =	Table 2105.10 limit in lb VOC/gal of coating solids or lb VOC/lb of coating solids
O =	Overall control efficiency

c. Records. A facility, regardless of the facility's annual emission rate, which contains surface coating processes shall maintain records sufficient to demonstrate compliance with this section. At a minimum, a facility shall maintain daily records of:

1. The following parameters for each coating, thinner, and other component as supplied:

A. The coating, thinner, or component name and identification number;
B. The volume used;
C. The mix ratio;
D. The density or specific gravity;
E. The weight percent of total volatiles, water, solids, and exempt solvents; and
F. The volume percent of solids for Table 2105.10 surface coating process categories 1-10.

2. The VOC content of each coating, thinner, and other component as supplied.

3. The VOC content of each as applied coating.

The records shall be maintained for 2 years and shall be submitted to the Department on a schedule reasonably prescribed by the Department.

d. Exempt Solvents. The solvents methyl chloroform (1,1,1 - trichloroethane) and methylene chloride are exempt from control under this Section. No surface coating process which seeks to comply with this Section through the use of an exempt solvent may be included in any alternative standard approved pursuant to this Article.

e. Wood Furniture. No person shall operate, or allow to be operated, any source subject to this Section that emits VOCs into the outdoor atmosphere from the application of wood furniture coatings unless the coatings are applied using electrostatic, airless, curtain coating, roll coating, hand roller, hand brush, flow coating, dip coating, or high volume-low pressure application equipment. Air atomized sprays may be used to apply cosmetic specialty coatings if the volume of the cosmetic specialty coatings is less than 5% by volume of the total coating used at the source or to apply final repair coatings.

f. Miscellaneous Metal Parts and Products. If more than one emission limitation for miscellaneous metal parts and products applies to a specific coating, then the least stringent emission limitation shall apply.

g. Exempt Other. The VOC standards in Table 2105.10 do not apply to a coating used exclusively for determining product quality and commercial acceptance, touch-up and repair, and other small quantity coatings if the coating meets the following criteria:

1. The quantity of coating used does not exceed 50 gallons per year for a single coating and a total of 200 gallons per year for all coatings combined for the facility.

2. The owner or operator of the facility requests, in writing, and the Department approves, in writing, the exemption prior to use of the coating.

Table 2105.10
Emission Limits of VOCs in Surface Coatings by Process Category

Weight of VOC per Volume of Coating Solids

Surface Coating Process Category		lbs VOC per gal coating solids	kg VOC per liter coating solids
1.	Can Coating		
	(a) sheet basecoat	4.62	0.55
	(b) can exterior	4.62	0.55
	(c) interior body spray	10.05	1.20
	(d) two piece can end exterior	10.05	1.20
	(e) side-seam spray	21.92	2.63
	(f) end sealing compound	7.32	0.88
2.	Coil coating	4.02	0.48
3.	Fabric coating	4.84	0.58
4.	Vinyl coating	7.69	0.92
5.	Paper coating	4.84	0.58
6.	Automobile and light duty truck coating		
	(a) prime coat	2.60	0.31
	(b) topcoat	4.62	0.55
	(c) repair	14.14	1.69
7.	Metal furniture coating	5.06	0.61
8.	Magnet wire coating	2.16	0.26
9.	Large appliance coating	4.62	0.55
10.	Miscellaneous metal parts and products		
	(a) topcoats for locomotives and heavy-duty trucks	6.67	0.80
	(b) hopper car and tank car interiors	6.67	0.80
	(c) pail and drum interiors	10.34	1.24
	(d) clear coatings	10.34	1.24
	(e) air-dried coatings	6.67	0.80
	(f) extreme performance coatings	6.67	0.80
	(g) all other coatings	5.06	0.61

Weight of VOC per Weight of Coating Solids

		lbs VOC per lb coating solids	kg VOC per kg coating solids
11.	Wood furniture manufacturing operations		
	(a) topcoats and enamels	3.0	3.0
	(b) washcoat	14.3	14.3
	(c) final repair coat	3.3	3.3
	(d) basecoats	2.2	2.2
	(e) cosmetic specialty coatings	14.3	14.3
	(f) sealers	3.9	3.9

§2105.74 AEROSPACE MANUFACTURING AND REWORK [NEW Section]

a. Applicability. Except as provided in Subsection b, this section applies to the manufacture or rework of commercial, civil, or military aerospace vehicles or components at any facility which has the potential to emit 25 tons per year of VOCs or more.

b. Exceptions. This section does not apply to cleaning and coating of aerospace components and vehicles as follows:

1. At any source conducting research and development for the research and development activities;

2. For quality control and laboratory testing;

3. For production of electronic parts and assemblies (except for cleaning and coating of completed assemblies); and

4. For rework operations performed on antique aerospace vehicles or components.

c. Exemption from Limits. Subsection d does not apply to cleaning and coating of aerospace components and vehicles in the following circumstances:

1. The use of touchup, aerosol, and Department of Defense "classified" coatings;

2. The coating of space vehicles; and

3. At facilities that use separate formulations in volumes less than 50 gallons per year to a maximum exemption of 200 gallons per year of all the coatings in aggregate for these formulations.

d. Limits. A person may not apply to aerospace vehicles or components, aerospace specialty coatings, primers, topcoats, and chemical milling maskants including VOC-containing materials added to the original coating supplied by the manufacturer, that contain VOCs in excess of the limits specified in Table 2105.74.

1. Aerospace coatings that meet the definitions of the specific coatings in Table 2105.74 shall meet those allowable coating VOC limits.

2. All other aerospace primers, aerospace topcoats and chemical milling maskants are subject to the general coating VOC limits for aerospace primers, aerospace topcoats, and aerospace chemical milling maskants.

