

**DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL
CONTROL**

DIVISION OF AIR AND WASTE MANAGEMENT

Statutory Authority: 7 Delaware Code, Chapter 60 (7 Del.C. Ch. 60)
7 DE Admin. Code 1141

PROPOSED

REGISTER NOTICE
SAN #2008-06 and SAN #2008-07

1. Title of the Regulation:

Amendment to **regulation 1141 Limiting Emissions of Volatile Organic Compounds from Consumer and Commercial Products**, Section 2.0 "Consumer Products" and Section 4.0 "Adhesives & Sealants".

2. Brief Synopsis of the Subject, Substance and Issues:

Delaware is in non-attainment under the 8-hour ground-level ozone National Ambient Air Quality Standards (NAAQS) and further reduction in the emissions of volatile organic compounds (VOC), a precursor to ground-level ozone, is needed to meet the 2009 NAAQS.

As to Section 2.0, this amendment adds 23 new products and product types to the existing slate of consumer products for which VOC content has been regulated since 2001. A reduction of 220 tons per year VOC emissions is expected.

As to Section 4.0, this amendment adds a heretofore unregulated category of commercially used products including 25 adhesives, 4 adhesive primers, 5 sealants and 3 sealant primers. A 365 ton per year reduction in VOC emissions is expected.

3. Possible Terms of the Agency Action:

None.

4. Statutory Basis or Legal Authority to Act:

7 Delaware Code, Chapter 60.

5. Other Regulations that may be Affected by the Proposal:

None.

6. Notice of Public Comment:

There will be a hearing on these proposed amendments on Wednesday, January 28, 2009 beginning at 6pm in the Priscilla Building conference room. Interested parties may submit comments in writing to Gene Pettingill, Air Quality Management Section, 715 Grantham Lane, New Castle, DE 19720 and/or statements and testimony may be presented either orally or in writing at the public hearing.

7. Prepared By:

Gene Pettingill (302) 323-4542

December 4, 2008

1141 Limiting Emissions of Volatile Organic Compounds from Consumer and Commercial Products

03/11/2002

1.0 Architectural and Industrial Maintenance Coatings

1.1 Applicability

- 1.1.1 Except as provided in 1.1.2 and 1.1.3 of this regulation, 1.0 of this regulation applies to any person who supplies, sells, offers for sale, blends, repackages for sale, or manufactures any architectural coating for use in the State of Delaware, as well as any person who applies or solicits the application of any architectural coating in the State of Delaware on or after January 1, 2005.
- 1.1.2 A coating manufactured prior to January 1, 2005, may be sold, supplied, or offered for sale on or after January 1, 2005. In addition, a coating manufactured before January 1, 2005 may be applied at anytime, both before and after January 1, 2005, so long as the coating complied with the standards in effect at the time the coating was manufactured. This does not apply to any coating that does not display the date code required by 1.4.1 of this regulation.
- 1.1.3 The provisions of 1.0 of this regulation do not apply to
 - 1.1.3.1 any architectural coating that is sold or manufactured for use outside the State of Delaware or for shipment to other manufacturers for reformulation or repackaging;
 - 1.1.3.2 any aerosol coating product, or
 - 1.1.3.3 any architectural coating that is sold in a container with a volume of one liter (1.057 quart) or less.

1.2 Definitions

Terms used but not defined in 1.0 of this regulation shall have the meaning given them in **7 DE Admin. Code 1101** or the CAA, in that order of priority.

"Adhesive" means any chemical substance that is applied for the purposes of bonding two surfaces together other than by mechanical means.

"Aerosol coating product" means a pressurized coating product containing pigments or resins that dispenses product ingredients by means of a propellant and is packaged in a disposable can for hand-held application, or for use in specialized equipment for ground traffic marking applications.

"Antenna coating" means a coating labeled and formulated exclusively for application to equipment and associated structural appurtenances that are used to receive or transmit electromagnetic signals.

"Anti-fouling coating" means a coating labeled and formulated for application to submerged stationary structures and their appurtenances to prevent or reduce the attachment of marine or freshwater biological organisms. To qualify as an anti-fouling coating, the coating must be registered with the U. S. EPA under the Federal Insecticide, Fungicide and Rodenticide Act (7 U. S. C. Section 136 et seq.) and with the Department of Agriculture of the State of Delaware under 3 **Del.C. Ch. 12**.

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

"Architectural coating" means a coating to be applied to stationary structures or their appurtenances at the site of installation, to portable buildings at the site of installation, to pavements, or to curbs. Coatings applied in shop applications or to non-stationary structures such as airplanes, ships, boats, railcars, and automobiles, and adhesives are not considered architectural coatings for the purpose of 1.0 of this regulation.

"ASTM" means the American Society for Testing and Materials.

"BAAQMD" means the Bay Area Air Quality Management District, a part of the California Air Resources Board (CARB) which regulates air quality in the State of California.

"Bitumens" means black or brown materials including, but not limited to, asphalt, tar, pitch, and asphaltite that are soluble in carbon disulfide, consist mainly of hydrocarbons, and are obtained from natural deposits or as residues from the distillation of crude petroleum or coal.

"Bituminous roof coating" means a coating which incorporates bitumens that is labeled and formulated exclusively for roofing.

"Bituminous roof primer" means a primer which incorporates bitumens that is labeled and formulated exclusively for roofing.

"Bond breaker" means a coating labeled and formulated for application between layers of concrete to prevent a freshly poured top layer of concrete from bonding to the layer over which it was poured.

"Calcimine recoater" means a flat solvent-borne coating formulated and recommended specifically for recoating calcimine-painted ceilings and other calcimine-painted substrates.

"CAA" means the Clean Air Act, as amended in 1990.

"Clear brushing lacquers" means clear wood coatings, excluding clear lacquer sanding sealers, formulated with nitrocellulose or synthetic resins to dry by solvent evaporation without chemical reaction and to provide a solid protective film, which are intended exclusively for application by brush and which are labeled as specified in 1.4.5 of this regulation.

"Clear wood coatings" means clear and semi-transparent coatings, including clear brushing lacquers, clear lacquer sanding sealers, sanding sealers other than clear lacquer sanding sealers and varnishes, applied to wood substrates to provide a transparent or translucent film.

"Coating" means a material applied onto or impregnated into a substrate for protective, decorative, or functional purposes. Such materials include, but are not limited to, paints, varnishes, sealers, and stains.

"Colorant" means a concentrated pigment dispersion in water, solvent, and/or binder that is added to an architectural coating after packaging in sales units to produce the desired color.

"Concrete curing compound" means a coating labeled and formulated for application to freshly poured concrete to retard the evaporation of water.

"Concrete surface retarder" means a mixture of retarding ingredients such as extender pigments, primary pigments, resin, and solvent that interact chemically with the cement to prevent hardening on the surface where the retarder is applied, allowing the retarded mix of cement and sand at the surface to be washed away to create an exposed aggregate finish.

"Conversion varnish" means a clear acid-curing coating with an alkyd or other resin blended with amino resins and supplied as a single component or two-component product. Conversion varnishes produce a hard, durable, clear finish designed for professional application to wood flooring. Film formation is the result of an acid-catalyzed condensation reaction, affecting a transesterification at the reactive ethers of the amino resins.

"Dry fog coating" means a coating labeled and formulated only for spray application such that over spray droplets dry before subsequent contact with incidental surfaces in the vicinity of the surface coating activity.

"Exempt compound" means a compound identified as exempt under the definition of Volatile Organic Compound (VOC) in 7 DE Admin. Code 1101. Exempt compound content of a coating shall be determined by U. S. EPA Method 24 or South Coast Air Quality Management District (SCAQMD) Method 303-91 (Revised February 1993), incorporated by reference in 1.6.5.10 of this regulation.

"Faux finishing coating" means a coating labeled and formulated as a stain or glaze to create artistic effects including, but not limited to, dirt, old age, smoke damage, and simulated marble and wood grain.

"Fire-resistive coating" means an opaque coating labeled and formulated to protect structural integrity by increasing the fire endurance of interior or exterior steel and other structural materials, that has been fire tested and rated by a testing agency and approved by State of Delaware building code officials for the County or local jurisdiction for use in bringing assemblies of structural materials into compliance with federal, state and local building code requirements. The fire-resistive coating and the testing agency must be approved by State of Delaware building code officials for the County or local

jurisdiction. The fire-resistive coating shall be tested in accordance with ASTM Designation E 119-07a, incorporated by reference in 1.6.5.2 of this regulation.

"Fire-retardant coating" means a coating labeled and formulated to retard ignition and flame spread, that has been fire tested and rated by a testing agency approved by State of Delaware building code officials for the County or local jurisdiction for use in bringing building and construction materials into compliance with federal, state and local building code requirements. The fire-retardant coating and the testing agency must be approved by State of Delaware building code officials for the County or local jurisdiction. The fire-retardant coating shall be tested in accordance with ASTM Designation E 84-08, incorporated by reference in 1.6.5.1 of this regulation.

"Flat coating" means a coating that is undefined under any other definition in 1.2 of this regulation and that registers gloss less than 15 on an 85-degree meter or less than 5 on a 60-degree meter according to ASTM Designation D 523-89 (1999), incorporated by reference in 1.6.5.3 of this regulation.

"Floor coating" means an opaque coating that is labeled and formulated for application to flooring, including, but not limited to, decks, porches, steps, and other horizontal surfaces, which may be subjected to foot traffic.

"Flow coating" means a coating labeled and formulated exclusively for use by electric power companies or their subcontractors to maintain the protective coating systems present on utility transformer units.

"Form-release compound" means a coating labeled and formulated for application to a concrete form to prevent the freshly poured concrete from bonding to the form. The form may consist of wood, metal, or some material other than concrete.

"Graphic arts coating or sign paint" means a coating labeled and formulated for hand application by artists using brush or roller techniques to indoor and outdoor signs (excluding structural components) and murals including letter enamels, poster colors, copy blockers, and bulletin enamels.

"High-temperature coating" means a high performance coating labeled and formulated for application to substrates exposed continuously or intermittently to temperatures above 204°C (400°F).

"Impacted immersion coating" means a high performance maintenance coating formulated and recommended for application to steel structures subject to immersion in turbulent, debris-laden water. These coatings are specifically resistant to high-energy impact damage caused by floating ice or debris.

"Industrial maintenance coating" means a high performance architectural coating, including primers, sealers, undercoaters, intermediate coats, and topcoats, formulated for application to substrates exposed to one or more of the extreme environmental conditions listed in (1) through (5) under this definition and labeled as specified in 1.4.4 of this regulation:

- (1) immersion in water, wastewater, or chemical solutions (aqueous and non-aqueous solutions), or chronic exposure of interior surfaces to moisture condensation;
- (2) acute or chronic exposure to corrosive, caustic, or acidic agents, or to chemicals, chemical fumes or chemical mixtures or solutions;
- (3) repeated exposure to temperatures above 121°C (250°F);
- (4) repeated (frequent) heavy abrasion, including mechanical wear and repeated (frequent) scrubbing with industrial solvents, cleansers, or scouring agents; or
- (5) exterior exposure of metal structures and structural components.

"Lacquer" means a clear or opaque wood coating, including clear lacquer sanding sealers, formulated with cellulosic or synthetic resins to dry by solvent evaporation without chemical reaction and to provide a solid, protective film.

"Low-solids coating" means a coating containing 0.12 kilogram or less of solids per liter (one pound or less of solids per gallon) of coating material.

"Magnesite cement coating" means a coating labeled and formulated for application to magnesite cement decking to protect the magnesite cement substrate from erosion by water.

"Mastic texture coating" means a coating labeled and formulated to cover holes and minor cracks and to conceal surface irregularities, that is recommended to be applied in a single coat of at least 10 mils (0.010 inch) dry film thickness.

"Metallic pigmented coating" means a coating containing at least 48 grams of elemental metallic pigment per liter of coating as applied (0.4 pounds per gallon), when tested in accordance with SCAQMD Method 318-95, incorporated by reference in 1.6.5.4 of this regulation.

"Multi-color coating" means a coating that is packaged in a single container and that exhibits more than one color when applied in a single coat.

"Non-flat coating" means a coating that is undefined under any other definition in 1.2 of this regulation and that registers a gloss of 15 or greater on an 85-degree meter and 5 or greater on a 60-degree meter according to ASTM Designation D 523-89 (1999), incorporated by reference in 1.6.5.3 of this regulation.

"Non-flat - high gloss coating" means a non-flat coating that registers a gloss of 70 or above on a 60-degree meter according to ASTM Designation D 523-89 (1999), incorporated by reference in 1.6.5.3 of this regulation.

"Non-industrial use" means any use of architectural coatings except in the construction or maintenance of any of the following: facilities used in the manufacturing of goods and commodities; transportation infrastructure, including highways, bridges, airports and railroads; facilities used in mining activities, including petroleum extraction; and utilities infrastructure, including power generation and distribution, and water treatment and distribution systems.

"Nuclear coating" means a protective coating formulated and recommended to seal porous surfaces such as steel (or concrete) that otherwise would be subject to intrusions by radioactive materials. These coatings must be resistant to long-term (service life) cumulative radiation exposure [ASTM Method D 4082-02, incorporated by reference in 1.6.5.14 of this regulation], relatively easy to decontaminate, and resistant to various chemicals to which the coatings are likely to be exposed [ASTM Method D 3912-95(2001), incorporated by reference in 1.6.5.15 of this regulation].

"Post-consumer coating" means a finished coating that would have been disposed of in a landfill, having completed its usefulness to a consumer, and does not include manufacturing wastes.

"Pre-treatment wash primer" means a primer that contains a minimum of 0.5 percent acid, by weight, when tested in accordance with ASTM Designation D 1613-06, incorporated by reference in 1.6.5.5 of this regulation, that is labeled and formulated for application directly to bare metal surfaces to provide corrosion resistance and to promote adhesion of subsequent topcoats.

"Primer" means a coating labeled and formulated for application to a substrate to provide a firm bond between the substrate and subsequent coats.

"Quick-dry enamel" means a non-flat coating that is labeled as specified in 1.4.8 of this regulation and that is formulated to have the following characteristics:

- (1) can be applied directly from the container under normal conditions with ambient temperatures between 16° and 27°C (60° and 80°F);
- (2) when tested in accordance with ASTM Designation D 1640-03, incorporated by reference in 1.6.5.6 of this regulation, sets to the touch in two hours or less, is tack free in four hours or less, and dries hard in eight hours or less by the mechanical test method; and
- (3) has a dried film gloss of 70 or above on a 60-degree meter.

"Quick-dry primer, sealer and undercoater" means a primer, sealer, or undercoater that is dry to the touch in 30 minutes and can be re-coated in two hours when tested in accordance with ASTM Designation D 1640-03, incorporated by reference in 1.6.5.6 of this regulation.

"Recycled coating" means an architectural coating formulated such that not less than 50 percent of the total weight consists of secondary and post-consumer coating, with not less than 10 percent of the total weight consisting of post-consumer coating.

"Roof coating" means a non-bituminous coating labeled and formulated exclusively for application to roofs for the primary purpose of preventing penetration of the substrate by water or reflecting heat or

ultraviolet radiation. Metallic pigmented roof coatings, which qualify as metallic pigmented coatings, shall be considered to be in the metallic pigmented coatings category.

"Rust preventive coating" means a coating formulated exclusively for non-industrial use to prevent the corrosion of metal surfaces and labeled as specified in 1.4.6 of this regulation.

"Sanding sealer" means a clear wood coating labeled and formulated for application to bare wood to seal the wood and to provide a coat that can be abraded to create a smooth surface for subsequent applications of coatings. A sanding sealer that also meets the definition of a lacquer is not included in this category, but is included in the lacquer category.

"SCAQMD" means the South Coast Air Quality Management District, a part of the California Air Resources Board (CARB), which is responsible for regulation of air quality in the State of California.

"Sealer" means a coating labeled and formulated for application to a substrate for one or more of the following purposes: to prevent subsequent coatings from being absorbed by the substrate, or to prevent harm to subsequent coatings by materials in the substrate.

"Secondary coating (rework)" means a fragment of a finished coating or a finished coating from a manufacturing process that has converted resources into a commodity of real economic value, but does not include excess virgin resources of the manufacturing process.

"Shellac" means a clear or opaque coating formulated solely with the resinous secretions of the lac beetle (*laciffer lacca*), thinned with alcohol, and formulated to dry by evaporation without a chemical reaction.

"Shop application" means application of a coating to a product or a component of a product in or on the premises of a factory or shop as part of a manufacturing, production, or repairing process (e.g., original equipment manufacturing coatings).

"Solicit" means to require for use or to specify, by written or oral contract.

"Specialty primer, sealer, and undercoater" means a coating labeled as specified in 1.4.7 of this regulation and that is formulated for application to a substrate to seal fire, smoke or water damage; to condition excessively chalky surfaces; to seal efflorescence; or to block stains. An excessively chalky surface is one that is defined as having a chalk rating of four or less as determined by ASTM Designation D 4214-07, incorporated by reference in 1.6.5.7 of this regulation.

"Stain" means a clear, semi-transparent, or opaque coating labeled and formulated to change the color of a surface, but not to conceal the grain pattern or texture.

"Swimming pool coating" means a coating labeled and formulated to coat the interior of swimming pools and to resist swimming pool chemicals.

"Swimming pool repair and maintenance coating" means a rubber-based coating labeled and formulated to be used over existing rubber-based coatings for the repair and maintenance of swimming pools.

"Temperature-indicator safety coating" means a coating labeled and formulated as a color changing indicator coating for the purpose of monitoring the temperature and safety of the substrate, underlying piping, or underlying equipment, and for application to substrates exposed continuously or intermittently to temperatures above 204°C (400°F).

"Thermoplastic rubber coating and mastic" means a coating or mastic formulated and recommended for application to roofing or other structural surfaces and that incorporates no less than 40 percent by weight of thermoplastic rubbers in the total resin solids and may also contain other ingredients including, but not limited to, fillers, pigments and modifying resins.

"Tint base" means an architectural coating to which colorant is added after packaging in sale units to produce a desired color.

"Traffic marking coating" means a coating labeled and formulated for marking and striping streets, highways, or other traffic surfaces including, but not limited to, curbs, berms, driveways, parking lots, sidewalks, and airport runways.

"Undercoater" means a coating labeled and formulated to provide a smooth surface for subsequent coatings.

"Varnish" means a clear wood coating, excluding lacquers and shellacs, formulated to dry by chemical reaction on exposure to air. Varnishes may contain small amounts of pigment to color a surface, or to control the final sheen or gloss of the finish.

"VOC content" means the weight of VOC per volume of coating, calculated according to the procedures specified in 1.6.1 of this regulation.

"Waterproofing sealer" means a coating labeled and formulated for application to a porous substrate for the primary purpose of preventing the penetration of water.

"Waterproofing concrete/masonry sealer" means a clear or pigmented film-forming coating that is labeled and formulated for sealing concrete and masonry to provide resistance against water, alkalis, acids, ultraviolet light and staining.

"Wood preservative" means a coating labeled and formulated to protect exposed wood from decay or insect attack, that is registered with the U.S. EPA under the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. section 136, et. seq.) and with the Department of Agriculture of the State of Delaware under 3 Del.C. Ch. 12.

1.3 Standards

- 1.3.1 Except as provided in 1.3.2, and 1.3.7 of this regulation, no person subject to the requirements of 1.0 of this regulation shall manufacture, blend, repackage for sale, supply, sell or offer for sale, solicit for application or apply in the State of Delaware, any architectural coating with a VOC content in excess of the corresponding limit specified in Table 1-1 of this regulation.
- 1.3.2 If anywhere on the container of any architectural coating, or any label or sticker affixed to the container, or in any sales, advertising, or technical literature supplied by the manufacturer or anyone acting on their behalf, any representation is made that indicates that the coating meets the definition of or is recommended for use for more than one of the coating categories listed in Table 1-1 of this regulation, then the most restrictive VOC content limit shall apply. This provision does not apply to the coating categories specified in 1.3.2.1 through 1.3.2.19 of this regulation.
 - 1.3.2.1 Antenna coatings
 - 1.3.2.2 Anti-fouling coatings
 - 1.3.2.3 Bituminous roof primers
 - 1.3.2.4 Calcimine recoaters
 - 1.3.2.5 Fire-retardant coatings
 - 1.3.2.6 Flow coatings
 - 1.3.2.7 High-temperature coatings
 - 1.3.2.8 Impacted immersion coatings
 - 1.3.2.9 Industrial maintenance coatings
 - 1.3.2.10 Lacquer coatings (including clear lacquer sanding sealers)
 - 1.3.2.11 Low-solids coating
 - 1.3.2.12 Metallic pigmented coatings
 - 1.3.2.13 Nuclear coatings
 - 1.3.2.14 Pre-treatment wash primers
 - 1.3.2.15 Shellacs
 - 1.3.2.16 Specialty primers, sealers, and undercoaters
 - 1.3.2.17 Temperature-indicator safety coatings
 - 1.3.2.18 Thermoplastic rubber coatings and mastic
 - 1.3.2.19 Wood preservatives
- 1.3.3 All architectural coating containers used to apply the contents therein to a surface directly from the container by pouring, siphoning, brushing, rolling, padding, ragging, or other means, shall be closed when not in use. These architectural coating containers include, but are not limited to, drums, buckets, cans, pails, trays, or other application containers. Containers of any VOC-containing materials used for thinning or cleanup shall also be closed when not in use.

- 1.3.4 No person shall apply or solicit the application of any architectural coating that is thinned to exceed the applicable VOC limit specified in Table 1-1 of this regulation.
 - 1.3.5 No person shall apply or solicit the application of any rust preventive coating for industrial use unless such rust preventive coating complies with the industrial maintenance coating VOC limit specified in Table 1-1 of this regulation.
 - 1.3.6 For any coating that does not meet any of the definitions for the specialty coatings categories listed in Table 1-1 of this regulation, the VOC content limit shall be determined by classifying the coating as a flat coating or a non-flat coating, based on its gloss, as defined in 1.2 of this regulation and the corresponding flat or non-flat coating limit shall apply.
 - 1.3.7 Notwithstanding the provisions of 1.3.1 of this regulation, a person or facility may add up to 10 percent by volume of VOC to a lacquer to avoid blushing of the finish during days with relative humidity greater than 70% and the temperature below 65°F, at the time of application, provided that the coating contains acetone and no more than 550 grams of VOC per liter of coating, less water and exempt compounds, prior to the addition of VOC.
- 1.4 Container Labeling Requirements

Each manufacturer of any architectural coatings subject to this rule shall display the information listed in 1.4.1 through 1.4.9 of this regulation on the coating container (or label) in which the coating is sold or distributed, on or after January 1, 2005.