TABLE 2105.74
Allowable Content of VOCs in Aerospace Coatings
Allowable VOC Content
Weight of VOC Per Volume of Coating (Minus Water and Exempt Solvents)

	LIMIT	
COATING TYPE	POUNDS PER GALLON	GRAMS PER LITER
Specialty Coatings		
1. Ablative Coating	5.0	600
2. Adhesion Promoter	7.4	890
3. Adhesive Bonding Primers:		
a. Cured at 250°F or below	7.1	850
b. Cured above 250°F	8.6	1030
4. Adhesives:		
a. Commercial Interior Adhesive	6.3	760
b. Cyanoacrylate Adhesive	8.5	1020
c. Fuel Tank Adhesive	5.2	620
d. Nonstructural Adhesive	3.0	360
e. Rocket Motor Bonding Adhesive	7.4	890
f. Rubber-Based Adhesive	7.1	850
g. Structural Autoclavable Adhesive	0.5	60
h. Structural Nonautoclavable Adhesive	7.1	850
5. Antichafe Coating	5.5	660
6. Chemical Agent-Resistant Coating	4.6	550
7. Clear Coating	6.0	720
8. Commercial Exterior Aerodynamic Structure Primer	5.4	650
9. Compatible Substrate Primer	6.5	780
10. Corrosion Prevention Compound	5.9	710
11. Cryogenic Flexible Primer	5.4	645
12. Cryoprotective Coating	5.0	600
13. Electric or Radiation-Effect Coating	6.7	800
14. Electrostatic Discharge and Electromagnetic Interference (EMI) Coating	6.7	800
15. Elevated Temperature Skydrol Resistant Commercial Primer	6.2	740
16. Epoxy Polyamide Topcoat	5.5	660
17. Fire-Resistant (Interior) Coating	6.7	800
18. Flexible Primer	5.4	640
19. Flight-Test Coatings:		
a. Missile or Single Use Aircraft	3.5	420

b. All Other	7.0	840
20. Fuel-Tank Coating	6.0	720
a. High-Temperature Coating	7.1	850
21. Insulation Covering	6.2	740
22. Intermediate Release Coating	6.2	750
23. Lacquer	6.9	830
24. Maskants:		
a. Bonding Maskant	10.2	1230
b. Critical Use and Line Sealer Maskant	8.6	1020
c. Seal Coat Maskant	10.2	1230
25. Metallized Epoxy Coating	6.2	740
26. Mold Release	6.5	780
27. Optical Anti-Reflective Coating	6.2	750
28. Part Marking Coating	7.1	850
29. Pretreatment Coating	6.5	780
30. Rain Erosion-Resistant Coating	7.1	850
31. Rocket Motor Nozzle Coating	5.5	660
32. Scale Inhibitor	7.3	880
33. Screen Print Ink	7.0	840
34. Sealants:		
a. Extrudable/Rollable/Brushable Sealant	2.0	240
b. Sprayable Sealant	5.0	600
35. Self-Priming Topcoat	3.5	420
36. Silicone Insulation Material	7.1	850
37. Solid Film Lubricant	7.3	880
38. Specialized Function Coating	7.4	890
39. Temporary Protective Coating	2.7	320
40. Thermal Control Coating	6.7	800
41. Wet Fastener Installation Coating	5.6	675
42. Wing Coating	7.1	850

<u>Aerospace Primers, Aerospace Topcoats, and Aerospace Chemical Milling Maskants</u>

1. Primers	2.9	350
2. Topcoats	3.5	420
3. Chemical Milling Maskants (Type I/II)	1.3	160

e. Calculation. The mass of VOC per combined volume of VOC and coating solids, less water and exempt compounds shall be calculated for each coating by the following equation:

$$VOC = \frac{(W_v - W_w - W_{ex})(D_c)}{100\% - (W_w)(D_c/D_w) - (W_{ex})(D_c/D_{ex})}$$

Where:

VOC = VOC content in grams per liter (g/l) of each coating less water and exempt solvents
W_v = Weight of total volatiles, % (100%-Weight % Nonvolatiles)
W_w = Weight of water, %
W_{ex} = Weight of exempt solvent, %
D_c = Density of coating, g/l at 25°C
D_w = Density of water, 0.997×10^3 g/l at 25°C
D_{ex} = Density of exempt solvent, g/l, at 25°C

To convert from grams per liter (g/l) to pounds per gallon (lb/gal), multiply the result (VOC content) by 8.345×10^{-3} (lb/gal/g/l).

f. Application Techniques. Except as provided in Subsection g, a person shall use one or more of the following application techniques in applying primer or topcoat to aerospace vehicles or components:

1. Flow/curtain coat;
2. Dip coat;
3. Roll coating;
4. Brush coating;
5. Cotton-tipped swab application;
6. Electrodeposition (DIP) coating;
7. High volume low pressure (HVLP) spraying; and
8. Electrostatic spray.

g. Exemption from Application Techniques. The following situations are exempt from application equipment requirements listed in Subsection f:

1. Any situation that normally requires the use of an airbrush or an extension on the spray gun to properly apply coatings to limited access spaces;

2. The application of specialty coatings;

3. The application of coatings that contain fillers that adversely affect atomization with HVLP spray guns and that the applicant has demonstrated and the Department has determined cannot be applied by any of the application methods specified in Subsection f;

4. The application of coatings that normally have a dried film thickness of less than 0.0013 centimeter (0.0005 in.) when the applicant has

demonstrated and the Department has determined cannot be applied by any of the application methods specified in Subsection f;

5. The use of airbrush application methods for stenciling, lettering and other identification markings;

6. The use of hand-held spray can application methods; and

7. Touch-up and repair operations.

h. Cleaning Solvents. Except as provided in Subsection i, a person may not use solvents for hand-wipe cleaning of aerospace vehicles or components unless the cleaning solvents do one of the following:

1. Meet the definition of "aqueous cleaning solvent" in §2101.20 (relating to definitions);

2 Have a VOC composite vapor pressure less than or equal to 45 millimeters (mmHg) at 20°C; or

3. Is composed of a mixture of VOCs and has a maximum vapor pressure of 7 millimeters (mmHg) at 20°C (3.75 inches water at 68°F) and contains no hazardous air pollutants (HAP) or ozone depleting compounds.

i. Exemption from Cleaning Solvents. The following aerospace vehicle and component solvent cleaning operations are exempt from Subsection h:

1. Cleaning during the manufacture, assembly, installation, maintenance or testing of components of breathing oxygen systems that are exposed to the breathing oxygen;

2. Cleaning during the manufacture, assembly, installation, maintenance or testing of parts, subassemblies or assemblies that are exposed to strong oxidizers or reducers (for example, nitrogen tetroxide, liquid oxygen, hydrazine);

3. Cleaning and surface activation prior to adhesive bonding;

4. Cleaning of electronics parts and assemblies containing electronics parts;

5. Cleaning of aircraft and ground support equipment fluid systems that are exposed to the fluid, including air-to-air heat exchangers and hydraulic fluid systems;

6. Cleaning of fuel cells, fuel tanks and confined spaces;

7. Surface cleaning of solar cells, coated optics and thermal control surfaces;

8. Cleaning during fabrication, assembly, installation and maintenance of upholstery, curtains, carpet and other textile materials used in or on the interior of the aircraft;

9. Cleaning of metallic and nonmetallic materials used in honeycomb cores during the manufacture or maintenance of these cores, and cleaning of the completed cores used in the manufacture of aerospace vehicles or components;

10. Cleaning of aircraft transparencies, polycarbonate or glass substrates;

11. Cleaning and solvent usage associated with research and development, quality control or laboratory testing;

12. Cleaning operations, using nonflammable liquids, conducted within 5 feet of any alternating current (AC) or direct current (DC) electrical circuit on an assembled aircraft once electrical power is connected, including interior passenger and cargo areas, wheel wells and tail sections; and

13. Cleaning operations identified in an essential use waiver under section 604(d)(1) of the Clean Air Act (42 U.S.C.A. § 7671c(d)(1)) or a fire suppression or explosion prevention waiver under section 604(g)(1) of the Clean Air Act which has been reviewed and approved by the EPA and the voting parties of the International Montreal Protocol Committee.

j. Cleaning Solvent Collection. Cleaning solvents, except for semiaqueous cleaning solvents, used in the flush cleaning of aerospace vehicles, components, parts, and assemblies and coating unit components, shall be emptied into an enclosed container or collection system that is kept closed when not in use or captured with wipers which comply with the housekeeping requirements of Subsection l. Aqueous cleaning solvents are exempt from these requirements.

k. Spray Guns. Spray guns used to apply aerospace coatings shall be cleaned by one of the following:

1. An enclosed spray gun cleaning system that is kept closed when not in use. Leaks, including visible leakage, misting and clouding, shall be repaired within 14 days from when the leak is first discovered. Each owner or operator using an enclosed spray gun cleaner shall visually inspect the seals and all other potential sources of leaks at least once per month. The results of each inspection shall be recorded, and the record shall indicate the date of the inspection, the person who conducted the inspection and whether components were leaking. Records of the

inspections shall be maintained for at least 2 years. Each inspection shall occur while the spray gun cleaner is in operation. If the leak is not repaired by the 15th day after detection, the solvent shall be removed and the enclosed cleaner shall be shut down until the leak is repaired or its use is permanently discontinued;

2. Unatomized discharge of solvent into a waste container that is kept closed when not in use;

3. Disassembly of the spray gun and cleaning in a vat that is kept closed when not in use; or

4. Atomized spray into a waste container that is fitted with a device designed to capture atomized solvent emissions.

l. Housekeeping. The owner or operator of an affected facility shall implement the following housekeeping measures for cleaning solvents:

1. Fresh and used cleaning solvents, except aqueous and semiaqueous cleaning solvents, used in solvent cleaning operations shall be stored in nonabsorbent, nonleaking containers. The containers shall be kept closed at all times except when filling or emptying;

2. Cloth and paper, or other absorbent applicators, moistened with cleaning solvents, except aqueous cleaning solvents, shall be stored in closed, nonabsorbent, nonleaking containers. Cotton-tipped swabs used for very small cleaning operations are exempt; and

3. Handling and transfer procedures shall minimize spills during filling and transferring the cleaning solvent, except aqueous cleaning solvents, to or from enclosed systems, vats, waste containers and other cleaning operation equipment that holds or stores fresh or used cleaning solvents.

m. Approved Equipment. The owner or operator of an affected facility may comply with this section by using approved air pollution control equipment provided that the following exist:

1. The control system has a combined VOC emissions capture and control equipment efficiency of at least 81% by weight and is operated and maintained in accordance with good air pollution control practices that minimize VOC emissions;

2. The owner or operator received approval from the Department of a monitoring plan that specifies the applicable operating parameter value, or range of values, to ensure ongoing compliance with this section. The monitoring device shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's specifications, and the Department's approval; and

3. The owner or operator shall record monitoring parameters as specified in the approved monitoring plan.

n. Records. The owner or operator of an affected facility shall maintain records in accordance with §2105.01-2105.10, including:

1. A current list of coatings in use categorized in accordance with Table 2105.74 showing VOC content as applied and usage on an annual basis;

2. A current list of cleaning solvents used and annual usage for hand wiping solvents including the water content of aqueous and semiaqueous solvents and the vapor pressure and composite vapor pressure of all vapor pressure compliant solvents and solvent blends; and

3. A current list and annual usage information for exempt hand-wipe cleaning solvents with a vapor pressure greater than 45 millimeters of mercury (mmHg) used in exempt hand-wipe cleaning operations.