 - 1.4.1 The date the coating was manufactured, or a date code representing the date, shall be indicated on the label, lid, or bottom of the container. If the manufacturer uses a date code for any coating, the manufacturer shall file an explanation of each code with the Department.
 - 1.4.2 A statement of the manufacturer's recommendation regarding thinning of the coating shall be indicated on the label or lid of the container. This requirement does not apply to the thinning of architectural coatings with water. If thinning of the coating prior to use is not necessary, the recommendation must specify that the coating is to be applied without thinning.
 - 1.4.3 Each container of any coating subject to this rule shall display either the maximum or the actual VOC content of the coating, as supplied, including the maximum thinning as recommended by the manufacturer. VOC content shall be displayed in grams of VOC per liter of coating. VOC content displayed shall be calculated using product formulation data, or shall be determined using the test methods in 1.6.2 of this regulation. The equations in 1.6.1 of this regulation shall be used to calculate VOC content.
 - 1.4.4 All industrial maintenance coatings shall display on the label or the lid of the container in which the coating is sold or distributed one or more of the descriptions noted below:
 - 1.4.4.1 For industrial use only.
 - 1.4.4.2 For professional use only.
 - 1.4.4.3 Not for residential use.
 - 1.4.4.4 Not intended for residential use.
 - 1.4.5 The labels of all clear brushing lacquers shall prominently display the statements "For brush application only", and "This product must not be thinned or sprayed".
 - 1.4.6 The labels of all rust preventive coatings shall prominently display the statement "For metal substrates only".
 - 1.4.7 The labels of all specialty primers, sealers, and undercoaters shall prominently display one or more of the descriptions listed below:
 - 1.4.7.1 For blocking stains
 - 1.4.7.2 For fire-damaged substrates
 - 1.4.7.3 For smoke-damaged substrates
 - 1.4.7.4 For water-damaged substrates
 - 1.4.7.5 For excessively chalky substrates
 - 1.4.7.6 To seal in efflorescence

1.4.8 The labels of all quick dry enamels shall prominently display the words "Quick Dry" and the dry hard time.

1.4.9 The labels of all non-flat-high gloss coatings shall prominently display the words "High Gloss".

1.5 Reporting Requirements

1.5.1 Each manufacturer of a product subject to a VOC content limit in Table 1-1 shall keep records demonstrating compliance with the VOC content limits. Such records shall clearly list each covered product by name (and identifying number if applicable) as shown on the product label, and in applicable sales and technical literature, the VOC content determined as in 1.6.1 and 1.6.2 of this regulation, the name or names of the regulated VOC constituents in the product, the dates of VOC determinations, and the coating category and VOC content limit under which the product is regulated in 1.0 of this regulation. These records shall be kept for a period of at least five years (60 months) from when generated.

1.5.2 Although routine reporting by manufacturers of coating products is not required, from time-to-time the Department may request certain specific data concerning sales and distribution of coating products in Delaware. A manufacturer shall, within 90 days, accede to such requests for information. Requested information shall include, but not be limited to:

1.5.2.1 The name and full mailing address of the manufacturer

1.5.2.2 The name, address and telephone number of a contact person

1.5.2.3 The regulated product name as described on the label and the coating category in Table 1-1 of this regulation under which the product is regulated

1.5.2.4 If the product is marketed for interior or exterior use

1.5.2.5 Number of gallons sold in Delaware during the requested time period in containers greater than one liter

1.5.2.6 Number of gallons sold in Delaware during the requested time period in containers of one liter or less

1.5.2.7 The actual and regulatory VOC content in grams per liter (if product in containers less than or equal to one liter has a different VOC content than product in containers larger than one liter, list them separately)

1.5.2.8 The actual and regulatory VOC content in grams per liter after recommended thinning (if product in containers less than or equal to one liter has a different VOC content than product in containers larger than one liter, list them separately)

1.5.2.9 The name or names of the VOC constituents of the product

1.5.2.10 The name or names of any exempt compounds in the product

1.6 Compliance Provisions and Test Methods

1.6.1 For the purpose of determining compliance with the VOC content limits in Table 1-1 of this regulation, the VOC content of a coating shall be determined by using the procedures described in 1.6.1.1 or 1.6.1.2 of this regulation, as appropriate. The VOC content of a tint base shall be determined without colorant that is added after the tint base is manufactured.

1.6.1.1 With the exception of low-solids coatings, determine the VOC content in grams of VOC per liter of coating thinned to the manufacturer's maximum recommendation, excluding the volume of any water and exempt compounds. Determine the VOC content using equation 1-1 as follows:

$$\text{VOC Content} = \frac{W_s - W_w - W_e}{V_m - V_w - V_e}$$

(1-1)

Where:

VOC Content = grams of VOC per liter of coating;

W_s = weight of volatiles, in grams;

W_w = weight of water, in grams;

W_{ec} = weight of exempt compounds, in grams;

V_m = volume of coating, in liters;

V_w = volume of water, in liters;

V_{ec} = volume of exempt compounds, in liters.

- 1.6.1.2 For low-solids coatings, determine the VOC content in grams of VOC per liter of coating thinned to the manufacturer's maximum recommendation, including the volume of any water and exempt compounds. Determine the VOC content using equation 1-2 as follows:

$$\text{VOC Content (ls)} = \frac{W_s - W_w - W_{ec}}{V_m}$$

(1-2)

where:

VOC Content (ls) = the VOC content of a low-solids coating in grams per liter of coating;

W_s = weight of volatile, in grams;

W_w = weight of water, in grams;

W_{ec} = weight of exempt compounds, in grams;

V_m = volume of coating, in liters.

- 1.6.2 To determine the physical properties of a coating in order to perform the calculations in 1.6.1 of this regulation, the reference method for VOC content is U.S. EPA Method 24 (40CFR60 Appendix A), incorporated by reference in 1.6.5.11 of this regulation, except as provided in 1.6.3 and 1.6.4 of this regulation. An alternative method to determine the VOC content of coatings is SCAQMD Method 304-91 (Revised February 1996), incorporated by reference in 1.6.5.12 of this regulation. To determine the VOC content of a coating, the manufacturer may use U.S. EPA Method 24, or an alternative method, as provided in 1.6.3 of this regulation, formulation data, or any other reasonable means for predicting that the coating has been formulated as intended (e.g. quality assurance checks, recordkeeping). However, if there are any inconsistencies between the results of a Method 24 test and any other means for determining VOC content, the Method 24 results will govern, except when an alternative method is approved as specified in 1.6.3 of this regulation. The Secretary may require the manufacturer to conduct a Method 24 analysis. Exempt compound content shall be determined by SCAQMD Method 303-91 (revised February 1993), incorporated by reference in 1.6.5.10 of this regulation. The exempt compound parachlorobenzotrifluoride (PCBTF) shall be determined by BAAQMD Method 41, incorporated by reference in 1.6.5.9 of this regulation. Exempt compounds that are cyclic, branched, or linear, completely methylated siloxanes, shall be determined by BAAQMD Method 43, incorporated by reference in 1.6.5.8 of this regulation.
- 1.6.3 Other test methods demonstrated to provide results that are acceptable for the purposes of determining compliance with 1.6.2 of this regulation, after review and approval in writing by the Department and by the EPA, also may be used.
- 1.6.4 Analysis of methacrylate multi-component coatings used as traffic marking coatings shall be conducted according to a modification of U.S. EPA Method 24 (40CFR59, subpart D, Appendix A), incorporated by reference in 1.6.5.13 of this regulation. This method has not been approved for methacrylate multi-component coatings used for purposes other than as traffic marking coatings or for other classes of multi-component coatings.
- 1.6.5 The following test methods are incorporated by reference herein, and shall be used to test coatings subject to the provisions of this regulation:
- 1.6.5.1 The flame spread index of a fire-retardant coating shall be determined by the ASTM Designation E 84-08 , "Standard Test Method for Surface Burning Characteristics of Building Materials," [see "Fire-retardant coating" in 1.2 of this regulation].

- 1.6.5.2 The fire-resistance rating of a fire-resistant coating shall be determined by ASTM Designation E 119-07a, "Standard Test Methods for Fire Tests on Building Construction Materials," [see "Fire-resistant coating" in 1.2 of this regulation].
- 1.6.5.3 The gloss of a coating shall be determined by ASTM Designation D 523-89 (1999), "Standard Test Method for Specular Gloss" [see "Flat coating"; "Non-flat coating"; "Non-flat-high gloss coating"; "Quick-dry enamel" in 1.2 of this regulation].
- 1.6.5.4 The metallic content of a coating shall be determined by SCAQMD Method 318-95, "Determination of Weight Percent Elemental Metal in Coatings by X-Ray Diffraction," SCAQMD "Laboratory Methods of Analysis for Enforcement Samples," [see "Metallic pigmented coating" in 1.2 of this regulation].
- 1.6.5.5 The acid content of a coating shall be determined by ASTM Designation D 1613-06, "Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer and Related Products," [see "Pre-treatment wash primer" in 1.2 of this regulation].
- 1.6.5.6 The set-to-touch and dry-to-recoat times of a coating shall be determined by ASTM Designation D 1640-03, "Standard Methods for Drying, Curing, or Film Formation of Organic Coatings at Room Temperature," [see "Quick-dry enamel" and "Quick-dry primer, sealer, and undercoater" in 1.2 of this regulation]. The tack free time of a quick-dry enamel coating shall be determined by the Mechanical Test Method of ASTM Designation D 1640-03.
- 1.6.5.7 The chalkiness of a surface shall be determined using ASTM Designation D 4214-07, "Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films," [see "Specialty primer, sealer, and undercoater" in 1.2 of this regulation].
- 1.6.5.8 Exempt compounds that are cyclic, branched, or linear, completely methylated siloxanes, shall be analyzed as exempt compounds for compliance with 1.6 by BAAQMD Method 43, "Determination of Volatile Methylsiloxanes in Solvent-Based Coatings, Inks, and Related Materials," BAAQMD Manual of Procedures, Volume III, adopted November 6, 1996 [see 1.6.2 of this regulation].
- 1.6.5.9 The exempt compound parachlorobenzotrifluoride (PCBTF), shall be analyzed as an exempt compound for compliance with 1.6 of this regulation by BAAQMD Method 41, "Determination of Volatile Organic Compounds in Solvent-Based Coatings and Related Materials Containing Parachlorobenzotrifluoride," BAAQMD Manual of Procedures, Volume III, adopted December 20, 1995, [see 1.6.2 of this regulation].
- 1.6.5.10 Exempt compound content shall be analyzed by SCAQMD Method 303-91 (Revised 1993), "Determination of Exempt Compounds," SCAQMD "Laboratory Methods of Analysis for Enforcement Samples," [see 1.6.2 of this regulation].
- 1.6.5.11 The VOC content of a coating shall be determined by U.S. EPA Method 24 as it exists in Appendix A of 40 Code of Federal Regulations (CFR) Part 60, "Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings," [see 1.6.2 of this regulation].
- 1.6.5.12 The VOC content of coatings may be analyzed by either U.S. EPA Method 24 or SCAQMD Method 304-91 (Revised 1996), "Determination of Volatile Organic Compounds (VOC) in Various Materials," SCAQMD "Laboratory Methods of Analysis for Enforcement Samples," [see 1.6.2 of this regulation].
- 1.6.5.13 The VOC content of methacrylate multi-component coatings used as traffic marking coatings shall be analyzed by the procedures in 40 CFR part 59, subpart D, **Appendix A**, "Determination of Volatile Matter Content of Methacrylate Multicomponent Coatings Used as Traffic Marking Coatings," (September 11, 1998), [see 1.6.4 of this regulation].
- 1.6.5.14 The radiation resistance of a nuclear coating shall be determined by ASTM Method D 4082-02 "Standard Test Method for Effects of Gamma Radiation on Coatings for Use in Light-Water Nuclear Power Plants," see ["Nuclear coating" in 1.2 of this regulation].

1.6.5.15 The chemical resistance of nuclear coatings shall be determined by ASTM Method D 3912-95 (2001) "Standard Test Method for Chemical Resistance of Coatings Used in Light-Water Nuclear Power Plants," [see "Nuclear coating" in 1.2 of this regulation].

1.7 Test Method Availability

- 1.7.1 ASTM methods described in 1.6 of this regulation can be purchased from American Society for Testing and Materials (ASTM), 100 Barr Harbor Drive, West Conshohocken, Pennsylvania 19428-2959. Telephone (610) 832-9585. Fax (610) 832-9555.
- 1.7.2 SCAQMD methods described in 1.6 of this regulation can be purchased from South Coast Air Quality Management District, 21865 East Copley Drive, Diamond Bar, California 91765-0934. Telephone (909) 396-2162.
- 1.7.3 BAAQMD methods described in 1.6 of this regulation can be purchased from Bay Area Air Quality Management District (BAAQMD), 939 Ellis Street, San Francisco, California 94109. Telephone (415) 749-4900.

**TABLE 1-1
VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS**

Note: Limits are expressed in grams of VOC per liter of coating thinned to the manufacturer's maximum recommendation (as indicated on the label or lid of the coating container), excluding the volume of any water, exempt compounds, or colorant added to tint bases.

COATING CATEGORY	VOC CONTENT LIMIT
Flat Coatings	100
Non-flat Coatings	150
Non-flat - High Gloss Coatings	250
SPECIALTY COATINGS	
Antenna Coatings	530*
Anti-fouling Coatings	400
Bituminous Roof Coatings	300
Bituminous Roof Primers	350
Bond Breakers	350
Calcimine Recoaters	475*
Clear Wood Coatings	
Clear Brushing Lacquers	680
Lacquers (including clear lacquer sanding sealers)	550
Sanding Sealers (other than clear lacquer sanding sealers)	350
Varnishes	350
Conversion Varnish	725*
Concrete Curing Compounds	350*
Concrete Surface Retarders	780*
Dry Fog Coatings	400*
Faux Finishing Coatings	350
Fire-resistive Coatings	350
Fire-retardant Coatings	
Clear	650
Opaque	350
Floor Coatings	250
Flow Coatings	420

Form-release Compounds	250
Graphic Arts Coatings (Sign Paints)	500*
High-temperature Coatings	420
Impacted Immersion Coatings	780*
Industrial Maintenance Coatings	340
Low-solids Coatings	120*(1)
Magnesite Cement Coatings	450
Mastic Texture Coatings	300*
Metallic Pigmented Coatings	500
Multi-color Coatings	250
Nuclear Coatings	450*
Pre-treatment Wash Primers	420
Primers, Sealers, and Undercoaters	200
Quick-dry Enamels	250
Quick-dry Primers, Sealers and Undercoaters	200
Recycled Coatings	250
Roof Coatings	250
Rust Preventive Coatings	400*
Shellacs	
Clear	730
Opaque	550
Specialty Primers, Sealers, and Undercoaters	350
Stains	250
Swimming Pool Coatings	340
Swimming Pool Repair and Maintenance Coatings	340
Temperature-indicator Safety Coatings	550
Thermoplastic Rubber Coatings and Mastic	550*
Traffic Marking Coatings	150*
Waterproofing Sealers	250
Waterproofing Concrete/Masonry Sealers	400
Wood Preservatives	350

* Indicates limits and definition unchanged from the Federal rule (40CFR59 Subpart D) "National Volatile Organic Compound Emission Standards for Architectural Coatings" which is still in effect.

(1) Units are grams of VOC per liter of coating, *including* water and exempt compounds.

2.0 Consumer Products

2.1 Applicability

- 2.1.1 Except as provided in 2.1.2 and 2.1.3 of this regulation, Section 2.0 of this regulation shall apply to any person who sells, supplies, offers for sale, or manufactures consumer products on and after January 1, 2005 the applicable compliance dates in Table 2-1 of this regulation, "VOC Content Limits for Consumer Products", for use in the State of Delaware.
- 2.1.2 The provisions of Section 2.0 of this regulation shall not apply to a manufacturer or distributor who sells, supplies, or offers for sale in the State of Delaware, a consumer product that does not comply with the VOC standards specified in 2.3.1 of this regulation, as long as the manufacturer or distributor can demonstrate both that the consumer product is intended for shipment and use outside of the State of Delaware, and that the manufacturer or distributor has taken reasonable

prudent precautions to assure that the consumer product is not distributed to the State of Delaware. This does not apply to consumer products that are sold, supplied, or offered for sale by any person to retail outlets in the State of Delaware.

- 2.1.3 The provisions of Section 2.0 of this regulation shall not apply to a retailer who sells, supplies or offers for sale in the State of Delaware, a particular consumer product that does not comply with the VOC standards specified in 2.3.1 of this regulation, provided that retailer demonstrates to the satisfaction of the Department that the manufacturer or distributor of that product mislead that retailer into believing that the product did comply with the VOC standards specified in 2.3.1 of this regulation.

2.2 Definitions

Terms used but not defined in Section 2.0 of this regulation shall have the meaning given them in Regulation No.1101 7 DE Admin. Code 1101 or the CAA in that order of priority.

"ACP (alternative control plan)" means an emissions averaging program, established and managed by a responsible ACP party which allows manufacturers to sell ACP products in the State of Delaware pursuant to the requirements of Section 2.0 of this regulation.

"ACP emissions" means the sum of the VOC emissions from every ACP product subject to an ACP, during the compliance period specified in the ACP, expressed to the nearest pound of VOC and calculated according to the following equation:

$$\text{ACP Emissions} = (\text{Emission})_1 + (\text{Emission})_2 + \dots + (\text{Emission})_N$$

where,

$$\text{Emission} = \frac{(\text{VOC Content}) \times (\text{Enforceable Sales})}{100}$$

where,

For all products except for charcoal lighter material products:

$$\text{VOC Content} = \frac{[(\text{B} - \text{C}) \times 100]}{\text{A}}$$

where,

A = net weight of unit (excluding container and packaging);

B = total weight of all VOCs per unit;

C = total weight of all exempted VOCs per unit, as specified in 2.3.11 through 2.3.19 of this regulation.

For charcoal lighter material products only:

$$\text{VOC Content} = \frac{(\text{Certified Emission} \times 100)}{\text{Certified Use Rate}}$$

where,

Certified Emissions = emissions levels for products specified 2.3.4.1 of this regulation;
Certified Use Rate = see "Certified use rate" in Section 2.2 of this regulation.

"ACP limit" means the maximum allowable ACP emissions during the compliance period specified in an ACP, expressed to the nearest pound of VOC and calculated according to the following equation:

$$\text{ACP Limit} = (\text{Limit})_1 + (\text{Limit})_2 + \dots + (\text{Limit})_N$$

where,

$$\text{Limit} = \frac{(\text{ACP Standard}) \times (\text{Enforceable Sales})}{100}$$

where,

Enforceable Sales = see "Enforceable sales" in Section 2.2 of this regulation
ACP Standard = see "ACP standard" in Section 2.2 of this regulation
1,2,...N = each product in an ACP up to the maximum N.

"ACP product" means any consumer product subject to the VOC standards specified in 2.3.1 of this regulation, except those products that have been exempted under 2.3 of this regulation, or exempted as innovative products under 2.4 of this regulation and is covered by an ACP established by the responsible ACP party.

"ACP reformulation or ACP reformulated" means the process of reducing the VOC content of an ACP product, within the period that an ACP is in effect, to a level which is less than the current VOC content of the product.

"ACP standard" means either the ACP product's pre-ACP VOC content or the applicable VOC standard specified in 2.3.1 of this regulation, whichever is the lesser of the two.

"ACP VOC standard" means the maximum allowable VOC content for an ACP product, determined as follows:

- (1) the applicable VOC standard specified in 2.3.1 of this regulation for all ACP products except for charcoal lighter material;
- (2) for charcoal lighter material products only, the VOC standard for the purposes of Section 2.0 of this regulation shall be calculated according to the following equation:

$$\text{VOC Standard} = \frac{0.020 \text{ poundCH}_2 \text{ per start}}{\text{Certified Use Rate}}$$

where,

0.020 = the certification emissions level as specified in 2.3.1 of this regulation.
Certified Use Rate = see "Certified use rate" in Section 2.2 of this regulation

"Adhesive" means any product that is applied for the purpose of bonding two surfaces together other than by mechanical means. Adhesive does not include products used on humans and animals, adhesive tape, contact paper, wallpaper, shelf liners, or any other product with an adhesive incorporated onto or in an inert substrate.

"Adhesive remover" means a product designed exclusively for the removal of to remove adhesives, caulk and other bonding materials from a specific or a variety of substrates. Adhesive remover does not include products that remove adhesives intended exclusively for use on humans or animals.

For the purposes of this definition and adhesive remover subcategories (1) through (4) below, the term adhesive shall mean a substance used to bond one or more materials. Adhesive includes, but is not limited to: caulk; sealants; glues; or similar substances used for the purposes of forming a bond.

- (1) "Floor and wall covering adhesive remover" means a product designed or labeled to remove floor or wall coverings and associated adhesive from the underlying substrate;
- (2) "Gasket or thread locking adhesive remover" means a product designed or labeled to remove gaskets or thread locking adhesives. Product labeled for dual use as a paint stripper and gasket remover and/or thread locking adhesive remover are considered gasket or thread locking adhesive remover.
- (3) "General purpose adhesive remover" means a product designed or labeled to remove cyanoacrylate adhesive as well as non-reactive adhesives or residue from a variety of substrates. General purpose adhesive remover includes, but is not limited to, products that remove thermoplastic adhesives; pressure sensitive adhesives; dextrine or starch-based adhesives; casein glues; rubber or latex-based adhesives; as well as products that remove stickers; decals; stencils; or similar materials. General purpose adhesive remover does not include floor or wall covering adhesive remover.
- (4) "Specialty adhesive remover" means a product designed to remove reactive adhesives from a variety of substrates. Reactive adhesives include adhesives that require a hardener or catalyst in order for the bond to occur. Examples of reactive adhesives include, but are not limited to: epoxies; urethanes; silicones. Specialty adhesive remover does not include gasket or thread locking adhesive remover.

"Aerosol adhesive" means an aerosol product in which the spray mechanism is permanently housed in a non-refillable can designed for hand-held application without the need for ancillary hoses or spray equipment. Aerosol adhesives include special purpose spray adhesives, mist spray adhesives and web spray adhesives.

"Aerosol cooking spray" means any aerosol product designed either to reduce sticking on cooking and baking surfaces or to be applied on food, or both.

"Aerosol product" means a pressurized spray system that dispenses product ingredients by means of a propellant contained in a product or a product's container or by means of a mechanically induced force. Aerosol product does not include pump sprays.

"Agricultural use" means the use of any pesticide or method or device for the control of pests in connection with the commercial production, storage or processing of any animal or plant crop. Agricultural use does not include the sale or use of pesticides in properly labeled packages or containers which are intended for: (and defined for the purposes of this definition only):

- (1) home use which means use in a household or its immediate environment,
- (2) structural pest control which means a use requiring a license under Title 3 **Del.C.** Ch. 12,
- (3) industrial use which means use for or in a manufacturing, mining, or chemical process or use in the operation of factories, processing plants, and similar sites, and
- (4) institutional use which means use within the lines of, or on property necessary for the operation of buildings such as hospitals, schools, libraries, auditoriums, and office complexes.

"Air freshener" means any consumer product including, but not limited to, sprays, wicks, powders, and crystals, designed for the purpose of masking odors, or freshening, cleaning, scenting, or deodorizing the air. Air freshener does not include products that are used on the human body, products that as indicated on the product label, function primarily as cleaning products, toilet and urinal care products, disinfectant products claiming to deodorize by killing germs on surfaces, or institutional/industrial disinfectants when offered for sale solely through institutional and industrial channels of distribution. Air freshener does include spray disinfectants and other products that are expressly represented for use as air fresheners, except institutional and industrial disinfectants when offered for

sale through institutional and industrial channels of distribution. To determine whether a product is an air freshener, all verbal and visual representations regarding product use on the label or packaging and in the product's literature and advertising may be considered. The presence of, and representations about, a product's fragrance and ability to deodorize (resulting from surface application) shall not constitute a claim of air freshening.

"All other carbon-containing compounds" means all other compounds which contain at least one carbon atom and are not exempt compounds or LVP-VOCs.

"All other forms" means all consumer product forms for which no form-specific VOC standard is specified. Unless specified otherwise by the applicable VOC standard, "All other forms" all other forms include, but are not limited to, solids, liquids, wicks, powders, crystals, and cloth or paper wipes (towelettes).

"Anti-microbial hand or body cleaner or soap" means a cleaner or soap designed to reduce the level of microorganisms on the skin through germicidal activity. Anti-microbial hand or body cleaner or soap includes, but is not limited to, anti-microbial hand or body washes/cleaners, food-handler hand washes, healthcare personnel hand washes, pre-operative skin preparations and surgical scrubs. Anti-microbial hand or body cleaner or soap does not include prescription drug products, antiperspirants, astringent/toner, deodorant, facial cleaner or soap, general-use hand or body cleaner or soap, hand dishwashing detergent (including anti-microbial), heavy-duty hand cleaner or soap, medicated astringent/medicated toner, and rubbing alcohol.

"Antiperspirant" means any product including, but not limited to, aerosols, roll-ons, sticks, pumps, pads, creams, and squeeze-bottles, that is intended by the manufacturer to be used to reduce perspiration in the human axilla by at least 20 percent in at least 50 percent of a target population.

"Anti-static product" means a product that is labeled to eliminate, prevent or inhibit the accumulation of static electricity. Anti-static product does not include electronic cleaner, floor polish or wax, floor coating and products that meet the definition of aerosol coating product or architectural coating.

"Architectural coating" means a coating applied to stationary structures and their appurtenances, to mobile homes, to pavements, or to curbs.

"ASTM" means the American Society for Testing and Materials.

"Astringent/toner" means any product not regulated as a drug by the United States Food and Drug Administration (FDA) which is applied to the skin for the purpose of cleaning or tightening pores. This category also includes clarifiers and substrate-impregnated products. This category does not include any hand, face, or body cleaner or soap product, medicated astringent/medicated toner, cold cream, lotion, or antiperspirant.

"Automotive brake cleaner" means a cleaning product designed to remove oil, grease, brake fluid, brake pad material or dirt from motor vehicle brake mechanisms.

"Automotive hard paste wax" means a motor vehicle wax or polish which is:

- (1) designed to protect and improve the appearance of motor vehicle painted surfaces;
- (2) a solid at room temperature; and
- (3) contains 0% water by formulation.

"Automotive instant detailer" means a product designed for use in a pump spray that is applied to motor vehicle painted surfaces and wiped off prior to being allowed to dry.

"Automotive rubbing or polishing compound" means a product designed primarily to remove oxidation, old paint, scratches or "swirl marks", and other defects from motor vehicle painted surfaces without leaving a protective barrier.

"Automotive wax, polish, sealant or glaze" means a product designed to seal out moisture, increase gloss, or otherwise enhance motor vehicle painted surfaces. Automotive wax, polish, sealant or glaze includes, but is not limited to, products designed for use in auto body repair shops and drive-through car washes, as well as products designed for the general public. Automotive wax, polish, sealant or glaze does not include automotive rubbing or polishing compounds, automotive wash and wax products, surfactant-containing car wash products, and products designed for use on unpainted surfaces such as bare metal, chrome, glass, or plastic.

"Automotive windshield washer fluid" means any liquid designed for use in a motor vehicle windshield washer system either as an antifreeze or for the purpose of cleaning, washing, or wetting the windshield. Automotive windshield washer fluid does not include fluids placed by the manufacturer in a new vehicle.

"Bathroom and tile cleaner" means a product designed to clean tile or surfaces in bathrooms. Bathroom and tile cleaner does not include products specifically designed to clean toilet bowls, or toilet tanks or urinals.

"Bug and tar remover" means a product designed to remove either or both of the following from painted motor vehicle surfaces without causing damage to the finish:

- (1) biological-type residues such as insect carcasses and tree sap and,
- (2) road grime, such as road tar, roadway paint markings, and asphalt.

"CARB" means the California Air Resources Board.

"Carburetor or fuel-injection air intake cleaners" means a product designed to remove fuel deposits, dirt, or other contaminants from a carburetor, choke, throttle body of a fuel-injection system, or associated linkages. Carburetor or fuel-injection air intake cleaners does not include products designed exclusively to be introduced directly into the fuel lines or fuel storage tank prior to introduction into the carburetor or fuel injectors.

"Carpet and upholstery cleaner" means a cleaning product designed for the purpose of eliminating dirt and stains on rugs, carpeting, and the interior of motor vehicles and/or on household furniture or objects upholstered or covered with fabrics such as wool, cotton, nylon or other synthetic fabrics. Carpet and upholstery cleaner includes, but is not limited to, products that make fabric protectant claims. Carpet and upholstery cleaner does not include general purpose cleaners, spot removers, vinyl or leather cleaners, dry cleaning fluids, or products designed exclusively for use at industrial facilities engaged in furniture or carpet manufacturing.

"Certified use rate" means the usage level for charcoal lighter materials specified under 2.3.4 of this regulation, expressed to the nearest 0.001 pound of charcoal lighter materials used per start.

"Charcoal lighter material" means any combustible material designed to be applied on, incorporated in, added to, or used with charcoal to enhance ignition. Charcoal lighter material does not include any of the following: electrical starters and probes; metallic cylinders using paper tinder; natural gas; propane; and fat wood.

"Colorant" means any pigment or coloring material used in a consumer product for an aesthetic effect, or to dramatize an ingredient.

"Compliance period" means the period of time, not to exceed one year, for which the ACP limit and ACP emissions are calculated and for which compliance with the ACP limit is determined, as specified in the ACP.

"Construction, panel, and floor covering adhesive" means any one-component adhesive that is designed exclusively for the installation, remodeling, maintenance, or repair of:

- (1) structural and building components that include, but are not limited to, beams, trusses, studs, paneling [drywall or drywall laminates, fiberglass reinforced plastic (FRP), plywood, particle board, insulation board, pre-decorated hardboard or tileboard, etc.], ceiling and acoustical tile, molding, fixtures, countertops or countertop laminates, cove or wall bases, and flooring or subflooring; or
- (2) floor or wall coverings that include, but are not limited to, wood or simulated wood covering, carpet, carpet pad or cushion, vinyl-backed carpet, flexible flooring material, non-resilient flooring material, mirror tiles and other types of tiles, and artificial grass.

"Construction, panel, and floor covering adhesive" Construction, panel, and floor covering adhesive does not include floor seam sealer.

"Consumer" means any person who purchases, or acquires any consumer product for personal, family, household, or institutional use. Persons acquiring a consumer product for resale are not consumers for that product.

"Consumer product" means a chemically formulated product used by household and institutional consumers including, but not limited to: antiperspirants; detergents; deodorants; cleaning compounds;

polishes; floor finishes; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; aerosol paints; and automotive specialty products, but does not include other paint products, furniture coatings, or architectural coatings. As used in 2.0 of this regulation, consumer products shall also refer to aerosol adhesives, including aerosol adhesives used for consumer, industrial and commercial uses.

"Contact adhesive" means an adhesive that:

- (1) is designed for application to both surfaces to be bonded together;
- (2) is allowed to dry before the two surfaces are placed in contact with each other;
- (3) forms an immediate bond that is impossible, or difficult, to reposition after both adhesive-coated surfaces are placed in contact with each other; and
- (4) does not need sustained pressure or clamping of surfaces after the adhesive-coated surfaces have been brought together using sufficient momentary pressure to establish full contact between both surfaces.

"Contact adhesive" Contact adhesive does not include rubber cements that are primarily intended for use on paper substrates. Contact adhesive also does not include vulcanizing fluids that are designed and labeled for tire repair only.

"Contact adhesive - general purpose" means any contact adhesive that is not a contact adhesive - special purpose.

"Contact adhesive - special purpose" means a contact adhesive that:

- (1) is used to bond melamine-covered board, unprimed metal, unsupported vinyl, Teflon, ultra-high molecular weight polyethylene, rubber, high pressure laminate or wood veneer 1/16 inch thick or less in thickness to any porous or nonporous surface, and is sold in units of product, less packaging, that contains more than eight fluid ounces, or
- (2) is used in automotive applications that are (a) automotive-under-the-hood applications requiring heat, oil or gasoline resistance, or (b) body-side molding, automotive weather-strip or decorative trim.

"Container/packaging" means the part or parts of the consumer or institutional product which serve only to contain, enclose, incorporate, deliver, dispense, wrap or store the chemically formulated substance or mixture of substances which is solely responsible for accomplishing the purposes for which the product was designed or intended. Container/packaging includes any article onto or into which the principal display panel and other accompanying literature or graphics are incorporated, etched, printed or attached.

"Contact person" means a representative(s) or representatives that has been designated by the responsible ACP party for the purpose of reporting or maintaining any information specified in the ACP.

"Crawling bug insecticide" means any insecticide product that is designed for use against ants, cockroaches, or other household crawling arthropods, including, but not limited to, mites, silverfish or spiders. Crawling bug insecticide does not include products designed to be used exclusively on humans or animals, or any house dust mite product. For the purposes of this definition only:

- (1) house dust mite product means a product whose label, packaging or accompanying literature states that the product is suitable for use against house dust mites, but does not indicate that the product is suitable for use against ants, cockroaches, or other household crawling arthropods, and
- (2) house dust mite means mites which feed primarily on skin cells shed in the home by humans and pets and which belong to the phylum Arthropoda, the subphylum Chelicerata, the class Arachnida, the subclass Acari, the order Astigmata, and the family Pyroglyphidae.

"Date-code" means the day, month and year on which the consumer product was manufactured, filled, or packaged, or a code indicating such a date.

"Delaware sales" means the sales (net pounds of product, less packaging and container, per year) in Delaware for a specified calendar year. If direct sales data for the State of Delaware are not available, sales may be estimated by prorating national or regional sales data by population.

"Deodorant" means:

(1) For products manufactured on or after January 1, 2005 and before May 1, 2009: any product including, but not limited to, aerosols, roll-ons, sticks, pumps, pads, creams, and squeeze-bottles, that is intended by the manufacturer to be used to minimize odor in the human axilla by retarding the growth of bacteria which cause the decomposition of perspiration.

(2) For products manufactured on or after May 1, 2009: any product including, but not limited to, aerosols, roll-ons, sticks, pumps, pads, creams, and squeeze bottles, that indicates or depicts on the container or packaging, or on any sticker or label affixed thereto, that the product can be used on or applied to the human axilla to provide a scent and/or minimize odor. A deodorant body spray product that indicates or depicts on the container or packaging, or on any sticker or label affixed thereto, that it can be used on or applied to the human axilla, is a deodorant.

"Deodorant body spray" means:

(1) for products manufactured on or after January 1, 2005 and before May 1, 2009: a personal fragrance product with 20 percent or less fragrance.

(2) for products manufactured on or after May 1, 2009: a personal fragrance product with 20 percent or less fragrance, that is designed for application all over the human body to provide a scent. A deodorant body spray product that indicates or depicts on the container or packaging, or on any sticker or label affixed thereto, that it can be used on or applied to the human axilla, is a deodorant.

"Device" means any instrument or contrivance (other than a firearm) which is designed for trapping, destroying, repelling, or mitigating any pest or any other form of plant or animal life (other than man and other than bacteria, virus, or other microorganism on or in living man or other living animals); but not including equipment used for the application of pesticides when sold separately there from.

"Disinfectant" means any product intended to destroy or irreversibly inactivate infectious or other undesirable bacteria, pathogenic fungi, or viruses on surfaces or inanimate objects and whose label is registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA, 7 U.S.C. 136, et seq.) and Title 3 **Del.C. Ch. 12.** Disinfectant does not include any of the following:

(1) products designed solely for use on human or animals;

(2) products designed for agricultural use;

(3) products designed solely for use in swimming pools, therapeutic tubs, or hot tubs;

(4) products which, as indicated on the principal display panel or label, are designed primarily for use as bathroom and tile cleaners, glass cleaners, general purpose cleaners, toilet bowl cleaners, or metal polishes.

"Distributor" means any person to whom a consumer product is sold or supplied for the purposes of resale or distribution in commerce, except that manufacturers, retailers, and consumers are not distributors.

"Double-phase aerosol air freshener" means an aerosol air freshener with the liquid contents in two or more distinct phases that requires the product container be shaken before use to mix the phases, producing an emulsion.

"Dry cleaning fluid" means any non-aqueous liquid product designed and labeled exclusively for use on: fabrics which are labeled "for dry clean only", such as clothing or drapery; or S-coded fabrics. Dry cleaning fluid includes, but is not limited to, those products used by commercial dry cleaners and commercial businesses that clean fabrics such as draperies at the customer's residence or work place. Dry cleaning fluid does not include spot remover or carpet and upholstery cleaner. For the purposes of this definition, S-coded fabric means an upholstery fabric designed to be cleaned only with water-free spot cleaning products as specified by the Joint Industry Fabric Standards Committee.

"Dusting aid" means a product designed to assist in removing dust and other soils from floors and other surfaces without leaving a wax or silicone based coating. Dusting aid does not include products which consist entirely of compressed gases for use in electronic or other specialty areas pressurized gas duster.

"Electrical cleaner" means a product labeled to remove heavy soils such as grease, grime, or oil from electrical equipment, including, but not limited to, electric motors, armatures, relays, electric panels, or

generators. Electric cleaner does not include general purpose cleaner, general purpose degreaser, dusting aid, electronic cleaner, energized electrical cleaner, pressurized gas duster, engine degreaser, anti-static product or products designed to clean the casings or housings of electrical equipment.

"Electronic cleaner" means a product designed specifically labeled for the removal of dirt, grease or grime moisture, dust, flux or oxides from the electrical internal components of electronic or precision equipment such as electric motors, circuit boards, electricity panels, and generators and the internal components of electronic devices, including, but not limited to, radios, compact disc (CD) players, digital video disc (DVD) players, and computers. Electronic cleaner does not include general purpose cleaner, general purpose degreaser, dusting aid, pressurized gas duster, engine degreaser, electrical cleaner, energized electrical cleaner, anti-static product, or products designed to clean the casings or housings of electronic equipment.

"Energized electrical cleaners" means a product that meets both of the following criteria:

- (1) the product is labeled to clean and/or degrease electrical equipment, where cleaning and/or degreasing is accomplished when electrical current exists, or when there is residual electrical potential from a component, such as a capacitor.
- (2) The product label clearly displays the statements: "Energized Equipment use only, Not to be used for motorized vehicle maintenance, or their parts."
Energized electrical cleaner does not include electronic cleaner.

"Enforceable sales" means the total amount of an ACP product sold for use in the State of Delaware, during the applicable compliance period specified in the ACP, as determined through enforceable sales records (expressed to the nearest pound, excluding product container and packaging).

"Enforceable sales record" means a written, point-of-sale record or any other Department-approved system of documentation from which the mass, in pounds (less product container and packaging), of an ACP product sold to the end user in the State of Delaware during the applicable compliance period can be accurately documented. For the purposes of Section 2.0 of this regulation, Enforceable sales records include, but are not limited to, the following types of records:

- (1) accurate records of direct retail or other outlet sales to the end user during the applicable compliance period;
- (2) accurate compilations, made by independent market surveying services, of direct retail or other outlet sales to the end users for the applicable compliance period, provided that a detailed method which can be used to verify any data comprising such summaries is recorded by the responsible ACP party;
- (3) any other accurate product sales records approved by the Department as meeting the criteria specified in Enforceable sales record in Section 2.2 of this regulation.

"Engine degreaser" means a cleaning product designed to remove grease, grime, oil and other contaminants from the external surfaces of engines and other mechanical parts.

"Exempt compound" means any carbon-containing compound listed as an exception to the definition of VOC's in Regulation No. 1101 7 DE Admin. Code 1101.

"Fabric protectant" means a product designed to be applied to fabric substrates to protect the surface from soiling from dirt and other impurities or to reduce absorption of liquid into the fabric's fibers. Fabric protectant does not include waterproofers, products designed for use solely on leather, or products designed for use solely on fabrics which are labeled "for dry clean only" and sold in containers of 10 fluid ounces or less.

"Fabric refresher" means a product labeled to neutralize or eliminate odors on non-laundered fabric including, but not limited to, soft household surfaces, rugs, carpeting, draperies, bedding, automotive interiors, footwear, athletic equipment, clothing and/or on household furniture or objects upholstered or covered with fabrics such as, but not limited to, wool, cotton or nylon. Fabric refresher does not include anti-static product, carpet and upholstery cleaner, soft household surface sanitizers, footwear or leather care product, spot remover, or disinfectant, or products labeled for application to both fabric and human skin. For the purposes of this definition only, soft household surface sanitizer means a

product labeled to neutralize or eliminate odors on surfaces listed above whose label is registered as a sanitizer under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA, 7 USC 136 et seq.).

"Facial cleaner or soap" means a cleaner or soap designed primarily to clean the face. Facial cleaner or soap includes, but is not limited to, facial cleansing creams, gels semisolids, liquids, lotions, and substrate-impregnated forms. Facial cleaner or soap does not include prescription drug products, antimicrobial hand or body cleaner or soap, astringent/toner, general-use hand or body cleaner or soap, medicated astringent/medicated toner, or rubbing alcohol.

"Fat wood" means pieces of wood kindling with high naturally-occurring levels of sap or resin which enhance ignition of the kindling. Fat wood does not include any kindling with substances added to enhance flammability, such as wax-covered or wax-impregnated wood-based products.

"Flea and tick insecticide" means any insecticide product that is designed for use against fleas, ticks, their larvae, or their eggs. Flea and tick insecticide does not include products that are designed to be used exclusively on humans or animals and their bedding.

"Flexible flooring material" means asphalt, cork, linoleum, no-wax, rubber, seamless vinyl and vinyl composite flooring.

"Floor coating" means an opaque coating that is labeled and designed for application to flooring, including, but not limited to, decks, porches, steps and other horizontal surfaces which may be subject to foot traffic.

"Floor polish or wax" means a wax, polish, or any other product designed to polish, protect, or enhance floor surfaces by leaving a protective coating that is designed to be periodically replenished. Floor polish or wax does not include spray buff products, products designed solely for the purpose of cleaning floors, floor finish strippers, products designed for unfinished wood floors, and coatings subject to architectural coatings regulations.

"Floor seam sealer" means any product designed and labeled exclusively for bonding, fusing, or sealing (coating) seams between adjoining rolls of installed flexible sheet flooring.

"Floor wax stripper" means a product designed to remove natural or synthetic floor polishes or waxes through breakdown of the polish or wax polymers, or by dissolving or emulsifying the polish or wax. Floor wax stripper does not include aerosol floor wax strippers or products designed to remove floor wax solely through abrasion.

"Flying bug insecticide" means any insecticide product that is designed for use against flying insects or other flying arthropods, including but not limited to flies, mosquitoes, moths, or gnats. Flying bug insecticide does not include wasp and hornet insecticide, products that are designed to be used exclusively on humans or animals, or any moth-proofing product. For the purposes of this definition only, moth-proofing product means a product whose label, packaging, or accompanying literature indicates that the product is designed to protect fabrics from damage by moths, but does not indicate that the product is suitable for use against flying insects or other flying arthropods.

"Footwear or leather care product" means any product designed or labeled to be applied to footwear or to other leather articles/components, to maintain, enhance, clean, protect, or modify the appearance, durability, fit, or flexibility of the footwear or leather article/component. Footwear includes both leather and non-leather foot apparel. Footwear or leather care product does not include fabric protectant, general purpose adhesive, contact adhesive, vinyl/fabric/leather/polycarbonate coating, rubber and vinyl protectant, fabric refresher, products solely for deodorizing, or sealant products with adhesive properties used to create external protective layers greater than 2 millimeters thick.

"Fragrance" means a substance or complex mixture of aroma chemicals, natural essential oils, and other functional components with a combined vapor pressure not in excess of 2 mm. of Hg at 20 degrees C, the sole purpose of which is to impart an odor or scent, or to counteract a malodor.

"Furniture maintenance product" means a wax, polish, conditioner, or any other product designed for the purpose of polishing, protecting or enhancing finished wood surfaces other than floors. Furniture maintenance product does not include dusting aids, wood cleaners and products designed solely for the purpose of cleaning, and products designed to leave a permanent finish such as stains, sanding sealers and lacquers.

"Furniture coating" means any paint designed for application to room furnishings including, but not limited to, cabinets (kitchen, bath and vanity), tables, chairs, beds, and sofas.

"Gel" means a colloid in which the disperse phase has combined with the continuous phase to produce a semisolid material, such as jelly.

"General purpose adhesive" means any non-aerosol adhesive designed for use on a variety of substrates. General purpose adhesive does not include:

- (1) contact adhesives;
- (2) construction, panel, and floor covering adhesives;
- (3) adhesives designed exclusively for application on one specific category of substrates (i.e., substrates that are composed of similar materials, such as different types of metals, paper products, ceramics, plastics, rubbers, or vinyls); or
- (4) adhesives designed exclusively for use on one specific category of articles (i.e., articles that may be composed of different materials but perform a specific function, such as gaskets, automotive trim, weather-stripping, or carpets).

"General purpose cleaner" means a product designed for general all-purpose cleaning, in contrast to cleaning products designed to clean specific substrates in certain situations. General purpose cleaner includes products designed for general floor cleaning, kitchen or countertop cleaning, and cleaners designed to be used on a variety of hard surfaces and does not include general purpose degreasers and electronic cleaners.

"General purpose degreaser" means any product ~~designed~~ labeled to remove or dissolve grease, grime, oil and other oil-based contaminants from a variety of substrates, including automotive or miscellaneous metallic parts. General purpose degreaser does not include engine degreaser, general purpose cleaner, adhesive remover, electronic cleaner, metal polish/cleanser, products used exclusively in solvent cleaning tanks or related equipment, or products that are:

- (1) sold exclusively to establishments which manufacture or construct goods or commodities; and
- (2) labeled "not for retail sale".

Solvent cleaning tanks or related equipment includes, but is not limited to, cold cleaners, vapor degreasers, conveyorized degreasers, film cleaning machines, or products designed to clean miscellaneous metallic parts by immersion in a container.

"General-use hand or body cleaner or soap" means a cleaner or soap designed to be used routinely on the skin to clean or remove typical or common dirt and soils. General-use hand or body cleaner or soap includes, but is not limited to, hand or body washes, dual-purpose shampoo-body cleaners, shower or bath gels, and moisturizing cleaners or soaps. General-use hand or body cleaner or soap does not include prescription drug products, anti-microbial hand or body cleaner or soap, astringent/toner, facial cleaner or soap, hand dishwashing detergent (including anti-microbial), heavy-duty hand cleaner or soap, medicated astringent/medicated toner, or rubbing alcohol.

"Glass cleaner" means a cleaning product designed primarily for cleaning surfaces made of glass. Glass cleaner does not include products designed solely for the purpose of cleaning optical materials used in eyeglasses, photographic equipment, scientific equipment and photocopying machines.

"Gross Delaware sales" means the estimated total State of Delaware sales of an ACP product during a specific compliance period (expressed to the nearest pound), based on either of the following methods, whichever the responsible ACP party determines will provide an accurate State of Delaware sales estimate:

- (1) apportionment of national or regional sales of the ACP product to State of Delaware sales, determined by multiplying the average national or regional sales of the product by the fraction of the national or regional population, respectively, that is represented by the State of Delaware's current population; or
- (2) any other documented method which provides an accurate estimate of the total current State of Delaware sales of the ACP product.

"Graffiti remover" means a product labeled to remove spray paint, ink, marker, crayon, lipstick, nail polish or shoe polish, from a variety of non-cloth or non-fabric substrates. Graffiti remover does not

include paint remover and stripper, nail polish remover, or spot remover. Products labeled for dual use as both a paint stripper and a graffiti remover are considered graffiti removers.

"Hair mousse" means a hairstyling foam designed to facilitate styling of a coiffure and provide limited holding power.

"Hair shine" means any product designed for the primary purpose of creating a shine when applied to the hair. Hair shine includes, but is not limited to, dual-use products designed primarily to impart a sheen to the hair. Hair shine does not include hair spray, hair mousse, hair styling product, hair styling gel or spray gel, or products whose primary purpose is to condition or hold the hair.