§2105.75 MOBILE EQUIPMENT REPAIR AND REFINISHING [NEW Section]

a. Applicability. Except as provided in Subsection b, this section applies to a person who applies mobile equipment repair and refinishing or color-matched coatings to mobile equipment or mobile equipment components.

b. Exception. This section does not apply to a person who applies surface coatings to mobile equipment or mobile equipment components under one of the following circumstances:

1. The surface coating process is subject to the miscellaneous metal parts finishing requirements of §2105.10 (Surface Coating Processes);
2. The surface coating process is at an automobile assembly plant; or
3. The person applying the coatings does not receive compensation for the application of the coatings.

c. Limits. A person may not apply to mobile equipment or mobile equipment components any automotive pretreatment, automotive primer-surfacer, automotive primer-sealer, automotive topcoat, and automotive specialty coatings, including any VOC-containing materials added to the original coating supplied by the manufacturer, that contain VOCs in excess of the limits specified in Table 2105.75.

Table 2105.75
Allowable Content of VOCs in Mobile Equipment Repair and Refinishing Coatings
Allowable VOC Content
(as applied)

Weight of VOC per Volume of Coating (minus water and non-VOC solvents)

	LIMIT	
COATING TYPE	POUNDS PER GALLON	GRAMS PER LITER
Automotive pretreatment primer	6.5	780
Automotive primer-surfacer	4.8	575
Automotive primer-sealer	4.6	550
Automotive topcoat		
single stage-topcoat	5.0	600
2 stage basecoat/clearcoat	5.0	600
3 or 4-stage basecoat/clearcoat	5.2	625
Automotive multicolored topcoat	5.7	680
Automotive specialty	7.0	840

d. Calculation. A person who provides mobile equipment repair and refinishing coatings subject to this section shall provide documentation concerning the VOC content of the coatings calculated in accordance with the following:

1. The mass of VOC per combined volume of VOC and coating solids, less water and exempt compounds, shall be calculated by the following equation:

$$VOC = \frac{(W_v - W_w - W_{ec})}{(V - V_w - V_{ec})}$$

where:

VOC = VOC content in grams per liter (g/l) of coating less water and non-VOC solvents
W_v = Mass of total volatiles, in grams
W_w = Mass of water, in grams
W_{ec} = Mass of exempt compounds, in grams
V = Volume of coating, in liters
V_w = Volume of water, in liters
V_{ec} = Volume of exempt compounds, in liters

To convert from grams per liter to pounds per gallon (lb/gal), multiply the result (VOC content) by 8.345×10^{-3} (lb/gal/g/l).

2. The VOC content of a multistage topcoat shall be calculated by the following equation:

$$VOC_{multi} = \frac{VOC_{bc} + \sum_{i=0}^{M} VOC_{mci} + 2(VOC_{cc})}{M + 3}$$

where:

VOC_{multi} = VOC content of multistage topcoat, g/l
VOC_{bc} = VOC content of basecoat, g/l
VOC_{mci} = VOC content of the midcoat(s), g/l
VOC_{cc} = VOC content of the clear coat, g/l
M = number of midcoats

To convert from grams per liter to pounds per gallon (lb/gal), multiply the result (VOC content) by 8.345×10^{-3} (lb/gal/g/l).

e. Application Techniques. A person at a facility subject to this section shall use one or more of the following application techniques to apply any finish material listed in Table 2105.75:

1. Flow/curtain coating;
2. Dip coating;
3. Roller coating;
4. Brush coating;
5. Cotton-tipped swab application;
6. Electrodeposition coating;
7. High volume low pressure (HVLP) spraying;
8. Electrostatic spray;
9. Airless spray; and
10. Other coating application method that the person demonstrates and the Department determines achieves emission reductions equivalent to HVLP or electrostatic spray application methods.

f. Exemption from Application Techniques. The following situations are exempt from the application equipment requirements in Subsection e:

1. The use of airbrush application methods for stenciling, lettering and other identification markings;
2. The application of coatings sold in nonrefillable aerosol containers; and
3. Automotive touch-up repair.

g. Spray Guns. Spray guns used to apply mobile equipment repair and refinishing coatings shall be cleaned by one of the following:

1. An enclosed spray gun cleaning system that is kept closed when not in use;
2. Unatomized discharge of solvent into a paint waste container that is kept closed when not in use;
3. Disassembly of the spray gun and cleaning in a vat that is kept closed when not in use; and

4. Atomized spray into a paint waste container that is fitted with a device designed to capture atomized solvent emissions.

h. Housekeeping. The owner and operator of a facility subject to this section shall implement the following housekeeping and pollution prevention and training measures:

1. Fresh and used coatings, solvent and cleaning solvents shall be stored in nonabsorbent, non-leaking containers. The containers shall be kept closed at all times except when filling or emptying;
2. Cloth and paper, or other absorbent applicators, moistened with coatings, solvents or cleaning solvents, shall be stored in closed, nonabsorbent, nonleaking containers;
3. Handling and transfer procedures shall minimize spills during the transfer of coatings, solvents and cleaning solvents through the use of devices including pumps or spouts on larger containers; and
4. Ensure that a person who applies mobile equipment repair and refinishing coatings has completed training in the proper use and handling of the mobile equipment repair and refinishing coatings, solvents and waste products to minimize the emission of air contaminants and to comply with this section.

§2105.76 WOOD FURNITURE MANUFACTURING OPERATIONS [NEW Section]

a. General Provisions and Applicability. This section applies to each wood furniture manufacturing facility located in the county that emits or has the potential to emit 25 tons or more per year of VOCs from wood furniture manufacturing operations.