"Hair styling gel" means a consumer product manufactured before May 1, 2009 that is a high viscosity, often gelatinous, product that contains a resin and is designed for application to hair to aid in styling and sculpting of the hair coiffure.

"Hair spray" means:

(1) for products before May 1, 2009: a consumer product designed primarily for the purpose of dispensing droplets of a resin on and into a hair coiffure which will impart sufficient rigidity to the coiffure to establish or retain the style for a period of time, and

(2) for products manufactured on or after May 1, 2009: a consumer product that is applied to styled hair, and is designed or labeled to provide sufficient rigidity, to hold, retain and/or finish the style of the hair for a period of time. Hair spray includes aerosol hair sprays, pump hair sprays, spray waxes; color, glitter or sparkle hairsprays that make finishing claims; and products that are both a styling and finishing product. Hair spray does not include spray products that are intended to aid in styling but do not provide finishing of a hair style. For the purposes of this definition, finish or finishing means the maintaining and/or holding of previously styled hair for a period of time and styling means the forming, sculpting, or manipulating the hair to temporarily alter the hair's shape.

"Hair styling product" means a consumer product manufactured on or after JMay 1, 2009, that is designed or labeled for the application to wet, damp or dry hair to aid in defining, shaping, lifting, styling, and/or sculpting of the hair. Hair styling product includes, but is not limited to, hair balm, clay, cream, cre?me, curl straightener, gel, liquid, lotion, paste, pomade, putty, root lifter, serum, spray gel, stick, temporary hair straightener, wax, spray products that aid in styling but do not provide finishing of a hair style, and leave-in volumizers, detanglers and/or conditioners that make styling claims. Hair styling product does not include hair mousse, hair shine, hair spray, or shampoos or conditioners that are rinsed from the hair prior to styling. For the purposes of this definition, finish or finishing means the maintaining and/or holding of previously styled hair for a period of time and styling means forming, sculpting, or manipulating the hair to temporarily alter the hair's shape.

"Heavy-duty hand cleaner or soap" means a product designed to clean or remove difficult dirt and soils such as oil, grease, grime, tar, shellac, putty, printer's ink, paint, graphite, cement, carbon, asphalt, or adhesives from the hand with or without the use of water. Heavy-duty hand cleaner or soap does not include prescription drug products, anti-microbial hand or body cleaner or soap, astringent/toner, facial cleaner or soap, general-use hand or body cleaner or soap, medicated astringent/medicated toner or rubbing alcohol.

"Herbicide" means a pesticide product designed to kill or retard a plant's growth, but excludes products that are; for agricultural use, or restricted materials that require a permit for use and possession.

"High volatility organic compound (HVOC)" means any volatile organic compound that exerts a vapor pressure greater than 80 mm Hg when measured at 20oC.

"Household product" means any consumer product that is primarily designed to be used inside or outside of living quarters or residences that are occupied or intended for occupation by individuals, including the immediate surroundings.

"Insecticide" means a pesticide product that is designed for use against insects or other arthropods, but excluding products that are:

- (1) for agricultural use;
- (2) for a use which requires a structural pest control license under Title 3 **Del.C.** Ch. 12; or

(3) restricted materials that require a permit for use and possession.

"Insecticide fogger" means any insecticide product designed to release all or most of its content, as a fog or mist, into indoor areas during a single application.

"Institutional product" or "Industrial and institutional (I & I) product" means a consumer product that is designed for use in the maintenance or operation of an establishment that:

(1) manufactures, transports, or sells goods or commodities, or provides services for profit; or

(2) is engaged in the nonprofit promotion of a particular public, educational, or charitable cause.

Establishments include, but are not limited to, government agencies, factories, schools, hospitals, sanitariums, prisons, restaurants, hotels, stores, automobile service and parts centers, health clubs, theaters, or transportation companies. Institutional product does not include household products and products that are incorporated into or used exclusively in the manufacture or construction of the goods or commodities at the site of the establishment.

"Label" means any written, printed, or graphic matter affixed to, applied to, attached to, blown into, formed, molded into, embossed on, or appearing upon any consumer product or consumer product package, for purposes of branding, identifying, or giving information with respect to the product or to the contents of the package.

"Laundry prewash" means a product that is designed for application to a fabric prior to laundering and that supplements and contributes to the effectiveness of laundry detergents and/or provides specialized performance.

"Laundry starch product" means a product that is designed for application to a fabric, either during or after laundering, to impart and prolong a crisp, fresh look and may also act to help ease ironing of the fabric. Laundry starch product includes, but is not limited to, fabric finish, sizing, and starch.

"Lawn and garden insecticide" means an insecticide product designed labeled primarily to be used in household lawn and garden areas to protect plants from insects or other arthropods. Notwithstanding the requirements of 2.5.2 of this regulation, lawn and garden insecticides (aerosol) may claim to kill insects and other arthropods.

"Liquid" means a substance or mixture of substances which is capable of a visually detectable flow as determined under ASTM D-4359-90 (2006), incorporated by reference in 2.8.3 of this regulation. Liquid does not include powders or other materials that are composed entirely of solid particles.

"Lubricant" means a product designed to reduce friction, heat, noise, or wear between moving parts, or to loosen rusted or immovable parts or mechanisms. Lubricant does not include:

(1) automotive power steering fluids;

(2) products for use inside power generating motors, engines, and turbines, and their associated power-transfer gearboxes;

(3) two cycle oils or other products designed to be added to fuels;

(4) products for use on the human body or animals; or products that are

(a) sold exclusively to establishments which manufacture or construct goods or commodities, and

(b) labeled "not for retail sale".

"LVP content" means the total weight, in pounds, of LVP-VOC compounds in an ACP product multiplied by 100 and divided by the product's total net weight, in pounds, excluding container and packaging, expressed to the nearest 0.1 percent.

"LVP-VOC" means a low vapor pressure chemical compound or mixture that contains at least one carbon atom and meets one of the following:

(1) has a vapor pressure less than 0.1 mm Hg at 20°C, as determined by CARB Method 310, incorporated by reference in 2.8.1 of this regulation; or

(2) is a chemical "compound" with more than 12 carbon atoms, or a chemical "mixture" comprised solely of "compounds" with more than 12 carbon atoms as verified by formulation data, and the vapor pressure and boiling point is are unknown; or

- (3) is a chemical "compound" with a boiling point greater than 216oC, as determined by CARB Method 310, incorporated by reference in 2.8.1 of this regulation; or
- (4) is the weight percent of a chemical "mixture" that boils above 216oC, as determined by CARB Method 310, incorporated by reference in 2.8.1 of this regulation.

For the purposes of the definition of LVP-VOC, chemical compound means a molecule of definite chemical formula and isomeric structure, and chemical mixture means a substrate comprised of two or more chemical compounds.

"Manufacturer" means any person who imports, manufactures, assembles, produces, packages, repackages, or relabels a consumer product.

"Medicated astringent/medicated toner" means any product regulated as a drug by the FDA which is applied to the skin for the purpose of cleaning or tightening pores. Medicated astringent/medicated toner includes, but is not limited to, clarifiers and substrate-impregnated products. Medicated astringent/medicated toner does not include hand, face, or body cleaner or soap products, astringent/toner, cold cream, lotion, antiperspirants, or products that must be purchased with a doctor's prescription.

"Medium volatility organic compound (MVOC)" means any volatile organic compound that exerts a vapor pressure greater than 2 mm Hg and less than or equal to 80 mm Hg when measured at 20oC.

"Metal polish/cleanser" means any product designed primarily to improve the appearance of finished metal, metallic, or metalized surfaces by physical or chemical action. To improve the appearance means to remove or reduce stains, impurities, or oxidation from surfaces or to make surfaces smooth and shiny. Metal polish/cleanser includes, but is not limited to, metal polishes used on brass, silver, chrome, copper, stainless steel and other ornamental metals. Metal polish/cleanser does not include: automotive wax, polish, sealant or glaze; wheel cleaner; paint remover or stripper; products designed and labeled exclusively for automotive and marine detailing; or, products designed for use in degreasing tanks.

"Missing data days" means the number of days in a compliance period for which the responsible ACP party has failed to record the required enforceable sales or VOC content data, as specified in the ACP.

"Mist spray adhesive" means any aerosol which is not a special purpose spray adhesive and which delivers a particle or mist spray, resulting in the formation of fine, discrete particles that yield a generally uniform and smooth application of adhesive to the substrate.

"Multi-purpose dry lubricant" means any lubricant which is:

- (1) designed and labeled to provide lubricity by depositing a thin film of graphite, molybdenum disulfide ("moly"), or polytetrafluoroethylene or closely related fluoropolymer ("Teflon") on surfaces; and
- (2) designed for general purpose lubrication, or for use in a wide variety of applications.

"Multi-purpose lubricant" means any lubricant designed for general purpose lubrication, or for use in a wide variety of applications. Multi-purpose lubricant does not include: multi-purpose dry lubricants; penetrants; or, silicone-based multi-purpose lubricants.

"Multi-purpose solvent" means any organic liquid designed to be used for a variety of purposes, including cleaning or degreasing of a variety of substrates, or thinning, dispersing or dissolving other organic materials. Multi-purpose solvent includes solvents used in institutional facilities, except for laboratory reagents used in analytical, educational, research, scientific or other laboratories. Multi-purpose solvent does not include solvents used in cold cleaners, vapor degreasers, conveyorized degreasers or film cleaning machines, or solvents that are incorporated into, or used exclusively in the manufacture or construction of, the goods or commodities at the site of the establishment.

"Nail polish" means any clear or colored coating designed for application to the fingernails or toenails and including but not limited to, lacquers, enamels, acrylics, base coats and top coats.

"Nail polish remover" means a product designed to remove nail polish and coatings from fingernails or toenails.

"Non-aerosol product" means any consumer product that is not dispensed by a pressurized spray system.

"Non-carbon containing compound" means any compound which does not contain carbon atoms.

"Non-resilient flooring" means flooring of a mineral content which is not flexible. Non-resilient flooring includes terrazzo, marble, slate, granite, brick, stone, ceramic tile and concrete.

"Non-selective terrestrial herbicide" means a terrestrial herbicide product that is toxic to plants without regard to species.

"One-product business" means a responsible ACP party which sells, supplies, offers for sale, or manufactures for use in the State of Delaware:

(1) only one distinct ACP product, sold under one product brand name, which is subject to the requirements of 2.3 of this regulation; or

(2) only one distinct ACP product line subject to the requirements of 2.3 of this regulation, in which all the ACP products belong to the same product category(es) or categories and the VOC contents in the products are within 98.0% and 102.0% of the arithmetic mean of the VOC contents over the entire product line.

"OTC state" means any of the following, considered to be in the Ozone Transport Region as defined in the CAA and members of the Ozone Transport Commission (OTC): Connecticut, Delaware, District of Columbia, Maryland, Massachusetts, Maine, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Virginia and Vermont.

"Oven cleaner" means any cleaning product designed to clean and to remove dried food deposits from oven interiors.

"Paint" means any pigmented liquid, liquefiable, or mastic composition designed for application to a substrate in a thin layer which is converted to an opaque solid film after application and is used for protection, decoration or identification, or to serve some functional purpose such as the filling or concealing of surface irregularities or the modification of light and heat radiation characteristics.

"Paint remover or stripper" means any product designed to strip or remove paints or other related coatings, by chemical action, from a substrate without markedly affecting the substrate. Paint remover or stripper does not include:

(1) multi-purpose solvents;

(2) paint brush cleaners;

(3) products designed and labeled exclusively to remove as graffiti removers; and

(4) hand cleaner products that claim to remove paints and other related coating from skin.

"Penetrant" means a lubricant designed and labeled primarily to loosen metal parts that have bonded together due to rusting, oxidation, or other causes. Penetrant does not include multi-purpose lubricants that claim to have penetrating qualities, but are not labeled primarily to loosen bonded parts.

"Personal fragrance product" means any product which is applied to the human body or clothing for the primary purpose of adding a scent or masking a malodor, including cologne, perfume, aftershave and toilet water. Personal fragrance product does not include: deodorant; medicated products designed primarily to alleviate fungal or bacterial growth on feet or other areas of the body; mouthwashes, breath fresheners and deodorizers; lotions, moisturizers, powders or other skin care products used primarily to alleviate skin conditions such as dryness and irritations; products designed exclusively for use on human genitalia; soaps, shampoos and products primarily used to clean the human body; and, fragrance products designed to be used exclusively on non-human animals.

"Pesticide" means any substance or mixture of substances labeled, designed, or intended for use in preventing, destroying, repelling or mitigating any pest, or any substance or mixture of substances labeled, designed, or intended for use as a defoliant, desiccant, or plant regulator, provided that the term pesticide will not include any substance, mixture of substances, or device which the United States Environmental Protection Agency does not consider a pesticide. (EPA Office of Pesticide Programs or see <http://www.epa.gov/opppmsd1/PPISdata/index.html>.)

"Pre-ACP VOC content" means the lowest VOC content of an ACP product between January 1, 1990 and the date on which the ACP was established by the manufacturer, based on available Delaware sales records, or other accurate records, whichever yields the lowest VOC content for the product. If a

valid ACP is in force in another state, product data from that state may be used if it yields the lowest VOC content for the product.

"Pressurized gas duster" means a pressured product labeled to remove dust from a surface solely by means of mass air or gas flow, including surfaces such as photographs, photographic film negatives, computer keyboards and other types of surfaces that cannot be cleaned with solvents. Pressurized gas duster does not mean dusting aid.

"Principal display panel or panels" means that part, or those parts of a label that are so designed as to most likely be displayed, presented, shown or examined under normal and customary conditions of display or purchase. Whenever a principal display panel appears more than once, all requirements pertaining to the principal display panel shall pertain to all such principal display panels.

"Product brand name" means the name of the product exactly as it appears on the principal display panel of the product.

"Product category" means the applicable category which best describes the product as listed in 2.2 and in Table 2-1 of this regulation.

"Product form" means, for the purposes of complying with 2.6 of this regulation only, the applicable form that most accurately describes the products' dispensing form including as follows: A= aerosols, gels, S= solids, L= liquids, P= and pump sprays, SS= semisolid, and O= other.

"Product line" means a group of products of identical form and function belonging to the same product category(ies) or categories.

"Propellant" means a liquefied or compressed gas that is used in whole or in part, such as a co-solvent, to expel a liquid or any other material from the same self-pressurized container or from a separate container.

"Pump spray" means a packaging system in which the product ingredients within the container are not under pressure and in which the product is expelled only while a pumping action is applied to a button, trigger or other actuator.

"Reconcile or reconciliation" means to provide sufficient VOC emission reductions to completely offset any shortfalls generated under the ACP during an applicable compliance period.

"Reconciliation of shortfalls plan" means the plan to be implemented by the responsible ACP party when shortfalls have occurred, pursuant to 2.10.3.7.10 of this regulation.

"Responsible party" means the company, firm or establishment which is listed on the product's label. If the label lists two companies, firms or establishments, the responsible party is the party which the product was "manufactured for" or "distributed by", as noted on the label.

"Responsible ACP party" means the company, firm or establishment which is listed on the ACP product's label. If the label lists two or more companies, firms, or establishments, the responsible ACP party is the party which the ACP product was "manufactured for" or "distributed by", as noted on the label.

"Restricted materials" means pesticides established as restricted materials under Title 3 **Del.C.** Ch. 12 or under the Federal Insecticide, Fungicide and Rodenticide Act (7 U. S. C. Section 136 et seq.)

"Retailer" means any person who sells, supplies, or offers consumer products for sale directly to consumers.

"Retail outlet" means any establishment at which consumer products are sold, supplied, or offered for sale directly to consumers.

"Roll-on product" means any antiperspirant or deodorant that dispenses active ingredients by rolling a wetted ball or wetted cylinder on the affected area.

"Rubber and vinyl protectant" means any product designed to protect, preserve or renew vinyl, rubber, and plastic on vehicles, tires, luggage, furniture, and household products such as vinyl covers, clothing, and accessories. Rubber and vinyl protectant does not include products primarily designed to clean the wheel rim, such as aluminum or magnesium wheel cleaners, and tire cleaners that do not leave an appearance-enhancing or protective substance on the tire.

"Rubbing alcohol" means any product containing isopropyl alcohol (also called isopropanol) or denatured ethanol and labeled for topical use, usually to decrease germs in minor cuts and scrapes, to relieve minor muscle aches, as a rubefacient, and for massage.

"SCAQMD" means the South Coast Air Quality Management District, a part of the California Air Resources Board which is responsible for regulation of air quality in the State of California.

"Sealant and caulking compound" means any product with adhesive properties that is designed to fill, seal, waterproof, or weatherproof gaps or joints between two surfaces. Sealant and caulking compound does not include:

- (1) roof cements and roof sealants;
- (2) insulating foams;
- (3) removable caulking compounds;
- (4) clear/paintable/water resistant caulking compounds;
- (5) floor seam sealers;
- (6) products designed exclusively for automotive uses; or

For the purposes of this definition only, removable caulking compound means a compound which temporarily seals windows or doors for three to six month time intervals, and clear/paintable/water resistant caulking compounds means a compound which contains no appreciable level of opaque fillers or pigments; transmits most or all visible light through the caulk when cured; is paintable; and is immediately resistant to precipitation upon application.

"Semisolid" means a product that, at room temperature, will not pour, but will spread or deform easily, including, but not limited to, gels, pastes, and greases.

"Shaving cream" means an aerosol product which dispenses a foam lather intended to be used with a blade or cartridge razor, or other wet-shaving system, in the removal of facial or other bodily hair. Shaving cream does not include shaving gel.

"Shaving gel" means an aerosol product which dispenses a post-forming semisolid designed to be used with a blade, cartridge razor, or other shaving system in the removal of facial or other bodily hair. Shaving gel does not include shaving cream.

"Shortfall" means the ACP emissions minus the ACP limit when the ACP emissions were greater than the ACP limit during a specified compliance period, expressed to the nearest pound of VOC. Shortfall does not include emissions occurring prior to the date the ACP was established.

"Silicone-based multi-purpose lubricant" means any lubricant which is: (i) designed and labeled to provide lubricity primarily through the use of silicone compounds including, but not limited to, polydimethylsiloxane, and (ii) designed and labeled for general purpose lubrication, or for use in a wide variety of applications. Silicone-based multi-purpose lubricant does not include products designed and labeled exclusively to release manufactured products from molds.

"Single-phase aerosol air freshener" means an aerosol air freshener with the liquid contents in a single homogeneous phase and which does not require that the product container be shaken before use.

"Small business" means an independently owned and operated business with less than 100 employees as defined by the Administrator of the federal Small Business Administration pursuant to U. S. Public Law 85-536.

"Solid" means a substance or mixture of substances which, either whole or subdivided (such as the particles comprising a powder), is not capable of visually detectable flow as determined under ASTM D-4359-90, incorporated by reference in 2.8.3 of this regulation.

"Special purpose spray adhesive" means an aerosol adhesive that meets any of the following definitions:

- (1) **"Mounting adhesive"** means an aerosol adhesive designed to permanently mount photographs, artwork, and any other drawn or printed media to a backing (paper, board, cloth, etc.) without causing discoloration to the artwork.

(2) "**Automotive engine compartment adhesive**" means an aerosol adhesive designed for use in motor vehicle under-the-hood applications which require oil and plasticizer resistance, as well as high shear strength, at temperatures of 200 to 275 degrees F.

(3) "**Flexible vinyl adhesive**" means an aerosol adhesive designed to bond flexible vinyl to substrates. Flexible vinyl means a nonrigid polyvinyl chloride plastic with at least five percent, by weight, of plasticizer content. A plasticizer is a material, such as a high boiling point organic solvent, that is incorporated into a plastic to increase its flexibility, workability, or distensibility, and may be determined using ASTM Method E260-96 D1045-95, incorporated by reference in 2.8.5 of this regulation, or from product formulation data.

(4) "**Polystyrene foam adhesive**" means an aerosol adhesive designed to bond polystyrene foam to substrates.

(5) "**Automotive headliner adhesive**" means an aerosol adhesive designed to bond together layers in motor vehicle headliners.

(6) "**Polyolefin adhesive**" means an aerosol adhesive designed to bond polyolefins to substrates.

(7) "**Laminate repair/edgebanding adhesive**" means an aerosol adhesive designed for:

(a) touch-up or repair of items laminated with high pressure laminates (e.g., lifted edges, delaminates, etc.); or,

(b) for touch-up, repair, or attachment of edgebanding materials, including but not limited to, other laminates, synthetic marble, veneers, wood molding, and decorative metals.

For the purposes of this definition high pressure laminate means sheet materials which consist of paper, fabric, or other core material that have been laminated at temperatures exceeding 265 degrees F, and at pressures between 1,000 and 1,400 psi.

"**Spot remover**" means any product designed labeled to clean localized areas, or remove localized spots or stains on cloth or fabric such as drapes, carpets, upholstery, and clothing, that does not require subsequent laundering to achieve stain removal. Spot remover does not include dry cleaning fluid, laundry pre-wash, carpet and upholstery cleaner, or multi-purpose solvent.

"**Spray buff product**" means a product designed to restore a worn floor finish in conjunction with a floor buffering machine and special pad.

"**Stick product**" means any antiperspirant or deodorant that contains active ingredients in a solid matrix form, and that dispenses the active ingredients by frictional action on the affected area.

"**Structural waterproof adhesive**" means an adhesive whose bond lines are resistant to conditions of continuous immersion in fresh or salt water, and that conforms with Federal Specification MMM-A-181 D (Type 1, Grade A), and MIL-A-4605 (Type A, Grade A and Grade C).

"**Surplus reduction**" means the ACP limit minus the ACP emissions when the ACP limit was greater than the ACP emissions during a given compliance period, expressed to the nearest pound of VOC. Surplus reduction does not include emissions occurring prior to the date the ACP was established by the manufacturer.

"**Surplus trading**" means the buying, selling, or transfer of surplus reductions between responsible ACP parties.

"**Terrestrial**" means to live on or grow from land.

"**Tire sealant and inflators**" means any pressurized product that is designed to temporarily inflate and seal a leaking tire.

"**Toilet/urinal care product**" means any product designed or labeled to clean and/or to deodorize toilet bowls, toilet tanks, or urinals. Toilet bowls, toilet tanks, or urinals includes, but is not limited to, toilets or urinals connected to permanent plumbing in buildings and other structures, portable toilets or urinals placed at temporary or remote locations, and toilets or urinals in vehicles such as buses, recreational motor homes, boats, ships and aircraft. Toilet/urinal care product does not include bathroom and tile cleaner or general purpose cleaner.

"**Total maximum historical emissions (TMHE)**" means the total VOC emissions from all ACP products for which the responsible ACP party has failed to record the required VOC content or

enforceable sales records. The TMHE shall be calculated for each ACP product during each portion of a compliance period for which the responsible ACP party has failed to record the required VOC content or enforceable sales records. The TMHE shall be expressed to the nearest pound and calculated according to the following calculation:

where,

$$THME = (MHE)_1 + (MHE)_2 + \dots + (MHE)_N$$

where,

$$MHE = \frac{(\text{Highest VOC Content} \times \text{Highest Sales}) \times (\text{Missing Data Days})}{100 \times 365}$$

Highest VOC Content = the maximum VOC content which the ACP product has contained in the previous 5 years, if the responsible ACP party has failed to meet the requirements for recording VOC content data (for any portion of the compliance period), as specified in the ACP, or the current actual VOC content, if the responsible ACP party has recorded all required VOC content data (for the entire compliance period), as specified in the ACP;

Highest Sales = the maximum one-year gross State of Delaware sales of the ACP product in the previous 5 years, if the responsible ACP party has failed to meet the requirements for recording enforceable sales records (for any portion of the compliance period), as specified in the ACP, or the current actual one-year enforceable sales for the product, if the responsible ACP party has recorded all required enforceable sales records (for the entire compliance period), as specified in the ACP;

Missing Data Days = see "Missing data days" in Section 2.2 of this regulation;

1, 2, ..., N = each product in an ACP, up to the maximum N, for which the responsible ACP party has failed to record the required enforceable sales or VOC content data as specified in the ACP.