1. The owner or operator of an existing wood furniture manufacturing facility subject to this section must comply with this section by the effective date.

2. An existing wood furniture manufacturing facility that increases its actual emissions or potential to emit to 25 tons per year or more of VOCs from wood furniture manufacturing operations shall comply with this section within 1 year after becoming subject to this section.

3. At a minimum, a new source installed at an existing facility that is subject to the requirements of this section shall comply with the emission standards of Subsection b upon installation of the new source.

4. Except for Paragraph c.7 of this section, the owner or operator of a woodfurniture manufacturing facility subject to this section and §2105.10 must comply with the more stringent emissions limitation or applicable requirement for wood furniture manufacturing operations in this section or §2105.10.

5. The VOC standards in Table 2105.76 do not apply to a coating used exclusively for determining product quality and commercial acceptance, touch-up and repair, and other small quantity coatings if the coating meets the following criteria:

A. The quantity of coating used does not exceed 50 gallons per year for a single coating and a total of 200 gallons per year for all coatings combined for the facility.

B. The owner or operator of the facility requests, in writing, and the Department approves, in writing, the exemption prior to use of the coating.

b. Emission Standards. An owner or operator of a facility subject to this section shall limit VOC emissions from wood furniture manufacturing operations by:

1. Applying either waterborne topcoats or a combination of sealers and topcoats and strippable spray booth coatings with a VOC content equal to or less than the standards specified in Table 2105.76:

Table 2105.76
Emission Limits of VOC for Wood Furniture Manufacturing Sealers, Topcoats and Strippable Spray Booth Coatings As Applied, in Pounds of VOC Per Pound of Coating Solids (kg VOC/kg of Coating Solids), by Category

1) Waterborne Topcoats	0.8
2) High solids coating systems	
Sealer	1.9
Topcoat	1.8
3) Acid-cured alkyd amino systems	
i. Acid-cured alkyd amino sealer	2.3
Acid-cured alkyd amino conversion varnish topcoat	2.0
ii. Other sealer	1.9
Acid-cured alkyd amino conversion varnish topcoat	2.0
iii. Acid-cured alkyd amino sealer	2.3
Other topcoat	1.8
4) Waterborne strippable spray booth coating	0.8

2. Using an emissions averaging program which meets the requirements in Subsection g (relating to special provisions for facilities using an emissions averaging approach).

3. Using a control system that will achieve a reduction in emissions equivalent to 0.8 lb VOC/lb solids for topcoats or 1.8 lbs VOC/lb solids for topcoats and 1.9 lbs VOC/lb solids for sealers.

4. Using a combination of the methods specified in Paragraphs b.1-3 above.

c. Work practice standards.

1. Work practice implementation plan. Within 60 days after the compliance date specified in Subsection a, an owner or operator of a facility subject to the requirements in this section must:

A. Prepare and maintain a written work practice implementation plan that defines work practices for each wood furniture manufacturing operation and addresses the provisions in Paragraphs c.2-10 below. The owner or operator of the facility shall comply with the work practice implementation plan.

B. Make available the written work practice implementation plan for inspection by the Department upon request. If the Department determines that the work practice

implementation plan does not adequately address the criteria specified in Paragraphs c.2-10 below, the Department may require that the facility owner or operator modify the plan.

2. Operator training program. New and existing personnel, including contract personnel, who are involved in coating, cleaning or washoff operations, or implementation of the requirements of this section must complete an operator training program.

   A. New personnel must be trained upon hiring.

   B. Existing personnel must be trained at least 6 months before the compliance date specified in Subsection a.

   C. Personnel shall be given refresher training annually.

   D. A copy of the written operator training program shall be maintained with the work practice implementation plan. The operator training program shall include the following:

      i. A list of all current personnel by name and job description that are required to be trained.

      ii. An outline of the subjects to be covered in the initial and annual refresher training sessions for each position or group of personnel.

      iii. Lesson plans for courses to be given at the initial and annual refresher training sessions that include, at a minimum, appropriate application techniques, appropriate cleaning and washoff procedures, appropriate equipment setup and adjustment to minimize coating usage and overspray and appropriate management of cleanup wastes.

      iv. A description of the methods to be used at the completion of the initial or annual refresher training sessions to demonstrate and document successful completion.

v. A record of the date each employee is trained.

3. Leak inspection and maintenance plan. An owner or operator of a facility shall prepare and maintain with the work practice implementation plan a written leak inspection and maintenance plan which shall include the following:

A. A minimum visual inspection frequency of once per month for all equipment used to transfer or apply coatings or solvents.

B. An inspection schedule.

C. The methods for documenting the date and results of each inspection and any repairs that were made.

D. The time frame between identifying a leak and making the repair, which shall adhere to the following schedule:

i. A first attempt at repairs, including tightening of packing glands, shall be made within 5 working days after the leak is detected.

ii. Final repairs shall be made within 15 working days, unless the leaking equipment is to be replaced by a new purchase, in which case repairs shall be completed within 3 months.

4. Cleaning and washoff solvent accounting system. A solvent accounting form shall be developed to account for solvents used in cleaning and washoff operations. The information recorded on the form shall include the following:

A. The total number of pieces processed through washoff operations each month and the reason for the washoff operations.

B. The name and total quantity of each solvent used each month for:

i. Cleaning activities.
ii. Washoff operations.

C. The name and total quantity of each solvent evaporated to the atmosphere each month from:

i. Cleaning activities.
ii. Washoff operations.

5. Spray booth cleaning. An owner or operator of a facility may not use compounds containing more than 8.0% by weight of VOC for cleaning spray booth components other than conveyors, continuous coaters and their enclosures, or metal filters, unless the spray booth is being refurbished. If the spray booth is being refurbished, that is, the spray booth coating or other material used to cover the booth is being replaced, the facility shall use no more than 1.0 gallon of solvent to prepare the booth prior to applying the booth coating.