"Type A propellant" means a compressed gas such as CO₂, N₂, N₂O, or compressed air which is used as a propellant, and is either incorporated with the product or contained in a separate chamber within the product's packaging.

"Type B propellant" means any halocarbon which is used as a propellant including chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), and hydrofluorocarbons (HFCs).

"Type C propellant" means any propellant which is not a Type A or Type B propellant, including propane, isobutane, n-butane, and dimethyl ether (also known as dimethyl oxide).

"Undercoating" means any aerosol product designed to impart a protective, non-paint layer to the undercarriage, trunk interior, and/or firewall of motor vehicles to prevent the formation of rust or to deaden sound. Undercoating includes, but is not limited to, rubberized, mastic, or asphaltic products.

"Usage directions" means the text or graphics on the product's principal display panel, label, or accompanying literature which describes to the end user how and in what quantity the product is to be used.

"VOC content" means, except for charcoal lighter products, the total weight of VOC in a product expressed as a percentage of the product weight (exclusive of the container or packaging), as determined pursuant to 2.8.1 and 2.8.2 of this regulation.

For charcoal lighter products only.

$$\text{VOC Content} = \frac{(\text{Certified Emissions} \times 100)}{\text{Certified Use Rate}}$$

where,

Certified Emissions = emissions level for products specified in 2.3.4 of this regulation;

Certified Use Rate = usage level for products specified in 2.3.4 of this regulation.

"Wasp and hornet insecticide" means any insecticide product that is designed for use against wasps, hornets, yellow jackets or bees by allowing the user to spray from a distance a directed stream or burst at the intended insects, or their hiding place.

"Waterproofer" means a product designed and labeled exclusively to repel water from fabric or leather substrates. Waterproofer does not include fabric protectants.

"Wax" means a material or synthetic thermoplastic substance generally composed of high molecular weight hydrocarbons or high molecular weight esters of fatty acids or alcohols, except glycerol and high polymers (plastics). Wax includes, but is not limited to, substances derived from the secretions of plants and animals such as carnauba wax and beeswax, substances of a mineral origin such as ozocerite and paraffin, and synthetic polymers such as polyethylene.

"Web spray adhesive" means any aerosol adhesive which is not a mist spray or special purpose spray adhesive.

"Wood cleaner" means a product labeled to clean wooden materials including, but not limited to, decking, fences, flooring, logs, cabinetry, and furniture. Wood cleaner does not include dusting aid, general purpose cleaner, furniture maintenance product, floor wax stripper, floor polish or wax, or products designed and labeled exclusively to preserve or color wood.

"Wood floor wax" means wax-based products for use solely on wood floors.

"Working day" means any day between Monday through Friday, inclusive, except for days that are federal holidays.

2.3 Standards and Exemptions

2.3.1 Except as provided in 2.1 (Applicability), 2.4 (Innovative Products), 2.7 (Variances), and 2.10 (Alternative Control Plan) of this regulation,

2.3.1.1 no person shall sell, supply, or offer for sale in the State of Delaware any consumer product manufactured on and after January 1, 2005 the effective date shown in Table 2-1 of this regulation which contains VOC's in excess of the limits shown in Table 2-1 of this regulation and

2.3.1.2 no person shall manufacture any consumer product on and after January 1, 2005 the effective date shown in Table 2-1 of this regulation for use in the State of Delaware which contains volatile organic compounds in excess of the limits shown in Table 2-1 of this regulation.

2.3.2 For products that are diluted prior to use, the following shall apply:

2.3.2.1 The limits specified in Table 2-1 of this regulation shall apply to consumer products for which the label, packaging, or accompanying literature specifically states that the product should be diluted with water or non-VOC solvent prior to use, only after the minimum recommended dilution has taken place. Minimum recommended dilution, for the purposes of 2.3.2.1 of this regulation, shall not include recommendations for incidental use of a concentrated product to deal with limited special applications such as hard-to-remove soils or stains.

2.3.2.2 The limits specified in Table 2-1 of this regulation shall apply to consumer products for which the label, packaging, or accompanying literature states that the product should be diluted with any VOC solvent prior to use only after the maximum recommended dilution has taken place.

- 2.3.3 The effective date of the VOC standards specified in Table 2-1 of this regulation, for those consumer products that are registered under the Federal Insecticide, Fungicide, and Rodenticide Act, (FIFRA; 7 U.S.C. Section 136 et seq.), is January 1, 2006 one year after the indicated date. Such products also must be registered under Title 3 Del.C. Ch. 12.
- 2.3.4 The following requirements shall apply to all charcoal lighter material products as defined in "Charcoal lighter material" in Section 2.2 of this regulation:
- 2.3.4.1 Regulatory standards.
- No person shall sell, supply, or offer for sale on and after January 1, 2005 any charcoal lighter material product unless at the time of the transaction:
- 2.3.4.1.1 The manufacturer or distributor of the charcoal lighter material has performed the requisite testing to demonstrate that VOC emissions from ignition of charcoal with the charcoal lighter material are less than or equal to 0.020 pound of VOC per start ("certified emissions" certified emissions), using the procedures specified in the South Coast Air Quality Management District Rule 1174 Ignition Method Compliance Certification Protocol, dated February 27, 1991 (the "SCAQMD Rule 1174 Testing Protocol"), incorporated by reference in 2.8.4.1 of this regulation. The provisions relating to LVP-VOC ~~in LVP-VOG~~ in Section 2.2 of this regulation and 2.3.104 of this regulation shall not apply to any charcoal lighter material subject to the requirements of 2.3.1 and 2.3.4 of this regulation. The Department may approve alternative test procedures which are shown to provide equivalent results to those obtained using the SCAQMD Rule 1174 Testing Protocol 2.8.4 of this regulation.
- 2.3.4.1.2 The charcoal lighter material meets the formulation criteria and other conditions specified in an applicable ACP.
- 2.3.4.2 The Department may, at any time, request a manufacturer to submit information concerning the charcoal lighter material manufactured for use in the State of Delaware. The manufacturer shall respond within 30 days, in writing, and shall include, at a minimum, the following:
- 2.3.4.2.1 The results of testing conducted pursuant to the procedures specified in SCAQMD Rule 1174 Testing Protocol 2.8.4 of this regulation.
- 2.3.4.2.2 The exact text and/or graphics that appear on the charcoal lighter material's principal display panel, label, and any accompanying literature. The provided material shall clearly show the usage directions for the product. These directions shall accurately reflect the quantity of charcoal lighter material per pound of charcoal that was used in the SCAQMD Rule 1174 Testing Protocol 2.8.4 of this regulation for that product, unless:
- 2.3.4.2.2.1 the charcoal lighter material is intended to be used in fixed amounts independent of the amount of charcoal used, such as certain paraffin cubes, or
- 2.3.4.2.2.2 the charcoal lighter material is already incorporated into the charcoal, such as certain "bag light," "instant light" or "match light" products.
- 2.3.4.2.3 For a charcoal lighter material which meets the criteria specified in 2.3.4.2.2.1 of this regulation, the usage instructions shall accurately reflect the quantity of charcoal lighter material used in the SCAQMD Rule 1174 Testing Protocol 2.8.4 of this regulation for that product.
- 2.3.4.2.4 Any physical property data, formulation data, or other information required by the Department for use in determining when a product modification has occurred and for use in determining compliance with the conditions specified an ACP.
- 2.3.4.2.5 Possession of a currently effective certification by the CARB under the Consumer Products provisions of Title 17 of the California Code of Regulations, Division 3, Chapter 1, Subchapter 8.5, Article 2, Section 94509(h), or from a state with a similar certification procedure, should be noted and a copy of the applicable certification decision (i.e., the Executive Order) should be included.

2.3.5 The following requirements for aerosol adhesives shall apply:

2.3.5.1 In order to qualify as a special purpose spray adhesive the product must meet one or more of the definitions specified in "Special purpose spray adhesive" in Section 2.2 of this regulation, but if the product label indicates that the product is suitable for use on any substrate or application not listed in "Special purpose spray adhesive" special purpose spray adhesive, then the product shall be classified as either a web spray adhesive or a mist spray adhesive.

2.3.5.2 If a product meets more than one of the definitions specified in "Special purpose spray adhesive" in Section 2.2 of this regulation for special purpose spray adhesive, and is not classified as a web spray adhesive or mist spray adhesive, the VOC limit for the product shall be the lowest applicable VOC limit specified in Table 2-1 of this regulation.

2.3.5.3 Effective January 1, 2009, no person shall, sell, supply, offer for sale, or manufacture for use in the State of Delaware any aerosol adhesive which contains methylene chloride, perchloroethylene, or trichloroethylene.

2.3.6 No person shall sell, supply, offer for sale, or manufacture for use in the State of Delaware any floor wax stripper unless the following requirements are met:

2.3.6.1 The label of each non-aerosol floor wax stripper must specify a dilution ratio for light or medium build-up of polish that results in an as-used VOC concentration of 3 percent by weight or less.

2.3.6.2 If a non-aerosol floor wax stripper is also intended to be used for removal of heavy build-up of polish, the label of that floor wax stripper must specify a dilution ratio for heavy build-up of polish that results in an as-used VOC concentration of 12 percent by weight or less.

2.3.6.3 The terms "light build-up", "medium build-up" or "heavy build-up" are not specifically required, as long as comparable terminology is used.

2.3.7 For any consumer product specified in Table 2-1 of this regulation, no person shall sell, supply, offer for sale or manufacture for sale in the State of Delaware any such consumer product which contains any of the following ozone layer depleting compounds: CFC-11;CFC-12; CFC-113; CFC-114; CFC-115; halon 1211; halon 1301; halon 2402; HCFC -22; HCFC-123; HCFC-124; HCFC-141b; HCFC-142b; carbon tetrachloride and, 1,1,1-trichloroethane.

2.3.7.1 The requirements of 2.3.7 shall not apply to any existing product formulation that complies with the VOC content limits specified in Table 2-1 of this regulation or any existing product formulation that is reformulated to meet the VOC content limits of Table 2-1 of this regulation, provided the ozone depleting compound content of the reformulated product does not increase.

2.3.7.2 The requirements of 2.3.7 shall not apply to any ozone depleting compounds that may be present as impurities in a consumer product in an amount equal to or less than 0.01% by weight of the product.

2.3.8 Effective May 1, 2009 no person shall sell, supply, or offer for sale in the State of Delaware contact adhesives, electronic cleaners, footwear or leather care products, general purpose degreasers, adhesive removers, electrical cleaners, or graffiti removers manufactured on and after May 1, 2009 that contain methylene chloride, perchloroethylene, or trichloroethylene in excess of 0.01 % by weight.

2.3.9 Effective May 1, 2009, no person shall sell, supply, or offer for sale in the State of Delaware any solid air fresheners or toilet/urinal care products manufactured on and after May 1, 2009 that contain para-dichlorobenzene.

2.3.10 Effective May 1, 2009, no person shall sell supply, or offer for sale in the State of Delaware any antiperspirant or deodorant which contains any of the following compounds: benzene; ethylene dibromide; ethylene dichloride; hexavalent chromium; asbestos; cadmium; carbon tetrachloride; trichloroethylene; chloroform; vinyl chloride; inorganic arsenic; nickel; perchloroethylene; formaldehyde; 1,3-butadiene; and lead.

NOTE: ITEMS 2.3.8 2.311 THROUGH 2.3.15 2.3.19 CONSTITUTE MISCELLANEOUS EXEMPTIONS

- 2.3.72.3.11 The medium volatility organic compound (MVOC) content standards specified in 2.3.1 of this regulation for antiperspirants or deodorants, shall not apply to ethanol.
- 2.3.82.3.12 The VOC limits specified in 2.3.1 of this regulation shall not apply to fragrances up to a combined level of 2 percent by weight contained in any consumer product and shall not apply to colorants up to a combined level of 2 percent by weight contained in any antiperspirant or deodorant.
- 2.3.92.3.13 The requirements of 2.3.1 of this regulation for antiperspirants or deodorants shall not apply to those volatile organic compounds that contain more than 10 carbon atoms per molecule and for which the vapor pressure is unknown, or that have a vapor pressure of 2 mm Hg or less at 20o C.
- 2.3.102.3.14 The VOC limits specified in 2.3.1 of this regulation shall not apply to any LVP-VOC.
- 2.3.112.3.15 The VOC limits specified in 2.3.1 of this regulation shall not apply to air fresheners that are comprised entirely of fragrance, less compounds not defined as VOCs under Regulation No. 1104 7 DE Admin. Code 1101 or exempted under 2.3.103 of this regulation.
- 2.3.122.3.16 The VOC limits specified in 2.3.1 of this regulation shall not apply to air fresheners and (1) insecticides containing at least 98% para-dichlorobenzene (2) until May 1, 2009, solid air fresheners containing at least 98 % para-dichlorobenzene. On and after May 1, 2009, the provisions of 2.3.9 of this regulation apply to solid air fresheners containing para-dichlorobenzene.
- 2.3.132.3.17 VOC limits specified in 2.3.1 of this regulation shall not apply to adhesives sold in containers of 1 fluid ounce or less.
The VOC limits specified in 2.3.1 of this regulation for contact adhesive do not apply to units of product, less packaging, which consist of more than one gallon. [The VOC limits specified in 2.3.1 of this regulation for construction, panel and floor covering adhesive and for general purpose adhesive do not apply to units of product, less packaging, which consist of more than one pound and more than 16 fluid ounces.]
- 2.3.142.3.18 The VOC limits specified in 2.3.1 of this regulation shall not apply to bait station insecticides. For the purpose of Section 2.0 of this regulation, bait station insecticides are containers enclosing an insecticidal bait that is not more than 0.5 ounce by weight, where the bait is designed to be ingested by insects and is composed of solid material feeding stimulants with less than 5 percent active ingredients.
- 2.3.152.3.19 Section 2.0 does The provisions of 2.0 of this regulation do not apply to sealant and caulking compound in units of product, less packaging, which weigh more than one pound and consist of more than 16 fluid ounces.

2.4 Innovative Products

- 2.4.1 Any manufacturer of consumer products granted an Innovative Product Exemption (IPE) by the CARB under the Innovative Products provisions in Subchapter 8.5, Article 2, Section 94511, or Subchapter 8.5 Article 1, Section 94503.5 of Title 17 of the California Code of Regulations, or granted an IPE by any OTC state, shall be exempt from the standards in 2.3.1 (Table 2-1) of this regulation for the period of time that said IPE remains in effect, provided that all consumer products within said IPE are contained in 2.3.1 Table 2-1 of this Section regulation. Any manufacturer claiming an exemption on this basis shall submit to the Department a copy of the IPE decision (i.e., the Executive Order or other comparable state action) including all conditions applicable to the exemption. The Department reserves the right to refuse to honor, revoke or otherwise cancel an IPE which it believes has been misrepresented or does not meet the criteria for establishing or maintaining an IPE. Only the following provisions of 2.4.2 of this regulation shall apply to IPE's exempted under 2.4.2.7, 2.4.2.8, and 2.4.2.9 of this regulation.

- 2.4.2 Manufacturers of consumer products may seek an IPE in accordance with the following criteria:

- 2.4.2.1 The Department shall exempt a consumer product from the VOC limits specified in 2.3.1 of this regulation if a manufacturer demonstrates by clear and convincing evidence that, due

to some characteristic of the product formulation, design, delivery systems or other factors, the use of the product will result in less VOC emissions as compared to:

- 2.4.2.1.1 the VOC emissions from a representative consumer product which complies with the VOC limits specified in 2.3.1 of this regulation; or,
- 2.4.2.1.2 the calculated VOC emissions from a non-complying representative product, if the product had been reformulated to comply with the VOC limits specified in 2.3.1 of this regulation. VOC emissions shall be calculated using the following equation:

$$E_R = \frac{E_{NC} \times VOC_{STD}}{VOC_{NC}}$$

where:

E_R = The VOC emissions from the non-complying representative product, had it been reformulated.

E_{NC} = The VOC emissions from the non-complying representative product in its current formulation.

VOC_{STD} = the VOC limit specified in 2.3.1 (Table 2-1) of this regulation.

VOC_{NC} = the VOC content of the non-complying product in its current formulation.

If a manufacturer demonstrates that this equation yields inaccurate results due to some characteristic of the product formulation or other factors, an alternative method which accurately calculates emissions may be used upon approval of the Department.

- 2.4.2.2 For the purposes 2.4.2.1 of this regulation, representative consumer product means a consumer product which meets all of the following criteria:

- 2.4.2.2.1 The representative consumer product shall be subject to the same VOC limit in 2.3.1 of this regulation as the innovative product.
 - 2.4.2.2.2 The representative consumer product shall be of the same product form as the innovative product, unless the innovative product uses a new form which does not exist in the product category at the time the application is made.
 - 2.4.2.2.3 The representative consumer product shall have at least similar efficacy as other consumer products in the same product category based on tests generally accepted for that product category by the consumer products industry.
- 2.4.2.3 A manufacturer shall apply in writing to the Department for any exemption claimed under 2.4.2.1 of this regulation. The application shall include supporting documentation that demonstrates the emissions from the innovative product, including the actual physical test methods used to generate the data and, if necessary, the consumer testing undertaken to document product usage.
- In addition, the applicant must provide any information necessary to enable the Department to establish enforceable conditions for granting the exemption including the VOC content for the innovative product and test methods for determining the VOC content. All information submitted to the Department is subject to public review under terms of the Freedom of Information Act (FOIA) (to be found at Title 29 **Del.C.** Ch. 100), unless deemed to be confidential by the Secretary in accordance with the procedures outlined in the FOIA regulation and codified at Title 29 **Del.C.** Ch. 100, Section 10002(d). The procedure an applicant must follow in order to have information classified as confidential is reviewed in the DNREC FOIA regulation which can be obtained from the Department.

- If a manufacturer has been refused an IPE or had an IPE revoked by the CARB or any OTC state, details shall be included in the application.
- 2.4.2.4 Within 30 days of receipt of the exemption application the Department shall determine whether an application is complete.
- 2.4.2.5 Within 90 days after an application has been deemed complete, the Department shall determine whether, under what conditions, and to what extent, an exemption from the requirements of 2.3.1 of this regulation will be permitted. The applicant and the Department may mutually agree to a longer time period for reaching a decision, and additional supporting documentation may be submitted by the applicant before a decision has been reached. The Department shall notify the applicant of the decision in writing and specify such terms and conditions as are necessary to insure that emissions from the product will meet the emissions reductions specified in 2.4.2.1 of this regulation, and that such emissions reductions can be enforced.
- 2.4.2.6 In granting an exemption for a product the Department shall establish conditions that are enforceable. These conditions shall include the VOC content of the innovative product, dispensing rates, application rates and any other parameters determined by the Department to be necessary. The Department also shall specify the test methods for determining conformance to the conditions established. The test methods shall include criteria for reproducibility, accuracy, sampling and laboratory procedures.
- 2.4.2.7 For any product for which an exemption has been granted pursuant to 2.4.1 or 2.4.2 of this regulation, the manufacturer shall notify the Department in writing within 30 days of any change in the product formulation or recommended product usage directions, and shall also notify the Department within 30 days if the manufacturer learns of any information which would alter the emissions estimates submitted to the Department in support of the exemption application.
- 2.4.2.8 If the VOC limits specified in 2.3.1 of this regulation are lowered for a product category through any subsequent rule making, all innovative product exemptions granted for products in the product category, except as provided in 2.4.2.8 of this regulation, shall have no force and effect as of the effective date of the modified VOC standard. This shall not apply to those innovative products which have VOC emissions less than the applicable lowered VOC limit and for which a written notification of the product's emissions status versus the lowered VOC limit has been submitted to and approved by the Department at least 60 days before the effective date of such limits.
- 2.4.2.9 If the Department believes that a consumer product for which an exemption has been granted no longer meets the criteria for an innovative product specified in 2.4.2.1 of this regulation, the Department may modify or revoke the exemption as necessary to assure that the product will meet these criteria. The Department shall not modify or revoke an exemption without first affording the applicant an opportunity to appeal the Department's decision to the Secretary, in writing.

2.5 Administrative Requirements

- 2.5.1 Each manufacturer of a consumer product subject to Section 2.0 of this regulation shall clearly display on each consumer product container or package, the day, month, and year when the product was manufactured, or a code indicating such date. The date or date-code information shall be located on the container or inside the cover/cap so that it is readily observable or obtainable (by simply removing the cover/cap) without irreversibly disassembling any part of the container or packaging. ~~This date or code shall be displayed on each consumer product container or package no later than twelve months prior to the effective date of the applicable standard specified in 2.3.1 of this regulation Date or date-code information may be displayed on the bottom of the container or packaging as long as it is clearly legible without removing any product packing.~~ No person shall erase, alter, deface or otherwise remove or make illegible any date or date-code from any regulated product container. The requirements of this provision shall not apply to products containing VOCs at 0.10% by weight or less. The requirements of 2.5.1 of this regulation shall not

apply to consumer products registered under the Federal Insecticide, Fungicide and Rodenticide Act FIFRA; 7 U.S.C. Section 136 (et seq.), or Title 3 Del.C. Ch. 12.

- 2.5.1.1 A manufacturer using the following code to indicate the date of manufacture shall not be subject to 2.5.1.2 of this regulation, if the code is represented separately from other codes on the product container so that it is easily recognizable:

YYDDD = year year day day day

where:

YY = two digits representing the year in which the product was manufactured

DDD= three digits representing the day of the year the product was manufactured, with 001 representing the first day of the year, 002 representing the second day of the year, etc. (the Julian date).

- 2.5.1.2 If a manufacturer elects to use a date-code other than represented in 2.5.1.1 of this regulation for any consumer product subject to 2.0 of this regulation an explanation of the date portion of the code must be filed with the Department before May 1, 2009 and must be refilled every time the date code is changed.

Date-codes and date-code explanations indicating the date of manufacture are considered public information and will not be kept confidential.

- 2.5.2 If a manufacturer uses a code indicating the date of manufacture, for any consumer product subject to 2.3.1 of this regulation, an explanation of the code must be filed with the Department no later than twelve months prior to the effective date of the applicable standard specified in 2.3.1 of this regulation.

2.5.32.5.2 Most Restrictive Limit

- 2.5.2.1 Notwithstanding the definition of product category in 2.2 of this regulation, if anywhere on the principal display panel of any consumer product manufactured before May 1, 2009, or any FIFRA-registered insecticide manufactured before May 1, 2010, any representation is made that the product may be used as, or is suitable for use as a consumer product for which a lower VOC limit is specified in 2.3.1 (Table 2-1) of this regulation, then the lowest VOC limit shall apply. This requirement does not apply to general purpose cleaners, and antiperspirant/deodorant products, and insecticide foggers.

- 2.5.2.2 Notwithstanding the definition of product category in 2.2 of this regulation, if anywhere on the container or packaging of any consumer product manufactured on or after May 1, 2009, or any FIFRA-registered insecticide manufactured on or after May 1, 2010, or on any sticker or label affixed thereto, any representation is made that the product may be used as, or is suitable for use as a consumer product for which a lower VOC limit is specified in 2.3.1 (Table 2-1) of this regulation, then the lowest VOC limit shall apply. This requirement does not apply to general purpose cleaners, antiperspirant/deodorant products and insecticide foggers.