6. Storage requirements. An owner or operator of a facility shall use normally closed containers for storing coating, cleaning and washoff materials.

7. Application equipment requirements. An owner or operator of a facility may not use conventional air spray guns to apply coatings except under any of the following circumstances:

A. To apply coatings that have a VOC content no greater than 1.0 lb VOC/lb solids (1.0 kg VOC/kg solids), as applied.

B. For touch-up and repair coatings under one of the following circumstances:

i. The coatings are applied after completion of the wood furniture manufacturing operation.

ii. The coatings are applied after the stain and before any other type of coating is applied, and the coatings are applied from a container that has a volume of no more than 2.0 gallons.

C. The spray is automated, that is, the spray gun is aimed and triggered automatically, not manually.

D. The emissions from the surface coating process are directed to a VOC control system.

E. The conventional air spray gun is used to apply coatings and the cumulative total usage of those coatings is no more than 5.0% of the total gallons of coating used during each semiannual reporting period.

F. The conventional air spray gun is used to apply stain on a part for which the Department notifies the operator, in writing, of its determination that it is technically or economically infeasible to use any other spray application technology. To support the facility's claim of technical or economic infeasibility, a video tape, a technical report, or other documentation shall be submitted to the Department showing either independently or in combination, the following:

i. The production speed is too high or the part shape is too complex for one operator to coat the part, and the application station is not large enough to accommodate an additional operator.

ii. The excessively large vertical spray area of the part makes it difficult to avoid sagging or runs in the stain.

8. Line cleaning. The solvent used for line cleaning shall be pumped or drained into a normally closed container.

9. Spray gun cleaning. The solvent used to clean spray guns shall be collected into a normally closed container.

10. Washoff operations. The emissions from washoff operations shall be controlled by the following:

A. Using normally closed containers for washoff operations.

B. Minimizing dripping by tilting or rotating the part to drain as much solvent as possible.

d. Compliance procedures and monitoring requirements.

1. Compliance methods. An owner or operator of a facility subject to the emission standards in Subsection b shall demonstrate compliance with those provisions by using one or more of the following methods:

A. To support that each sealer, topcoat and strippable spray booth coating meets the requirements of Paragraph b.1 of this section:

i. Maintain CPDSs for each of the coatings.

ii. Maintain documentation showing the VOC content of the as applied coating in lbs VOC/lb solids, if solvent or other VOC is added to the coating before application.

iii. Perform sampling and testing in accordance with the procedures and test methods in Part G.

B. To comply through the use of a control system as described in Paragraph b.3:

i. Calculate the required overall control efficiency needed to demonstrate compliance using the following equation:

$$O = (1 - E/C) \times 100$$

Where:

C = the VOC content of the as applied coating, lbs VOC/lb solids
E = the Table 2105.76 emission limit which shall be achieved by the affected emission point(s), lbs VOC/lb solids
O = the overall control efficiency of the control system, expressed as a percentage

ii. Document that the value of C in the equation in Subparagraph d.1.B.i above is obtained from the VOC and solids content of the as applied coating.

iii. Determine the overall control efficiency of the control system using the procedures and test methods in Part G and demonstrate that the value of O calculated by the following equation is equal to or greater than the value of O calculated by the equation

Subparagraph d.1.B.i above:

$$O = (F \times N)\ (100)$$

Where:

F = the control device efficiency, expressed as a fraction
N = the capture device efficiency, expressed as a fraction

2. Initial compliance.

A. Compliant coatings. An owner or operator of a facility subject to Paragraph b.1 that is complying through the procedures in Subparagraph d.1.A shall submit an initial compliance status report as required by Paragraph f.1 (relating to reporting requirements), stating that compliant sealers, top coats, and strippable spray booth coatings are being used by the facility.

B. Continuous coaters. An owner or operator of a facility subject to Paragraph b.1 that is complying through the procedures in Subparagraph d.1.A and is applying sealers, topcoats, or both, using continuous coaters shall demonstrate initial compliance by either:

i. Submitting an initial compliance status report as required by Paragraph f.1 stating that compliant sealers, topcoats, or both, as determined by the VOC content of the coating in the reservoir and as calculated from records, are being used.

ii. Submitting an initial compliance status report as required by Paragraph f.1 stating that compliant sealers, topcoats, or both, as determined by the VOC content of the coating in the reservoir, are being used and the viscosity of the coating in the reservoir is being monitored. The facility shall also provide data that demonstrates the correlation between the viscosity and the VOC content of the coating in the reservoir.

C. Control systems. An owner or operator of a facility using a control system to comply with this section shall demonstrate initial compliance by submitting a report to the Department that:

i. Identifies the operating parameter value to be monitored for the capture device and discusses why the parameter is appropriate for demonstrating ongoing compliance.

ii. Includes the results of the initial performance testing using the procedures and test methods specified in Part G.

iii. Includes calculations of the overall control efficiency (O) using the equation in Subparagraph d.1.B.iii.

iv. Defines those operating conditions of the control system critical to determining compliance and establishes operating parameter values that will ensure compliance with the standard:

(a) For compliance with a thermal incinerator, minimum combustion temperature shall be the operating parameter value.

(b) For compliance with another control system, the operating parameter value shall be established using the procedures identified in Subparagraph d.3.C.iv.

v. An owner or operator of a facility complying with this subparagraph shall calculate the site-specific operating parameter value as the arithmetic average of the maximum or minimum operating parameter values, as appropriate, that demonstrate compliance with the standards, using the procedures in Part G.

D. Work practice implementation plan. An owner or operator of a facility subject to the work practice standards of Subsection c shall submit an initial compliance status report as required by Paragraph f.1, stating that the work practice implementation plan has been developed and procedures have been established for implementing the provisions of the plan.