2.5.42.5.3 Additional Labeling Requirements for Aerosol Adhesives.

- 2.5.4.12.5.3.1 In addition to the requirements specified in 2.5.1, 2.5.2, and 2.5.36 of this regulation, both the manufacturer and responsible party for each aerosol adhesive, adhesive remover, electronic cleaner, electrical cleaner, energized electric cleaner, and contact adhesive product subject to Section 2.0 of this regulation shall ensure that all products clearly display the following information on each product container which is manufactured on or after January 1, 2005 the effective date for the category specified in 2.3.1 (Table 2-1) of this regulation.

- 2.5.4.1.12.5.3.1.1 The aerosol adhesive product category as specified in 2.3.1 (Table 2-1) of this regulation or an abbreviation of the category shall be displayed.

- 2.5.4.1.22.5.3.1.2 The applicable VOC standard for the product that is specified in 2.3.1 (Table 2-1) of this regulation, except for energized electric cleaner, expressed as a

percentage by weight, shall be displayed unless the product is included in an ACP, as provided in 2.10 of this regulation and the product exceeds the applicable VOC standard.

If the product is included in an ACP, and the product exceeds the applicable VOC standard specified in 2.3.1 (Table 2-1) of this regulation, the product shall be labeled with the term ACP or ACP product.

2.5.4.1.32.5.3.1.3 If the product is classified as a special purpose spray adhesive, the applicable substrate and/or application or an abbreviation of the substrate/application that qualifies the product as special purpose shall be displayed.

2.5.4.1.42.5.3.1.4 If the manufacturer or responsible party uses an abbreviation as allowed by 2.5.4.1.42.5.3.1.1 of this regulation, an explanation of the abbreviation must be filed with the Department before the abbreviation is used.

2.5.4.22.5.3.2 The information required in 2.5.4.1 2.5.3.1 of this regulation, shall be displayed on the product container such that it is readily observable without removing or disassembling any portion of the product container or packaging. For the purposes of 2.5.4.2 2.5.3.2 of this regulation, information may be displayed on the bottom of a container as long as it is clearly legible without removing any product packaging.

2.6 Reporting Requirements

2.6.1 Upon 90 days written notice, the Department may require any responsible party to report information for any consumer product or products the Department may specify including, but not limited to, all or part of the following information: of the information listed in 2.6.1.1 through 2.6.1.12 of this regulation. If their responsible party does not have or does not provide the information requested by the Department, the Department may require the reporting of this information by the person that has the information, including, but not limited to, any formulator, manufacturer, supplier, parent company, private labeler, distributor, or repackager.

2.6.1.1 the name of the responsible party and the party's address, telephone number, and designated contact person;

2.6.1.2 any claim of confidentiality which shall be handled as specified in 2.10.12 of this regulation;

2.6.1.3 the product brand name for each consumer product and upon request by the Department, the product label;

2.6.1.4 the product category to which the consumer product belongs;

2.6.1.5 the applicable product form(s) or forms listed separately;

2.6.1.6 an identification of each product brand name and form as a household product, I & I product, or both;

2.6.1.7 separate Delaware sales in pounds per year, to the nearest pound, and the method used to calculate Delaware sales for each product form;

2.6.1.8 for reports submitted by two companies, an identification of the company which is submitting relevant data separate from that submitted by the responsible party. All information from both companies shall be submitted by the date specified in 2.6.1 of this regulation;

2.6.1.9 for each product brand name and form, the net percent by weight of the total product, less container and packaging, comprised of the following, rounded to the nearest one tenth of a percent (0.1%):

2.6.1.9.1 Total exempt compounds

2.6.1.9.2 Total LVP-VOCs that are not fragrances

2.6.1.9.3 Total all other carbon containing compounds that are not fragrances

2.6.1.9.4 Total all non-carbon containing compounds

2.6.1.9.5 Total fragrance

2.6.1.9.6 For products containing greater than two percent by weight fragrance:

- 2.6.1.9.6.1 the percent of fragrance that are LVP-VOCs, and
 - 2.6.1.9.6.2 the percent of fragrance that are all other carbon containing compounds
 - 2.6.1.9.7 Total paradichlorobenzene;
 - 2.6.1.10 for each product brand name and form, the identity, including the specific chemical name and associated Chemical Abstract Services (CAS) number, of the following:
 - 2.6.1.10.1 Each exempt compound
 - 2.6.1.10.2 Each LVP-VOC that is not a fragrance;
 - 2.6.1.11 if applicable, the weight percent comprised of propellant for each product; and
 - 2.6.1.12 if applicable, an identification of the type of propellant (Type A, Type B, Type C, or a blend of the different types).
 - 2.6.2 All information submitted by responsible parties pursuant to 2.6 of this regulation shall be handled in accordance with confidentiality procedures which are specified in 2.10.12 of this regulation.
- 2.7 Variances
- 2.7.1 Any person who cannot comply with the requirements set forth in 2.3 of this regulation, because of extraordinary reasons beyond the person's reasonable control, may apply in writing to the Department for a variance. The variance application shall set forth:
 - 2.7.1.1 the specific grounds upon which the variance is sought;
 - 2.7.1.2 the proposed date(s) or dates by which compliance with the provisions of 2.3 of this regulation will be achieved; and
 - 2.7.1.3 a compliance report reasonably detailing the method(s) or methods by which compliance will be achieved.
 - 2.7.2 Upon receipt of a variance application containing the information required in 2.7.1 of this regulation, the Department shall hold a public hearing to determine whether, under what conditions, and to what extent, a variance from the requirements in 2.3 of this regulation is necessary and will be permitted. Notice of the time and place of the hearing shall be sent to the applicant by certified mail not less than 20 30 days prior to the hearing. Notice of the hearing also shall be submitted for publication in the Delaware Register and sent to every person who requests such notice, not less than 30 days prior to the hearing. The notice shall state that the parties may, but need not be, represented by counsel at the hearing. At least 30 days prior to the hearing, the variance application shall be made available to the public for inspection. Interested members of the public shall be allowed a reasonable opportunity to testify at the hearing and their testimony shall be considered.

The applicant may wish to have some information treated as confidential. Procedures for establishing confidentiality are specified in 2.10.12 of this regulation. The Department may consider such confidential information in reaching a decision on a variance application.
 - 2.7.3 No variance shall be granted unless all of the following findings are made:
 - 2.7.3.1 that, because of reasons beyond the reasonable control of the applicant, requiring compliance with 2.3 of this regulation would result in extraordinary economic hardship;
 - 2.7.3.2 that the public interest in mitigating the extraordinary hardship to the applicant by issuing the variance outweighs the public interest in avoiding any increased emissions of air contaminants which would result from issuing the variance; and
 - 2.7.3.3 that the compliance report proposed by the applicant can reasonably be implemented, and will achieve compliance as expeditiously as possible.
 - 2.7.4 Any variance order shall specify a final compliance date by which the requirements of 2.3 of this regulation will be achieved. Any variance order shall contain a condition that specifies increments of progress necessary to assure timely compliance, and such other conditions that the Department, in consideration of the testimony received at the hearing, finds necessary to carry out the purposes of the State of Delaware's environmental regulations .
 - 2.7.5 A variance shall cease to be effective upon failure of the party to whom the variance was granted to comply with any term or condition of the variance.

2.7.6 Upon the application of any person, the Department may review, and for good cause, modify or revoke a variance from requirements of 2.3 of this regulation after holding a public hearing in accordance with provisions of the Delaware Code.

2.8 Test Methods

2.8.1 Testing to determine compliance with the requirements of Section 2.0 of this regulation, shall be performed using CARB Method 310, "Determination of Volatile Organic Compound (VOC) in Consumer Products", adopted September 25, 1997, and amended on September 3, 1999 May 5, 2005, which is incorporated herein by reference. This method includes a number of ASTM methods.

Alternative methods which are shown to accurately determine the concentration of VOCs in a subject product or its emissions may be used upon approval by the Department.

2.8.2 VOC content determinations using product formulation and records. Testing to determine compliance with the requirements of Section 2.0 of this regulation also may be demonstrated through calculation of the VOC content from records of the amounts of constituents used to make the product pursuant to the following criteria:

2.8.2.1 Compliance determinations based on these records may not be used unless the manufacturer of a consumer product keeps accurate records, for each day of production, of the amount and chemical composition of the individual product constituents. These records must be kept for at least three years.

2.8.2.2 For the purposes of 2.8.2 of this regulation, the VOC content shall be calculated according to the following equation:

$$\text{VOC Content} = \left[\frac{(B - C)}{A} \right] \times 100$$

where,

A = total net weight of unit (excluding container and packaging)

B = total weight of all VOCs per unit

C = total weight of VOCs exempted under 2.3 of this regulation, per unit

2.8.2.3 If product records appear to demonstrate compliance with VOC limits, but these records are contradicted by product testing performed using CARB Method 310, the results of CARB Method 310 shall take precedence over product records and may be used to establish a violation of the requirements of Section 2.0 of this regulation.

2.8.3 Determination of liquid or solid. Testing to determine whether a product is a liquid or solid shall be performed using ASTM D4359-90 (~~reapproved June, 2000~~(2006), "Standard Test Method for Determining Whether a Material is a Liquid or a Solid", incorporated by reference herein [see "Liquid" and "Solid" in Section 2.2 of this regulation].

2.8.4 Compliance determinations for charcoal lighter material products.

2.8.4.1 Testing to determine compliance with certification requirements for charcoal material shall be performed using procedures specified in the South Coast Air Quality Management District Rule 1174 Ignition Method Compliance Certification Protocol (February 28, 1991), incorporated by reference herein.

2.8.4.2 Testing to determine distillation points of petroleum distillate-based charcoal lighter materials shall be performed using ASTM D86-00a~~07b~~ (August 10, 2000), " Standard Test Method for Distillation of Petroleum Products at Atmospheric Pressure", incorporated herein by reference. in 2.8.1 of this regulation.

2.8.5 Testing to determine plasticizer in flexible vinyl adhesives [see "Flexible vinyl adhesive" within "Special purpose spray adhesive" in Section 2.2 of this regulation] shall be performed using ASTM

~~E260-96D-1045-95 (reapproved 2001) "Standard Practice for Packed Column Gas Chromatography", "Standard Test Methods for Sampling and Testing Plasticizers used in Plastics"~~ incorporated herein by reference.

- 2.8.6 No person shall create, alter, falsify, or otherwise modify records in such a way that the records do not accurately reflect the constituents used to manufacture a product, the chemical composition of the individual product, and any other test, processes, or records used in connection with product manufacture.

2.8.7 Test Method Availability.

- 2.8.7.1 CARB Method 310 is available on the website at <http://www.arb.ca.gov/testmeth/cptm/cptm.htm>
- 2.8.7.2 ASTM methods can be purchased from American Society for Testing and Materials (ASTM), 100 Barr Harbor Drive, West Conshohocken, Pennsylvania 19428-2959. Telephone (610) 832-9585. Fax (610) 832-9555.
- 2.8.7.3 SCAQMD methods can be purchased from South Coast Air Quality Management District, 21865 East Copley Drive, Diamond Bar, California 91765-0934. Telephone (909) 396-2162.

2.9 Severability

Each part of Section 2.0 of this regulation shall be deemed severable, and in the event that any part of Section 2.0 of this regulation is held to be invalid, the remainder of Section 2.0 of this regulation shall continue in full force and effect.

2.10 Alternative Control Plan

The purpose of 2.10 of this regulation is to provide an alternative method [an alternative control plan (ACP)] to comply with the Table 2-1 of this regulation limits specified in 2.3.1 of this regulation. This alternative is provided by allowing responsible ACP parties the option of voluntarily entering into separate alternative control plans for consumer products, as specified herein. Only responsible ACP parties for consumer products may establish an ACP.

- 2.10.1 Except as provided in 2.10.2 of this regulation, any manufacturer of consumer products, granted an ACP agreement by the CARB under provisions in Subchapter 8.5, Article 4, Sections 94540-94555, of Title 17 of the California Code of Regulations, or granted an ACP agreement by any OTC state, shall be exempt from the Table 2-1 limits specified in 2.3 of this regulation for the period of time that said ACP agreement remains in effect, provided that all ACP products used for emission credits within said ACP agreement are contained in Table 2-1 of this regulation. Any manufacturer claiming such an ACP agreement shall submit to the Department a copy of the ACP decision (i.e., the Executive Order or other comparable state action), including all conditions applicable to the exemption. The Department reserves the right to refuse to honor, revoke or otherwise cancel an ACP which it believes has been misrepresented or does not meet the criteria for establishing or maintaining an ACP. Holders of other state ACP agreements, operating in Delaware, shall be subject to all the provisions of 2.10.3 through 2.10.13 of this regulation.

- 2.10.2 Manufacturers of consumer products granted an ACP under the ACP provision in Subchapter 8.5, Article 4, Sections 9450-94555, of Title 17 of the California Code of Regulations, based on California specific data, or that have been granted an ACP agreement by any OTC state based on state specific data, or that have not been granted an ACP agreement by the CARB or any OTC state may establish an ACP in accordance with 2.10.2 through 2.10.13 of this regulation. It is not necessary to apply to the Department for authorization. The manufacturer shall submit the information requested in 2.10.5.1 of this regulation upon establishing the ACP and from time to time, the Department may require additional reporting as specified in 2.10.5 of this regulation. The Department reserves the right to refuse to honor, revoke or otherwise cancel an ACP established under 2.10.2 of this regulation which it believes has been misrepresented or does not meet the criteria for establishing or maintaining an ACP. Manufacturers of consumer products whose application to CARB or any OTC state for an ACP was refused or whose ACP agreement was revoked, cancelled or otherwise terminated prior to the specified termination date, shall notify the Department of the circumstances before establishing an ACP for Delaware sales. Decisions by

CARB or any OTC state to not approve an ACP application or to cancel or terminate an ACP prior to the specified termination date will be considered in taking any action in Delaware.

2.10.3 Requirements of an ACP.

To establish an ACP the responsible ACP party shall develop a file of information containing all of the following, which shall be kept current and available to the Department upon request as specified in 2.10.4.2 of this regulation and maintained for at least three years after such records are generated:

- 2.10.3.1 an identification of the contact persons, phone numbers, names and addresses of the responsible ACP party;
- 2.10.3.2 a statement of whether the responsible ACP party is a one-product business, as defined in "One product business" or a small business as defined in "Small business" in Section 2.2 of this regulation;
- 2.10.3.3 a listing of the exact product brand name, form, available variations (flavors, scents, colors, sizes, etc.), and applicable product category(ies) or categories for each distinct ACP product that is proposed for inclusion in the ACP;
- 2.10.3.4 for each proposed ACP product identified in 2.10.3.3 of this regulation a supported statement that the enforceable sales records to be used by the responsible ACP party for tracking product sales meet the minimum criteria specified in 2.10.3.4.5 of this regulation. To support this statement, the responsible ACP party shall include all of the following in the file:
 - 2.10.3.4.1 the contact persons, phone numbers, names, street and mail addresses of all persons and businesses who will provide information that will be used to determine the enforceable sales;
 - 2.10.3.4.2 the enforceable sales of each product using enforceable sales records as defined in "Enforceable sales record" in Section 2.2 of this regulation;
 - 2.10.3.4.3 support the validity of the enforceable sales with enforceable sales records provided by the contact persons or the responsible ACP party;
 - 2.10.3.4.4 calculate the percentage of the gross Delaware sales, as defined in "Gross Delaware sales" 2.2 of this regulation, which is comprised of enforceable sales;
 - 2.10.3.4.5 determine which ACP products have enforceable sales which are 75.0% or more of the gross Delaware sales. Only ACP products meeting this criteria shall be allowed to be sold in the State of Delaware under an ACP.
- 2.10.3.5 for each of the ACP products identified in 2.10.3.4.5 of this regulation, the inclusion of the following:
 - 2.10.3.5.1 legible copies of the existing labels for each product;
 - 2.10.3.5.2 the VOC content and LVP content for each product reported for two different periods, as follows:
 - 2.10.3.5.2.1 the VOC and LVP contents of the product at the time the ACP is established, and
 - 2.10.3.5.2.2 any VOC and LVP contents of the product, which have occurred at any time within the four years prior to the date of establishing the ACP, if either the VOC or LVP contents have varied by more than plus/minus ten percent (+10.0%) of the VOC or LVP contents reported in 2.10.3.5.2.1 of this regulation;
- 2.10.3.6 a written commitment obligating the responsible ACP party to date-code every unit of each ACP product included in the ACP. The commitment shall require the responsible ACP party to display the date-code on each ACP product container or package no later than 5 working days after the date an ACP was established.
- 2.10.3.7 an operational plan covering all the products identified under 2.10.3.4.5 of this regulation for each compliance period that the ACP will be in effect. The operational plan shall contain all of the following:

- 2.10.3.7.1 an identification of the compliance periods and dates for the responsible ACP party to summarize the information required by the Department in an ACP. The length of the compliance period shall be chosen by the responsible ACP party provided, however, that no compliance period shall be longer than 365 days. The responsible ACP party also shall choose the dates for summarizing information such that all required VOC content and enforceable sales data for all ACP products shall be summarized at the same time and at the same frequency;
- 2.10.3.7.2 an identification of specific enforceable sales records summarized in the operational plan for the compliance period dates specified in 2.10.3.7.1 of this regulation;
- 2.10.3.7.3 for a small business or a one-product business which will be relying to some extent on surplus trading to meet its ACP limits, a written commitment from the responsible ACP party~~(ies)~~ or parties that they will transfer the surplus reductions to the small business or one-product business upon adoption of the ACP;
- 2.10.3.7.4 for each ACP product, all VOC content levels which will be applicable for the ACP product during each compliance period. The plan shall also identify the specific method(s) or methods by which the VOC content will be determined and the statistical accuracy and precision (repeatability and reproducibility) calculated for each specified method.
- 2.10.3.7.5 the projected enforceable sales for each ACP product at each different VOC content for every compliance period that the ACP will be in effect;
- 2.10.3.7.6 a detailed write-up showing the combination of specific ACP reformulations or surplus trading (if applicable) that is sufficient to ensure that the ACP emissions will not exceed the ACP limit for each compliance period that the ACP will be in effect, the approximate date within each compliance period that such reformulations or surplus trading are expected to occur, and the extent to which the VOC contents of the ACP products will be reduced (i.e., by ACP reformulation). This write-up shall use the equations specified in "ACP emissions" and "ACP limit" as defined in 2.2 of this regulation for projecting the ACP emissions and ACP limits during each compliance period. It shall also include all VOC content levels and projected enforceable sales for all ACP products to be sold in the State of Delaware during each compliance period;
- 2.10.3.7.7 a certification that all reductions in the VOC content of a product will be real, actual reductions that do not result from changing product names mischaracterizing ACP product reformulations that have occurred in the past, or any other attempts to circumvent the provisions of Section 2.0 of this regulation;
- 2.10.3.7.8 written explanations of the date-codes that will be displayed on each ACP product's container or packaging;
- 2.10.3.7.9 a statement of the approximate dates by which the responsible ACP party plans to meet the applicable ACP VOC standards for each product in the ACP;
- 2.10.3.7.10 a reconciliation of shortfalls plan which commits the responsible ACP party to completely reconcile any shortfalls in any and all cases, even, to the extent permitted by law, if the responsible ACP party files for bankruptcy protection. The plan for reconciliation of shortfalls shall contain all of the following:
 - 2.10.3.7.10.1 a clear and convincing demonstration of how shortfalls of up to 5%, 10%, 15%, 25%, 50%, 75%, and 100% of the applicable ACP limit will be completely reconciled within 90 working days from the date the shortfall is determined;
 - 2.10.3.7.10.2 a listing of the specific records and other information that will be necessary to verify that the shortfalls were reconciled as specified in 2.10.3.7.10 of this regulation; and
 - 2.10.3.7.10.3 a commitment to provide any record or information requested by the Department to verify that the shortfalls have been completely reconciled.
- 2.10.3.7.11 a declaration, signed by a legal representative for the responsible ACP party which states that all information and plans included in the ACP are true and correct.

2.10.4 Record Keeping and Availability of Requested Information.

- 2.10.4.1 All information specified in an ACP shall be maintained by the responsible ACP party for a minimum of three years after the ACP is cancelled or expires. Such records shall be clearly legible and maintained in good condition during this period.
- 2.10.4.2 The records specified in 2.10.5.1 of this regulation shall be made available to the Department or an authorized representative:
 - 2.10.4.2.1 immediately upon request, during an on-site visit to a responsible ACP party; or
 - 2.10.4.2.2 within five working days after receipt of a written request from the Department; or
 - 2.10.4.2.3 within a time period mutually agreed upon by the Department and the responsible ACP party.

2.10.5 Reporting

- 2.10.5.1 Upon establishing an ACP, the responsible ACP party shall notify the Department, in writing, that an ACP has been established and shall submit to the Department all of the information specified in 2.10.3 of this regulation.
- 2.10.5.2 At any time that the information specified in 2.10.3 of this regulation is modified for any reason, the Department shall be promptly notified of the change.
- 2.10.5.3 When a shortfall occurs, the responsible ACP party shall promptly notify the Department. When the shortfall is reconciled, the responsible ACP party will notify the Department.
- 2.10.5.4 When a VOC exceedance occurs, the responsible ACP party shall promptly notify the Department of the exceedance and plans for correction. Any exceedance is a violation of Section 2.0 of this regulation and may result in penalties.

2.10.6 Violations.

- 2.10.6.1 Any person who commits a violation of Section 2.0 of this regulation may be subject to the penalties specified in applicable Delaware laws and regulations. Failure to meet any requirement of Section 2.0 of this regulation or any condition of an ACP shall constitute a single, separate violation of Section 2.0 of this regulation for each day until such requirement or condition is satisfied, except as otherwise provided in 2.10.6.3 through 2.10.6.8 of this regulation.
- 2.10.6.2 False reporting of any information contained in an ACP, or any supporting documentation or amendments thereto, shall constitute a single, separate violation of the requirements of Section 2.0 of this regulation for each day that the ACP is in effect.
- 2.10.6.3 Any exceedance during the applicable compliance period of the VOC content specified for an ACP product in the ACP shall constitute a single, separate violation of the requirements of Section 2.0 of this regulation for each ACP product which exceeds the specified VOC content that is sold, supplied, offered for sale, or manufactured for use in the State of Delaware.
- 2.10.6.4 Any of the following actions shall each constitute a single, separate violation of the requirements of Section 2.0 of this regulation for each day after the applicable deadline until the requirement is satisfied:
 - 2.10.6.4.1 Failure to record data (i.e., "missing data") or failure to record data accurately (i.e., "inaccurate data") in writing to the Department regarding the VOC content, LVP content, enforceable sales, or any other information required by any deadline specified by the Department;
 - 2.10.6.4.2 False reporting of any information submitted to the Department for determining compliance with the ACP requirements;
 - 2.10.6.4.3 Failure to completely implement the reconciliation of shortfalls plan that is set forth in the ACP, within 30 working days from the date of written notification of a shortfall;
 - 2.10.6.4.4 Failure to completely reconcile the shortfall as specified in the ACP, within 90 working days from the date of written notification of a shortfall.

- 2.10.6.5 False reporting or failure to report any of the information specified in 2.10.7.2.9 of this regulation, or the sale or transfer of invalid surplus reductions, shall constitute a single, separate violation of the requirements of Section 2.0 of this regulation for each day during the time period for which the surplus reductions are claimed to be valid.
- 2.10.6.6 Except as provided in 2.10.7 of this regulation, any exceedance of the ACP limit for any compliance period that the ACP is in effect shall constitute a single, separate violation of the requirements of Section 2.0 of this regulation for each day of the applicable compliance period. The responsible ACP party shall determine whether an exceedance of the ACP limit has occurred as follows and promptly report the results to the Department:
- 2.10.6.6.1 If the responsible ACP party has recorded all required information for the applicable compliance period specified in an ACP, then the manufacturer shall determine whether an exceedance has occurred using the enforceable sales records and VOC content for each ACP product, as reported by the responsible ACP party for the applicable compliance period;
- 2.10.6.6.2 If the responsible ACP party has failed to provide all the required information specified in the ACP for an applicable compliance period, determining whether an exceedance of the ACP limit has occurred shall be done as follows:
- 2.10.6.6.2.1 for the missing data days, calculate the total maximum historical emissions, as specified in "Total maximum historical emissions (TMHE)" in Section 2.2 of this regulation;
- 2.10.6.6.2.2 for the remaining portion of the compliance period which are not missing data days, calculate the emissions for each ACP product using the enforceable sales records and VOC content that were reported for that portion of the applicable compliance period;
- 2.10.6.6.2.3 the ACP emissions for the entire compliance period shall be the sum of the total maximum historical emissions, determined pursuant to 2.10.6.6.2.1 of this regulation, and the emissions determined pursuant to 2.10.6.6.2.2 of this regulation;
- 2.10.6.6.3 calculate the ACP limit for the entire compliance period using ACP standards applicable to each ACP product and enforceable sales records specified in 2.10.6.6.2.2 of this regulation. Enforceable sales for each ACP product during missing data days, as specified in 2.10.6.6.2.1 of this regulation, shall be zero (0).
- 2.10.6.6.4 an exceedance of the ACP limit has occurred when the ACP emissions, determined pursuant to 2.10.6.6.2.3 of this regulation, exceeds the ACP limit, determined pursuant to 2.10.6.6.3 of this regulation.
- 2.10.6.7 If a violation specified in 2.10.6.6 of this regulation occurs, the responsible ACP party may, pursuant to this paragraph, establish the number of violations as calculated according to the following equation:

$$NEV = \frac{(ACPEmissions - ACPLimit) \times 1 Violation}{40 Pounds}$$

where,

NEV = number of ACP limit violations;

ACP emissions = the ACP emissions for the compliance period;

ACP limit = the ACP limit for the compliance period;

The responsible ACP party may determine the number of ACP limit violations pursuant to this paragraph only if it has provided all required information for the applicable compliance period, as specified in the ACP. By choosing this option, the responsible ACP party waives

- any and all legal objections to the calculation of the ACP limit violations pursuant to 2.10.6.7 of this regulation.
- 2.10.6.8 In assessing the amount of penalties for any violation occurring pursuant to 2.10.6.1 through 2.10.6.7 of this regulation, circumstances covered in applicable laws and regulations of the State of Delaware shall be taken into consideration.
- 2.10.6.9 A cause of action against a responsible ACP party under 2.10.6 of this regulation shall be deemed to accrue on the date(s) or dates when the records establishing a violation are received by the Department.
- 2.10.6.10 The responsible ACP party is fully liable for compliance with the requirements of Section 2.0 of this regulation, even if the responsible ACP party contracts with or otherwise relies on another person to carry out some or all of the requirements of Section 2.0 of this regulation.
- 2.10.7 Surplus Reductions and Surplus Trading.
- 2.10.7.1 Any surplus reductions of VOC achieved by a responsible ACP party operating under an ACP may be represented in the form of certificates which can be bought from, sold to, or transferred to a responsible ACP party operating under an ACP, as provided in 2.10.7.2 of this regulation. All surplus reductions shall be calculated at the end of each compliance period within the time specified in the established ACP. Surplus reduction certificates shall not constitute instruments, securities, or any other form of property.
- 2.10.7.2 The issuance, use, and trading of all surplus reductions shall be subject to the following provisions:
- 2.10.7.2.1 For the purposes of Section 2.0 of this regulation, VOC reductions from sources of VOC other than consumer products subject to the VOC standards specified in 2.3.1 of this regulation may not be used to generate "Surplus reductions" surplus reductions;
- 2.10.7.2.2 Surplus reductions are valid only when generated by a responsible ACP party, and only while that responsible ACP party is operating under a prior established ACP;
- 2.10.7.2.3 Surplus reductions may be used by the responsible ACP party who generated the surplus until the reductions expire, are traded, or until the ACP is canceled pursuant to 2.10.11 of this regulation;
- 2.10.7.2.4 Surplus reductions cannot be applied retroactively to any compliance period prior to the compliance period in which the reductions were generated;
- 2.10.7.2.5 Except as provided in 2.10.7.2.6.2 of this regulation, only small or one-product businesses selling products under an established ACP may purchase surplus reductions. An increase in the size of a small business or one-product business shall have no effect on surplus reductions purchased by that business prior to the date of the increase.
- 2.10.7.2.6 While valid, surplus reductions can be used only for the following purposes:
- 2.10.7.2.6.1 to adjust either the ACP emissions of either the responsible ACP party who generated the reductions or the responsible ACP party to which the reductions were traded, provided the surplus reductions are not used by any responsible ACP party to further lower its ACP emissions when its ACP emissions are equal to or less than the ACP limit during the applicable compliance period; or
- 2.10.7.2.6.2 to be traded for the purpose of reconciling another responsible ACP party's shortfalls, provided such reconciliation is part of the reconciliation of shortfall plan pursuant to 2.10.3.7.10 of this regulation.
- 2.10.7.2.7 A valid surplus reduction shall be in effect starting five (5) days after the date of identification by the responsible ACP party, for a continuous period equal to the number of days in the compliance period during which the surplus reduction was generated. The surplus reduction shall then expire at the end of its effective period.
- 2.10.7.2.8 At least five (5) working days prior to the effective date of transfer of surplus reductions, both the responsible ACP party which is selling surplus reductions and the

responsible ACP party which is buying the surplus reductions shall, either together or separately, notify the Department in writing of the transfer. The notification shall include all of the following:

- 2.10.7.2.8.1 the date the transfer is to become effective;
 - 2.10.7.2.8.2 the date the surplus reductions being traded are due to expire;
 - 2.10.7.2.8.3 the amount (in pounds of VOCs) of surplus reductions that are being transferred;
 - 2.10.7.2.8.4 the total purchase price paid by the buyer for the surplus reductions;
 - 2.10.7.2.8.5 the contact persons, names of the companies, street and mail addresses, and phone numbers of the responsible ACP parties involved in the trading of the surplus reductions;
 - 2.10.7.2.8.6 a copy of the surplus reductions certificate issued by the responsible ACP party, signed by the seller and buyer of the certificate, showing transfer of all or a specified portion of the surplus reductions. The copy shall show the amount of any remaining non-traded surplus reductions, if applicable, and shall show their expiration date. The copy shall indicate limitations placed upon the transfer of the surplus reductions and accept full responsibility for the appropriate use of such surplus reductions as provided in 2.10.7 of this regulation.
- 2.10.7.2.9 Surplus reduction credits shall only be traded between ACP product(s) or products for consumer products.

2.10.8 Reconciliation of Shortfalls.

- 2.10.8.1 At the end of each compliance period, the responsible ACP party shall make an initial calculation of any shortfalls occurring in that compliance period. Upon receipt of this information, the Department shall determine the amount of any shortfall that has occurred during the compliance period, and shall notify the responsible ACP party of this determination.
- 2.10.8.2 The responsible ACP party shall implement the reconciliation of shortfalls plan as specified in the ACP, within 30 working days from the date of written notification of a shortfall by the Department.
- 2.10.8.3 All shortfalls shall be completely reconciled within 90 working days from the date of written notification of a shortfall by the Department, by implementing the reconciliation of shortfalls plan specified in the ACP.
- 2.10.8.4 All requirements specified in the ACP, including all applicable ACP limits, shall remain in effect while any shortfalls are in the process of being reconciled.

2.10.9 Notification of Modifications to an ACP by the Responsible ACP Party.

- 2.10.9.1 The responsible ACP party shall notify the Department, in writing, of any change in an ACP product's:
 - 2.10.9.1.1 product name,
 - 2.10.9.1.2 product formulation,
 - 2.10.9.1.3 product form,
 - 2.10.9.1.4 product function,
 - 2.10.9.1.5 applicable product category(ies) or categories,
 - 2.10.9.1.6 VOC content,
 - 2.10.9.1.7 LVP content,
 - 2.10.9.1.8 date-codes, or
 - 2.10.9.1.9 recommended product usage directions, no later than 15 working days from the date such a change occurs.

For each modification, the notification shall fully explain the following:

- 2.10.9.1.10 the nature of the modification;

- 2.10.9.1.11 the extent to which the ACP product formulation, VOC content, LVP content, or recommended usage directions will be changed;
 - 2.10.9.1.12 the extent to which the ACP emissions and ACP limit specified in the ACP will be changed for the applicable compliance period; and
 - 2.10.9.1.13 the effective date and corresponding date-codes for the modification.
- 2.10.9.2 Except as otherwise provided in 2.10.7.2 of this regulation, the responsible ACP party shall notify the Department, in writing, of any information learned of by the responsible ACP party which may alter any of the information submitted pursuant to the requirements of 2.10.3 of this regulation. The responsible ACP party shall provide such notification to the Department no later than 15 working days from the date such information is known to the responsible ACP party.
- 2.10.10 Modification of an ACP by the Department
- 2.10.10.1 If the Department determines that:
 - 2.10.10.1.1 the enforceable sales for an ACP product are no longer at least 75.0% of the gross Delaware sales for that product, or
 - 2.10.10.1.2 the information submitted pursuant to a request is no longer valid, or
 - 2.10.10.1.3 the ACP emissions are exceeding the ACP limit specified in the ACP, then the Department shall modify the ACP as necessary to ensure that the ACP meets all requirements of Section 2.0 of this regulation and that the ACP emissions will not exceed the ACP limit.
- The Department shall not modify the ACP without first affording the responsible ACP party an opportunity for a public hearing to determine if the ACP should be modified.
- 2.10.10.2 If any applicable VOC standards specified in 2.3.1 of this regulation are modified in a future rule making, the responsible ACP party shall modify the ACP limit specified in the ACP to reflect the modified ACP VOC standards as of their effective dates.
- 2.10.11 Cancellation of an ACP
- 2.10.11.1 An ACP shall remain in effect until:
 - 2.10.11.1.1 the ACP reaches the specified expiration date;
 - 2.10.11.1.2 the ACP is modified by the responsible ACP party;
 - 2.10.11.1.3 the ACP is modified by the Department, as provided in 2.10.10 of this regulation;
 - 2.10.11.1.4 the ACP includes a product for which the VOC standard specified in 2.3.1 of this regulation is modified by the Department in a future rule making, and the responsible ACP party informs the Department in writing that the ACP will terminate on the effective date(s) or dates of the modified standard;
 - 2.10.11.1.5 the ACP is cancelled pursuant to 2.10.11.2 of this regulation.
- 2.10.11.2 The Department shall cancel an ACP if any of the following circumstances occur:
- 2.10.11.2.1 the responsible ACP party demonstrates to the satisfaction of the Department that the continuation of the ACP will result in an extraordinary economic hardship;
 - 2.10.11.2.2 the responsible ACP party violates the requirements of the ACP, and the violation(s) or violations results in a shortfall that is 20.0% or more of the applicable ACP limit (i.e., the ACP emissions exceed the ACP limit by 20.0% or more);
 - 2.10.11.2.3 the responsible ACP party fails to meet the requirements of 2.10.8 (Reconciliation of Shortfalls) of this regulation within the time periods specified in 2.10.8 of this regulation; or
 - 2.10.11.2.4 the responsible ACP party has demonstrated a recurring pattern of violations and has consistently failed to take the necessary steps to correct those violations.
- 2.10.11.3 The Department shall not cancel an ACP pursuant to 2.10.11.2 of this regulation without first affording the responsible ACP party an opportunity for a public hearing to determine if the ACP should be canceled.

2.10.11.4 The responsible ACP party for an ACP which is canceled pursuant to 2.10.11.2 of this regulation and who does not have a valid ACP to immediately replace the canceled ACP shall meet all of the following requirements:

2.10.11.4.1 all remaining shortfalls in effect at the time of ACP cancellation shall be reconciled in accordance with the requirements of 2.10.8 of this regulation, and

2.10.11.4.2 all ACP products subject to the ACP shall be in compliance with the applicable VOC standards in 2.3.1 of this regulation immediately upon the effective date of ACP cancellation.

2.10.11.5 Any violations incurred pursuant to 2.10.6 shall not be cancelled or in any way affected by the subsequent cancellation or modification of an ACP pursuant to 2.10.9, 2.10.10, or 2.10.11 of this regulation.

2.10.12 Treatment of Information.

The information required by 2.10.3.1, 2.10.3.2, and 2.10.7.2.8 of this regulation is public information which may not be claimed as confidential. All information submitted to the Department is subject to public review under terms of the Freedom of Information Act (FOIA) (to be found at 29 **Del.C.** Ch. 100), unless deemed to be confidential by the Secretary in accordance with the procedures outlined in the FOIA regulation and codified at 29 **Del.C.** 10002(d). The procedure an applicant must follow in order to have information classified as confidential is reviewed in the FOIA regulation which can be obtained from the Department.

2.10.13 Other Applicable Requirements.

A responsible ACP party may transfer an ACP to another responsible ACP party, provided that all of the following conditions are met:

2.10.13.1 The Department shall be notified, in writing, by both responsible ACP parties participating in the transfer of the ACP. The written notifications shall be postmarked at least five (5) working days prior to the effective date of the transfer and shall be signed and submitted separately by both responsible parties. The written notifications shall clearly identify the contact persons, business names, mail and street addresses, and phone numbers of the responsible parties involved in the transfer.

2.10.13.2 The responsible ACP party to which the ACP is being transferred shall provide a written declaration stating that the transferee shall fully comply with all requirements of the ACP and Section 2.0 of this regulation.

2.11 Related Delaware Rules.

The following Delaware rules are referred to in Section 2.0 of this regulation and are required to fully understand the provisions of Section 2.0 of this regulation. Copies of these related rules may be obtained through the State of Delaware web site <http://www.delaware.gov>, by writing to State of Delaware, Department of Natural Resources and Environmental Control, Division of Air and Waste Management, 715 Grantham Lane, New Castle 19720 or by calling 302-323-4542.

2.11.1 Some definitions are in "Regulations Governing the Control of Air Pollution", Air Quality Management Section, Division of Air and Waste Management, "Regulation No. 1101 7 DE Admin. Code 1101", "Definitions and Administrative Principles". This regulation also is available on the Department of Natural Resources and Environmental Control (DNREC) web site <http://www.dnrec.state.de.us/DNREC2000>.

2.11.2 The state pesticide law, "State of **Delaware Code** Title 3, Part II, Chapter 12" also can be obtained by writing the State of Delaware, Department of Agriculture, 2320 South DuPont Highway, Dover, Delaware 19901 or by calling 302-739-4811. The pesticide law also can be found on the following web site, <http://www.michie.com>.

2.11.3 The Freedom of Information Act (FOIA), Title 29 **Del.C.** Ch. 100, Section 10002(d) also is available on the following web site <http://www.michie.com>. The DNREC FOIA regulation also is available at <http://www.dnrec.state.de.us/DNREC2000>.

2.11.4 The Delaware code relating to public hearings for environmental matters, Title 7 **Del.C.** Ch. 60, Section 6006 also can be found on the following web site, <http://www.michie.com>.

2.11.5 The Delaware Code relating to penalties for violations of environmental regulations, Title 7 Del.C. Ch. 60 Sections 6005 and 6013 also can be found at the following web site <http://www.michie.com>.

TABLE 2-1
VOC CONTENT LIMITS FOR CONSUMER PRODUCTS
(percent volatile organic compounds by weight)

PRODUCT CATEGORY	VOC CONTENT LIMIT
Adhesives	
Aerosol	
Mist Spray	65
Web Spray	55
Special Purpose	
(mounting, auto engine compartment and flexible vinyl)	70
(polystyrene foam and automotive headliner)	65
(polyolefin and laminate repair/edgebonding)	60
Contact	80*
Construction, Panel, and Floor Covering	15
General Purpose	10*
Structural Waterproof	15*
Aerosol Cooking Spray	18*
Air Fresheners	
Double Phase Aerosols	25
Liquids	18*
Pump Sprays	18*
Single Phase Aerosols	30
Solids	3*
Gels	3*
Antiperspirants	
Aerosol (% HVOC)	40
(% MVOC)	10
Non-aerosol (% HVOC)	0
(% MVOC)	0
Automotive Brake Cleaners	45
Automotive Rubbing or Polishing Compound	17
Automotive Wax, Polish, Sealant or Glaze	
Hard Paste Waxes	45
Instant Detailers	3
All Other Forms	15
Automotive Windshield Washers	35*
Bathroom and Tile Cleaners	
Aerosols	7*
All Other Forms	5*
Bug and Tar Remover	40

Carburetor or Fuel-injection Air Intake Cleaners	45
Carpet and Upholstery Cleaners	
Aerosols	7
Non-aerosols (dilutables)	0.1
Non-aerosols (ready to use)	3
Charcoal Lighter Material	See 2.3.4 of this regulation *
Deodorants	
Aerosol (% HVOC)	0
(% MVOC)	10
Non-aerosol (% HVOC)	0
(% MVOC)	0
Dusting Aids	
Aerosols	25
All Other Forms	7*
Engine Degreasers	
Aerosol	35
Non-aerosol	5
Fabric Protectants	60
Floor Polishes and Waxes	
Products for Flexible Flooring Materials	7*
Products for Non-resilient Flooring	10*
Wood Flooring	90*
Floor Wax Strippers (non-aerosols)	See 2.3.6 of this regulation
Furniture Maintenance Products	
Aerosols	17
All Other Forms (except solid or paste)	7
General Purpose Cleaners	
Aerosols	10
Non-aerosols	4
General Purpose Degreasers	
Aerosols	50
Non-aerosols	4
Glass Cleaners	
Aerosols	12*
Non-aerosols	4
Hair Mousse	6
Hairshines	55
Hairsprays	55
Hair Styling Gels	6*
Heavy Duty Hand Cleaner Soap	8
Insecticides	
Crawling Bug (aerosol)	15

Crawling Bug (all other forms)	20
Flea and Tick	25*
Flying Bug (aerosol)	25
Flying Bug (all other forms)	35
Foggers	45*
Lawn and Garden (non-aerosol)	3
Lawn and Garden (all other forms)	20
Wasp and Hornet	40
Laundry Prewash	
Aerosols/Solids	22*
All other forms	5*
Laundry Starch Products	5*
Metal Polishes/Cleaners	30
Multi-purpose Lubricant	
(excluding solid or semi-solid products)	50
Nail Polish Remover	75
Non-selective Terrestrial Herbicide (non-aerosol)	3
Oven Cleaners	
Aerosols & Pump sprays	8*
Liquids	5*
Paint Removers and Strippers	50
Penetrants	50
Rubber and Vinyl Protectants	
Aerosols	10
Non-aerosols	3
Sealants and Caulking Compounds	4
Shaving Creams	5*
Silicone-based Multi-Purpose Lubricants	
(excluding solid or semi-solid products)	60
Spot Removers	
Aerosols	25
Non-aerosols	8
Tire Sealants and Inflators	20
Undercoatings (aerosols)	40

* Limits and definition unchanged from EPA rule at 40 CFR 59 Subpart C, "National Volatile Organic Compound Emission Standards for Consumer Products", which remains in force.

Product Category	VOC Content Limit	
	Effective Date <u>1/1/2005</u>	Effective Date <u>5/1/2009</u>
<u>Adhesive Removers:</u>		
<u>Floor or Wall Covering</u>		<u>5</u>
<u>Gasket or Thread Locking</u>		<u>50</u>
<u>General Purpose</u>		<u>20</u>
<u>Specialty</u>		<u>70</u>
<u>Adhesives:</u>		
Aerosol Mist Spray	65	
Aerosol Web Spray	55	
<u>Special Purpose Spray Adhesives:</u>		
Mounting, Automotive Engine		
Compartment and Flexible Vinyl	70	
Polystyrene Foam and Automotive		
Headliner	65	
Polyolefin and Laminate Repair/ Edgebanding	60	
Construction, Panel and Floor	15	
Contact	80*	N/A
<u>Contact, General Purpose</u>		<u>55</u>
<u>Contact, Special Purpose</u>		<u>80</u>
General Purpose	10*	
Structural Waterproof	15*	
<u>Air Fresheners:</u>		
Single-phase Aerosols	30	
Double-phase Aerosols	25	
Liquids/Pump Sprays	18*	
Solids/Semisolids	3*	
<u>Antiperspirants:</u>		
Aerosol	40 HVOC 10 MVOC	
Non-aerosol	0 HVOC 0 MVOC	
<u>Anti-static Product, non-aerosol</u>		<u>11</u>
<u>Automotive Brake Cleaners</u>	45	
<u>Automotive Rubbing or Polishing Compound</u>	17	
<u>Automotive Wax, Polish, Sealant or Glaze:</u>		
Hard Paste Waxes	45	
Instant Detailers	3	
All Other Forms	15	
<u>Automotive Windshield Washer Fluids</u>	35	

Bathroom and Tile Cleaners		
Aerosols	7	
All Other Forms	5	
Bug and Tar Remover	40	
Carburetor or Fuel-Injection Air Intake Cleaners	45	
Carpet & Upholstery Cleaners		
Aerosols	7	
Non-aerosols (dilutable)	0.1	
(ready-to-use):	3.0	
Charcoal Lighter Material	2.3.4 this regulation*	
Cooking Spray, Aerosol	18 *	
Deodorants:		
Aerosol	0 HVOC 10 MVOC	
Non-aerosol	0 HVOC 0 MVOC	
Dusting Aids:		
Aerosol	25	
All other forms	7 *	
<u>Electrical Cleaner</u>		<u>45</u>
<u>Electronic Cleaner</u>		<u>75</u>
Engine Degreasers:		
Aerosol	35	
Non-aerosol	5	
Fabric Protectants	60	
Fabric Refresher:		
<u>Aerosol</u>		<u>15</u>
<u>Non-aerosol</u>		<u>6</u>
Floor Polishes/waxes:		
Products for Flexible Flooring Materials	7 *	
Products for Non-Resilient Flooring	10 *	
Wood Floor Wax	90 *	
Floor Wax Strippers, non-aerosol	2.3.6 this regulation	
Footwear or Leather Care Products:		
<u>Aerosol</u>		<u>75</u>
<u>Solid</u>		<u>55</u>
<u>All other forms</u>		<u>15</u>
Furniture Maintenance Products:		
Aerosol	17	
All other forms except solid or paste	7	
General Purpose Cleaners:		
Aerosol	10	
Non-aerosol	4	

General Purpose Degreaser		
Aerosol	50	
Non-aerosol	4	
Glass Cleaners:		
Aerosol	12 *	
Non-aerosol	4	
<u>Graffiti Removers:</u>		
<u>Aerosol</u>		<u>50</u>
<u>Non-aerosol</u>		<u>30</u>
Hair Mousse	6	
Hair Shine	55	
Hair Spray	55	
Hair Styling Gel	6 *	
<u>Hair Styling Products:</u>		
<u>Aerosol and Pump sprays</u>		<u>6</u>
<u>All other forms</u>		<u>2</u>
Heavy Duty Hand Cleaner or Soap	8	
Insecticide:		
Crawling Bug (aerosol)	15	
Crawling Bug (all other forms)	20	
Flea and Tick	25	
Flying Bug (aerosol)	25	
Flying Bug (all other forms)	35	
Foggers	45	
Lawn & Garden (all other forms)	20	
Lawn & Garden (non-aerosol)	3	
Wasp & Hornet	40	
Laundry Prewash:		
Aerosol/Solid	22	
All other forms	5	
Laundry Starch Product	5	
Metal Polish/Cleanser	30	
Multi-purpose Lubricant (excluding solid or semi-solid product)	50	
Nail Polish Remover	75	
Non-selective Terrestrial Herbicide		
Non-aerosol	3	
Oven Cleaner		
Aerosol/Pump spray	8	
Liquid	5	
Paint Remover or Stripper	50	
Penetrants	50	
Rubber & Vinyl Protectant		
Non-aerosol	3	
Aerosol	10	
Sealant & Caulking Compound	4	

Shaving Cream	5	
<u>Shaving Gel</u>		<u>7</u>
Silicone-based Multi-purpose Lubricants (excluding solid or semi-solid product)	60	
Spot Remover		
Aerosol	25	
Non-aerosol	8	
Tire Sealant and Inflators	20	
Toilet/Urinal Care:		
<u>Aerosol</u>		<u>10</u>
Non-aerosol		<u>3</u>
Undercoating, Aerosol	40	
Wood Cleaner:		
<u>Aerosol</u>		<u>17</u>
Non-aerosol		<u>4</u>

Notes: N/A Not applicable on or after January 1, 2009

* Limits and definition unchanged from 9/11/98 federal rule

11/11/2001

3.0 Portable Fuel Containers

3.1 Applicability.

- 3.1.1 The provisions of 3.0 of this regulation apply to any person who sells, supplies, offers for sale, or manufactures for sale portable fuel container (or containers) or spout (or spouts) or both portable fuel container (or containers) and spout (or spouts) for use in the State of Delaware; except:
 - 3.1.1.1 Safety cans meeting the requirements of 29 CFR 1926, Subpart F.
 - 3.1.1.2 Portable fuel containers with a nominal capacity less than or equal to one quart.
 - 3.1.1.3 Rapid refueling devices with nominal capacities greater than or equal to four gallons provided such devices are designed for use in officially sanctioned off-highway motorcycle competitions, and either create a leak-proof seal against a stock target fuel tank or are designed to operate in conjunction with a receiver permanently installed on the target fuel tank.
 - 3.1.1.4 Portable fuel tanks manufactured specifically to deliver fuel through a hose attached between the portable fuel tank and an outboard engine for the purpose of operating that outboard engine.
- 3.1.2 Compliance with the requirements of 3.0 of this regulation does not exempt any spill-proof system or spill-proof spout from compliance with other applicable Federal or State requirements.
- 3.1.3 The requirements of 3.0 of this regulation apply on and after January 1, 2003, except that, any portable fuel container or spout or both portable fuel container and spout manufactured before January 1, 2003 that does not meet the requirements of 3.0 of this regulation, may be sold, supplied, or offered for sale until January 1, 2004, provided that the date of manufacture or a date code, representing the date of manufacture, is clearly displayed on the portable fuel container or spout.
- 3.1.4 Any person subject to any requirement of 3.0 of this regulation may comply with an alternative control plan that has been approved by the Department and the U.S. EPA as part of Delaware's State Implementation Plan.