3. Continuous compliance demonstrations. An owner or operator of a facility subject to the requirements of this section shall submit, in writing, to the Department a compliance certification with the semiannual report required by Paragraph f.2.

A. Compliant coatings. An owner or operator of a facility subject to Subsection b that is complying through the procedures specified in Subparagraph d.1.A shall demonstrate continuous compliance by the following:

i. Using compliant coatings.

ii. Maintaining records that demonstrate the coatings are compliant.

iii. Submitting a compliance certification which states that compliant sealers, topcoats, or both, and strippable spray booth coatings have been used each day in the semiannual reporting period or should otherwise identify the days of noncompliance and the reasons for noncompliance.

B. Continuous coaters. An owner or operator of a facility subject to Subsection b that is complying through the procedures specified in Subparagraph d.1.A and is applying sealers, topcoats, or both, using continuous coaters shall demonstrate continuous compliance by either:

i. Using compliant coatings as determined by the VOC content of the coating in the reservoir and as calculated from records, and submitting a compliance certification which states that compliant sealers, topcoats, or both, have been used each day in the semiannual reporting period or should otherwise identify the days of noncompliance and the reasons for noncompliance.

ii. Using compliant coatings, as determined by the VOC content of the coating in the reservoir, maintaining a viscosity of the coating in the reservoir that is no less than the viscosity of the initial coating by monitoring the viscosity with a viscosity meter or by testing the viscosity of the initial coating and retesting the viscosity of the coating in the reservoir each time solvent is added, maintaining records of solvent

additions and submitting a compliance certification which states that compliant sealers, topcoats, or both, as determined by the VOC content of the coating in the reservoir, have been used each day in the semiannual reporting period. Additionally, the certification shall state that the viscosity of the coating in the reservoir has not been less than the viscosity of the initial coating, that is, the coating that is initially mixed and placed in the reservoir, for any day in the semiannual reporting period or should otherwise identify the days of noncompliance and the reasons for noncompliance.

C. Control systems. An owner or operator of a facility subject to Subsection b that is complying through the use of a control system shall demonstrate continuous compliance by the following:

i. Installing, calibrating, maintaining and operating monitoring equipment approved, in writing, by the Department.

ii. Using a device to monitor the site-specific operating parameter value established in accordance with Subparagraph d.2.C.i.

iii. When a thermal incinerator is used, a temperature monitoring device equipped with a continuous recorder is required and shall be installed in the firebox or in the ductwork immediately downstream of the firebox at a location before any substantial heat exchange occurs.

iv. An owner or operator using a control system not listed in this section shall submit, in writing, to the Department a description of the system, test data verifying the performance of the system, the appropriate operating parameter values that will be monitored and the monitoring device that will be used to demonstrate continuous compliance with the standard and receive, in writing, the Department's approval prior to use.

v. An owner or operator of a facility may not operate the control system at a daily average value greater than or less than (as appropriate) the operating parameter value. The daily average value shall be calculated as the average of all values for a monitored parameter recorded during the operating day.

vi. Submitting a compliance certification which states that the control system has not been operated at a daily average value greater than or less than (as appropriate) the operating parameter value for each day in the semiannual reporting period or should otherwise identify the days of noncompliance and the reasons for noncompliance.

D. Work practice implementation plan. An owner or operator of a facility subject to the work practice standards of Subsection c shall demonstrate continuous compliance by following the work practice implementation plan and submitting a compliance certification which states that the work practice implementation plan is being followed, or should otherwise identify the periods of noncompliance with the work practice standards and the reasons for noncompliance.

4. Compliance certification requirements. The compliance certification shall be signed by a responsible official of the company that owns or operates the facility. In addition to the certification requirements of this section, the certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the documents are true, accurate and complete.

e. Recordkeeping requirements.

1. Requirement. The owner or operator of a wood furniture manufacturing operation shall keep records to demonstrate compliance with this section. The records shall be maintained for at least 5 years.

2. Compliant coatings. The following records shall be maintained to demonstrate compliance with Subsection b (relating to emission standards).

A. A certified product data sheet for each coating and strippable spray booth coating subject to the emission limits of Subsection b.

B. The VOC content as applied, lbs VOC/lb solids (kg VOC/kg solids), of each coating and strippable spray booth coating subject to the emission limits of Subsection b, and copies of data sheets documenting how the as applied values were determined.

3. Continuous coaters. The owner or operator of a facility subject to the emission limits of Subsection b that is complying through the procedures specified in Subparagraph d.1.A and is applying sealers, topcoats, or both, using continuous coaters shall maintain the records required by Paragraphs e.1 and e.2 and records of the following:

A. Solvent and coating additions to the continuous coater reservoir.

B. Viscosity measurements.

4. Control systems. The owner or operator of a facility complying through the procedures in Subparagraph d.1.B by using a control system shall maintain the following records:

   A. Copies of the calculations to support the equivalency of using a control system, as well as the data that are necessary to support the calculation of C and E in Subparagraph d.1.B.i and O in Subparagraph d.1.B.iii.

   B. Records of the daily average value of each continuously monitored parameter for each operating day. If all recorded values for a monitored parameter are within the range established during the initial performance test, the owner or operator may record that all values were within the range rather than calculating and recording an average for that day.

5. Work practice implementation plan. The owner or operator of a facility subject to the work practice standards of Subsection c shall maintain onsite copies of the work practice implementation plan and all records associated with fulfilling the requirements of that plan, including:

   A. Records demonstrating that the operator training program is in place.

   B. Records maintained in accordance with the leak inspection and maintenance plan.

   C. Records associated with the cleaning and washoff solvent accounting system.

   D. Records associated with the limitation on the use of conventional air spray guns showing total coating usage and the percentage of coatings applied with conventional air spray guns for each semiannual reporting period.

   E. Records showing the VOC content of compounds used for cleaning booth components, except for solvent used to clean conveyors, continuous coaters and their enclosures or metal filters.

   F. Copies of logs and other documentation developed to demonstrate that the other provisions of the work practice implementation plan are followed.

6. In addition to the recordkeeping requirements of Paragraph e.1, the owner or operator of a facility that complies with Subsection c or Subparagraph d.1.A shall maintain a copy of the compliance certifications submitted in accordance with Paragraph f.2 for each semiannual period following the compliance date.

7. The owner or operator of a facility shall maintain a copy of the other information submitted with the initial status report required by Paragraph f.1 and the semiannual reports required by Paragraph f.2.

f. Reporting requirements.

1. Initial compliance report date. The initial compliance report must be submitted to the Department within 60 days after the compliance date specified in Subsection a. The report shall include the items required by Paragraph d.2.

2. Semiannual compliance report dates. When demonstrating compliance in accordance with Subparagraphs d.1.A or d.1.B, a semiannual report covering the previous 6 months of wood furniture manufacturing operations shall be submitted to the Department according to the following schedule:

A. The first report shall be submitted within 30 calendar days after the end of the first 6-month period following the compliance date specified in Subsection a.

B. Subsequent reports shall be submitted within 30 calendar days after the end of each 6-month period following the first report.

C. Each semiannual report shall include the information required by Paragraphs d.3 and d.4, a statement of whether the facility was in compliance or noncompliance and, if the facility was in noncompliance, the measures taken to bring the facility into compliance.

g. Special provisions for facilities using an emissions averaging approach.

1. Emissions averaging approach. An owner or operator of a facility subject to the emission limitations in Subsection b may use an emissions averaging approach which meets the equivalency requirements in §2105.01 (relating to equivalent compliance techniques) to achieve compliance with §2105.10 (relating to surface coating processes) or this section.

2. Additional requirement. When complying with the requirements of §2105.10 or this section through emissions averaging, an additional 10% reduction in emissions shall be achieved when compared to a facility using a compliant coatings approach to meet the requirements of this section.

3. Program goals and rationale. When using an emissions averaging program, the following shall be submitted to the Department in writing:

   A. A summary of the reasons why the facility would like to comply with the emission limitations through an equivalency determination using emissions averaging procedures.

   B. A summary of how averaging can be used to meet the emission limitations.

4. Program scope. A description of the types of coatings that will be included in the facility's emissions averaging program shall also be submitted to the Department in writing:

   A. Stains, basecoats, washcoats, sealers and topcoats may all be used in the emissions averaging program.

   B. The owner or operator of the facility may choose other coatings for its emissions averaging program, if the program meets the equivalency requirements in §2105.01.

   C. Coatings that are applied using continuous coaters may only be used in an emissions averaging program if the owner or operator of the facility can determine the amount of coating used each day.

   D. A daily averaging period shall be used, except under the following conditions:

      i. A longer averaging period may be used if the owner or operator of the facility demonstrates in writing to the satisfaction of the Department that the emissions do not fluctuate significantly on a day-to-day basis.

      ii. The owner or operator of the facility requests in writing and the Department approves in writing the longer averaging period.

5. Program baseline. The baseline for each coating included in the emissions averaging program shall be the lower of the actual or allowable emission rate as of the effective date. The facility baseline emission rate may not be higher than what was presumed in the 1990 emissions inventory for the facility unless the Department has accounted for the increase in emissions as growth.

6. Quantification procedures. The emissions averaging program shall specify methods and procedures for quantifying emissions. Quantification procedures for VOC content are included in Part G (relating to sampling and testing). The quantification procedures shall also include methods to determine the usage of each coating and shall be accurate enough to ensure that the facility's actual emissions are less than the allowable emissions.

7. Monitoring, recordkeeping and reporting. A written summary of the monitoring, recordkeeping, and reporting procedures that will be used to demonstrate compliance on a daily basis, when using an emissions averaging approach, shall be submitted to the Department.

   A. The monitoring, recordkeeping, and reporting procedures shall be structured so that inspectors and facility owners or operators can determine a facility's compliance status for any day.

   B. The monitoring, recordkeeping, and reporting procedures shall include methods for determining required data when monitoring, recordkeeping, and reporting violations result in missing, inadequate, or erroneous monitoring and recordkeeping

SECTION *If any provision of this Ordinance shall be determined to be unlawful, invalid, void or unenforceable, then that provision shall be considered severable from the remaining provisions of this Ordinance which shall be in full force and effect.*

SECTION *Any Resolution or Ordinance or part thereof conflicting with the provisions of this Ordinance is hereby repealed so far as the same affects this Ordinance.*

Enacted in Council, this 3RD *day of* JUNE, *2003*

Council Agenda No. 1120-03

Rick Schwartz
President of Council

Attest:
John Mascio
Chief Clerk of Council

Approved as to form:
Charles P. McCullough
County Solicitor

Chief Executive Office June 10, *2003*

Approved:
James C. Roddey
Chief Executive

Attest:
Victoria Spence
Executive's Secretary

MEMORANDUM

OFFICE OF THE COUNTY MANAGER

TO: John Mascio
Chief Clerk

FROM: Robert B. Webb RBW
County Manager

DATE: April 9, 2003

RE: Requesting County Council Approval

Attached is an Ordinance with revisions to the Allegheny County's Portion of the Pennsylvania State Implementation Plan for the Attainment and Maintenance of the National Ambient Air Quality Standards and Allegheny County Health Department Rules and Regulations Article XXI, Air Pollution Control. This request is submitted by the Health Department.

Please put on the next agenda for County Council approval.

Thank you.