3.2 Definitions.

For the purpose of 3.0 of this regulation, the following definitions apply:

"Fuel" means a hydrocarbon mixture used to power any spark ignition internal combustion engine.

"Manufacturer" means any person who imports, manufactures, produces, assembles, packages, repackages, or re-labels a portable fuel container or spout or both portable fuel container and spout.

"Nominal capacity" means the volume, indicated by the manufacturer that represents the maximum recommended filling level.

"Outboard engine" means a spark-ignition marine engine that, when properly mounted on a marine watercraft in the operating position, houses the engine and drive unit external to the hull of the marine watercraft.

"Permeation" means the process by which individual fuel molecules may penetrate the walls and various assembly components of a portable fuel container directly to the outside ambient air.

"Person" means any individual, public or private corporation, political subdivision, government agency, department or bureau of the State, municipality, industry, co-partnership, association, firm, estate or any legal entity whatsoever.

"Portable fuel container" means any container or vessel with a nominal capacity of ten gallons or less that is intended for reuse and that is designed or used primarily for receiving, transporting, storing, and dispensing fuel.

"Spill-proof spout" means any spout that complies with all of the performance standards specified in 3.3.2 of this regulation.

"Spill-proof system" means any configuration of portable fuel container and firmly attached spout that complies with all of the performance standards in 3.3.1 of this regulation.

"Spout" means any device that can be firmly attached to a portable fuel container, through which the contents of a portable fuel container can be dispensed.

"Target fuel tank" means any receptacle that receives fuel from a portable fuel container.

3.3 Standards.

3.3.1 No person subject to the requirements of 3.0 of this regulation shall sell, supply, offer for sale, or manufacture for sale portable fuel container (or containers) or spout (or spouts) or both portable fuel container (or containers) and spout (or spouts) for use in the State of Delaware which does not:

3.3.1.1 Have an automatic shut-off that stops the fuel flow before the target fuel tank overflows.

3.3.1.2 Automatically close and seal when removed from the target fuel tank, and remain completely closed when not dispensing fuel.

3.3.1.3 Have only one opening for both filling and pouring.

3.3.1.4 Provide a fuel flow rate and fill level of:

3.3.1.4.1 not less than one-half gallon per minute for portable fuel containers with a nominal capacity of:

3.3.1.4.1.1 less than or equal to 1.5 gallons and fills to a level less than or equal to one inch below the top of the target fuel tank opening; or

3.3.1.4.1.2 greater than 1.5 gallons but less than or equal to 2.5 gallons and fills to a level less than or equal to one inch below the top of the target fuel tank opening if the spill-proof system clearly displays the phrase "Low Flow Rate" in type of 34 point or greater on each spill-proof system or label affixed thereto, and on the accompanying package, if any; or

3.3.1.4.2 not less than one gallon per minute for portable fuel containers with a nominal capacity greater than 1.5 gallons but less than or equal to 2.5 gallons and fills to a level less than or equal to 1.25 inches below the top of the target fuel tank opening; or,

3.3.1.4.3 not less than two gallons per minute for portable fuel containers with a nominal capacity greater than 2.5 gallons.

3.3.1.5 Meet a permeation rate of 0.4 grams per gallon per day or less.

3.3.1.6 Have a warranty from the manufacturer for a period of not less than one year against defects in materials and workmanship.

- 3.3.2 No person subject to the requirements of 3.0 of this regulation shall sell, supply, offer for sale, or manufacture for sale any spout for use in the State of Delaware, which does not:
- 3.3.2.1 Have an automatic shut-off that stops the fuel flow before the target fuel tank overflows.
 - 3.3.2.2 Automatically close and seal when removed from the target fuel tank, and remain completely closed when not dispensing fuel.
 - 3.3.2.3 Provide a fuel flow rate and fill level of:
 - 3.3.2.3.1 not less than one-half gallon per minute for portable fuel containers with a nominal capacity of:
 - 3.3.2.3.1.1 less than or equal to 1.5 gallons and fills to a level less than or equal to one inch below the top of the target fuel tank opening; or,
 - 3.3.2.3.1.2 greater than 1.5 gallons but less than or equal to 2.5 gallons and fills to a level less than or equal to one inch below the top of the target fuel tank opening if the spill-proof spout clearly displays the phrase "Low Flow Rate" in type of 34 point or greater on the accompanying package, or for spill-proof spouts sold without packaging, on either the spill-proof spout or a label affixed thereto; or,
 - 3.3.2.3.2 not less than one gallon per minute for portable fuel containers with a nominal capacity greater than 1.5 gallons but less than or equal to 2.5 gallons and fills to a level less than or equal to 1.25 inches below the top of the target fuel tank opening; or,
 - 3.3.2.3.3 not less than two gallons per minute for portable fuel containers with a nominal capacity greater than 2.5 gallons.
 - 3.3.2.4 Have a warranty from the manufacturer for a period of not less than one year against defects in materials and workmanship.

3.4 Testing Procedures.

Any manufacturer subject to the requirements of 3.3 of this regulation shall perform the following compliance tests in accordance with test methods and procedures stated, or as otherwise approved by the Department and the Administrator of the EPA. Records of compliance testing shall be maintained for as long as the product is available for sale in Delaware, and test results shall be made available to the Department within 60 days of request.

- 3.4.1 The following tests shall be carried out to determine compliance with 3.3.2 of this regulation prior to the product being manufactured for sale in Delaware:

- 3.4.1.1 "Test Method 510, Automatic Shut-Off Test Procedure for Spill-Proof Systems and Spill-Proof Spouts" adopted by California Air Resources Board (CARB) on July 6, 2000. This test method is hereby adopted by reference.
- 3.4.1.2 "Test Method 511, Automatic Closure Test Procedure for Spill-Proof Systems and Spill-Proof Spouts" adopted by CARB on July 6, 2000. This test method is hereby adopted by reference.
- 3.4.1.3 "Test Method 512, Determination of Fuel Flow Rate for Spill-Proof Systems and Spill-Proof Spouts" adopted by CARB on July 6, 2000. This test method is hereby adopted by reference.

- 3.4.2 The following tests shall be carried out to determine compliance with 3.3.1 of this regulation prior to the product being manufactured for sale:

- 3.4.2.1 All of the test procedures stated in 3.4.1 of this regulation.
- 3.4.2.2 "Test Method 513, Determination of Permeation Rate for Spill-Proof Systems," adopted by CARB on July 6, 2000. This test method is hereby adopted by reference.

3.5 Administrative Requirements.

- 3.5.1 Any manufacturer subject to the requirements of 3.3.1 of this regulation shall clearly display on each spill-proof system:
- 3.5.1.1 the phrase "Spill-Proof System";
 - 3.5.1.2 a date of manufacture or representative date code; and

- 3.5.1.3 a representative code identifying the portable fuel container or portable fuel container and spout as subject to and complying with the requirements of 3.3.1 of this regulation.
- 3.5.2 Any person subject to the requirements of 3.3.2 of this regulation shall clearly display on the accompanying package, or for spill-proof spouts sold without packaging, on either the spill-proof spout or a label affixed thereto:
 - 3.5.2.1 the phrase "Spill-Proof Spout";
 - 3.5.2.2 a date of manufacture or representative date code; and
 - 3.5.2.3 a representative code identifying the spout as subject to and complying with the requirements of 3.3.2 of this regulation.
- 3.5.3 Any manufacturer subject to 3.5.1 or 3.5.2 or both 3.5.1 and 3.5.2 of this regulation shall file an explanation of both the date code and representative code with the Department prior to manufacturing the product for sale in the State of Delaware.
- 3.5.4 Any person subject to 3.5.1 or 3.5.2 or both 3.5.1 and 3.5.2 of this regulation shall clearly display a fuel flow rate on each spill-proof system or spill-proof spout, or label affixed thereto, and on any accompanying package.
- 3.5.5 Any person subject to 3.5.2 of this regulation shall clearly display the make, model number, and size of those portable fuel containers the spout is designed to accommodate.
- 3.5.6 Any person not subject to or not in compliance with 3.3 of this regulation may not display the phrase "Spill-Proof System" or "Spill-Proof Spout" on the portable fuel container or spout, respectively, on any sticker or label affixed thereto, or on any accompanying package.
- 3.5.7 Any person subject to and complying with 3.3 of this regulation, that due to its design or other features, cannot be used to refuel on-road motor vehicles shall clearly display the phrase "Not Intended For Refueling On-Road Motor Vehicles" in type of 34 point or greater on each of the following:
 - 3.5.7.1 For a portable fuel container or portable fuel container and spouts sold together as a spill-proof system, on the system or on a label affixed thereto, and on the accompanying package, if any; and
 - 3.5.7.2 For a spill-proof spout sold separately from a spill-proof system, on either the spill-proof spout, or a label affixed thereto, and on the accompanying package, if any.

5 DE Reg. 1497 (01/01/02)

5 DE Reg. 1759 (03/01/02)

5 DE Reg. 1125 (11/01/02)

10 DE Reg. 868 (11/01/06)

12 DE Reg. 347 (09/01/08)

4.0 Adhesives and Sealants

4.1 Applicability

- 4.1.1 Except as provided in 4.4 of this regulation, 4.0 of this regulation applies to any person who, on or after May 1, 2009, sells, supplies, offers for sale or manufactures for sale in the State of Delaware any adhesive, sealant, adhesive primer or sealant primer for use in the State of Delaware.
- 4.1.2 Except as provided in 4.4 of this regulation, 4.0 of this regulation also applies to any person who uses or applies any adhesive, sealant, adhesive primer or sealant primer within the State of Delaware.

4.2 Definitions

Terms used but not defined in 4.0 of this regulation shall have the meaning given them in **7 DE Admin. Code 1101** or the CAA, as amended in 1990, in that order of priority.

"Acrylonitrile-butadiene-styrene welding adhesive" or **"ABS welding adhesive"** means any adhesive intended by the manufacturer to weld acrylonitrile-butadiene-styrene pipe, which is made by reacting monomers of acrylonitrile, butadiene and styrene.

“Adhesive” means any chemical substance that is applied for the purpose of bonding two surfaces together by other than mechanical means.

“Adhesive primer” means any product intended by the manufacturer for application to a substrate, prior to the application of an adhesive, to provide a bonding surface.

“Aerospace component” means the fabricated part, assembly of parts or completed unit of any aircraft, helicopter, missile, or space vehicle, including passenger safety equipment.

“Aerosol adhesive” means an adhesive packaged as an aerosol product in which the spray mechanism is permanently housed in a non-refillable can designed for handheld application without the need for ancillary hoses or spray equipment.

“Architectural sealant or sealant primer” means any sealant or sealant primer intended by the manufacturer to be applied to stationary structures, including mobile homes, and their appurtenances. Appurtenances to an architectural structure include, but are not limited to: hand railings, cabinets, bathroom and kitchen fixtures, fences, rain gutters and downspouts, and windows.

“Automotive glass adhesive primer” means an adhesive primer labeled by the manufacturer to be applied to automotive glass prior to installation of the glass using an adhesive/sealant. This primer improves the adhesion to pinch weld and blocks ultraviolet light.

“CARB” means the California Air Resources Board.

“Ceramic tile installation adhesive” means any adhesive intended by the manufacturer for use in the installation of ceramic tiles.

“Chlorinated polyvinyl chloride plastic” or “CPVC plastic” means a polymer of the vinyl chloride monomer that contains 67% chlorine and is normally identified with a CPVC marking.

“Chlorinated polyvinyl chloride welding adhesive” or “CPVC welding adhesive” means an adhesive labeled for welding of chlorinated polyvinyl chloride plastic.

“Cleanup solvent” means a VOC-containing material used to remove a loosely held uncured (i.e., not dry to the touch) adhesive or sealant from a substrate, or to clean equipment used in applying an adhesive or sealant.

“Computer diskette jacket manufacturing adhesive” means any adhesive intended by the manufacturer to glue the fold-over flaps to the body of a vinyl computer diskette jacket.

“Contact bond adhesive” means an adhesive that: (1) is designed for application to both surfaces to be bonded together, and (2) is allowed to dry before the two surfaces are placed in contact with each other, and (3) forms an immediate bond that is impossible, or difficult, to reposition after both adhesive-coated surfaces are placed in contact with each other, and (4) does not need sustained pressure or clamping of surfaces after the adhesive-coated surfaces have been brought together using sufficient momentary pressure to establish full contact between both surfaces. Contact bond adhesive does not include rubber cements that are primarily intended for use on paper substrates. Contact bond adhesive also does not include vulcanizing fluids that are designed and labeled for tire repair only.

“Cove base” means a flooring trim unit, generally made of vinyl or rubber, having a concave radius on one edge and a convex radius on the opposite edge that is used in forming a junction between the bottom wall course and the floor or to form an inside corner.

“Cove base installation adhesive” means any adhesive intended by the manufacturer to be used for the installation of cove base or wall base on a wall or vertical surface at floor level.

“Cyanoacrylate adhesive” means any adhesive with a cyanoacrylate content of at least 95% by weight.

“Dry wall installation” means the installation of gypsum dry wall to studs or solid surfaces using an adhesive formulated for that purpose.

“Exempt compound” means a compound identified as exempt under the definition of volatile organic compound (VOC) in 7 **DE Admin. Code 1101**.

“Flexible vinyl” means non-rigid polyvinyl chloride plastic with at least five percent by weight plasticizer content.

“Fiberglass” means a material consisting of extremely fine glass fibers.

"Indoor floor covering installation adhesive" means any adhesive intended by the manufacturer for use in the installation of wood flooring, carpet, resilient tile, vinyl tile, vinyl backed carpet, resilient sheet and roll or artificial grass. Adhesives used to install ceramic tile and perimeter bonded sheet flooring with vinyl backing onto a non-porous substrate, such as flexible vinyl, are excluded from this category.

"Laminate" means a product made by bonding together two or more layers of material.

"Low-solids adhesive, sealant or primer" means any product that contains 120 grams or less of solids per liter of material.

"Marine deck sealant" or **"marine deck sealant primer"** means any sealant or sealant primer labeled for application to wooden marine decks.

"Medical equipment manufacturing" means the manufacture of medical devices, such as, but not limited to, catheters, heart valves, blood cardioplegia machines, tracheostomy tubes, blood oxygenators, and cardiotomy reservoirs.

"Metal to urethane/rubber molding or casting adhesive" means any adhesive intended by the manufacturer to bond metal to high density or elastomeric urethane or molded rubber materials, in heater molding or casting processes, to fabricate products such as rollers for computer printers or other paper handling equipment.

"Multipurpose construction adhesive" means any adhesive intended by the manufacturer for use in the installation or repair of various construction materials, including but not limited to drywall, subfloor, panel, fiberglass reinforced plastic (FRP), ceiling tile and acoustical tile.

"Nonmembrane roof installation/repair adhesive" means any adhesive intended by the manufacturer for use in the installation or repair of nonmembrane roofs and that is not intended for the installation of prefabricated single-ply flexible roofing membrane, including, but not limited to, plastic or asphalt roof cement, asphalt roof coating and cold application cement.

"Outdoor floor covering installation adhesive" means any adhesive intended by the manufacturer for use in the installation of floor covering that is not in an enclosure and that is exposed to ambient weather conditions during normal use.

"Panel installation" means the installation of plywood, pre-decorated hardboard (or tileboard), fiberglass reinforced plastic, and similar pre-decorated or non-decorated panels to studs or solid surfaces using an adhesive formulated for that purpose.

"Perimeter bonded sheet flooring installation" means the installation of sheet flooring with vinyl backing onto a nonporous substrate using an adhesive designed to be applied only to a strip of up to four inches wide around the perimeter of the sheet flooring.

"Plastic cement welding adhesive" means any adhesive intended by the manufacturer for use to dissolve the surface of plastic to form a bond between mating surfaces.

"Plastic cement welding adhesive primer" means any primer intended by the manufacturer for use to prepare plastic substrates prior to bonding or welding.

"Plastic foam" means foam constructed of plastics.

"Plasticizer" means a material, such as a high boiling point organic solvent, that is incorporated into a vinyl to increase its flexibility, workability, or distensibility, as determined by ASTM Method D1045-95 (see 4.6.5 of this regulation).

"Plastics" means synthetic materials chemically formed by the polymerization of organic (carbon-based) substances. Plastics are usually compounded with modifiers, extenders, and/or reinforcers and are capable of being molded, extruded, cast into various shapes and films or drawn into filaments.

"Polyvinyl chloride plastic" or **"PVC plastic"** means a polymer of the chlorinated vinyl monomer that contains 57% chlorine.

"Polyvinyl chloride welding adhesive" or **"PVC welding adhesive"** means any adhesive intended by the manufacturer for use in the welding of PVC plastic pipe.

"Porous material" means a substance that has tiny openings, often microscopic, in which fluids may be absorbed or discharged, including, but not limited to, wood, paper and corrugated paperboard.

"Propellant" means a fluid under pressure that expels the contents of a container when a valve is opened.

"Reactive diluent" means a liquid that is a reactive organic compound during application and one in that, through chemical and/or physical reactions, such as polymerization, twenty (20) percent or more of the reactive organic compound becomes an integral part of a finished material.

"Roadway sealant" means any sealant intended by the manufacturer for application to public streets, highways and other surfaces, including but not limited to curbs, berms, driveways and parking lots.

"Rubber" means any natural or manmade rubber substrate, including but not limited to, styrene-butadiene rubber, polychloroprene (neoprene), butyl rubber, nitrile rubber, chlorosulfonated polyethylene and ethylene-propylene-diene terpolymer.

"SCAQMD" means the South Coast Air Quality Management District, a part of the California Air Resources Board, which is responsible for the regulation of air quality in the State of California.

"Sealant primer" means any product intended by the manufacturer for application to a substrate, prior to the application of a sealant, to enhance the bonding surface.

"Sealant" means any material with adhesive properties that is formulated primarily to fill, seal, waterproof or weatherproof gaps or joints between two surfaces. Sealants include sealant primers and caulk.

"Sheet-applied rubber installation" means the process of applying sheet rubber liners by hand to metal or plastic substrates to protect the underlying substrate from corrosion or abrasion. These operations also include laminating sheet rubber to fabric by hand.

"Single-ply roof membrane" means a prefabricated single sheet of rubber, normally ethylene-propylene-diene terpolymer, that is field applied to a building roof using one layer of membrane material.

"Single-ply roof membrane installation and repair adhesive" means any adhesive labeled for use in the installation or repair of single-ply roof membrane. Installation includes, as a minimum, attaching the edge of the membrane to the edge of the roof and applying flashings to vents, pipes and ducts that protrude through the membrane. Repair includes gluing the edges of torn membrane together, attaching a patch over a hole and reapplying flashings to vents, pipes or ducts installed through the membrane.

"Single-ply roof membrane adhesive primer" means any primer labeled for use to clean and promote adhesion of the single-ply roof membrane seams or splices prior to bonding.

"Single-ply roof membrane sealant" means any sealant labeled for application to single-ply roof membrane.

"Solvent" means organic compounds that are used as diluents, thinners, dissolvers, viscosity reducers, cleaning agents or other related uses.

"Structural glazing adhesive" means any adhesive intended by the manufacturer to apply glass, ceramic, metal, stone or composite panels to exterior building frames.

"Subfloor installation" means the installation of subflooring material over floor joists, including the construction of any load bearing joists. Subflooring is covered by a finish surface material.

"Surface preparation solvent" means a solvent used to remove dirt, oil and other contaminants from a substrate prior to the application of a primer, adhesive or sealant.

"Thin metal laminating adhesive" means any adhesive intended by the manufacturer for use in bonding multiple layers of metal to metal or metal to plastic in the production of electronic or magnetic components in which the thickness of the bond line or lines is less than 0.25 mils.

"Tire repair" means a process that includes expanding a hole, tear, fissure or blemish in a tire casing by grinding or gouging, applying adhesive and filling the hole or crevice with rubber.

"Tire tread adhesive" means any adhesive intended by the manufacturer for application to the back of precurse tread rubber and to the casing and cushion rubber. Tire tread adhesive may also be used to seal buffed tire casings to prevent oxidation while the tire is being prepared for a new tread.

"Traffic marking tape" means preformed reflective film intended by the manufacturer for application to public streets, highways and other surfaces, including but not limited to curbs, berms, driveways and parking lots.

"Traffic marking tape adhesive primer" means any primer intended by the manufacturer for application to surfaces prior to installation of traffic marking tape.

"Undersea-based weapons systems components" means the fabrication of parts, assembly of parts or completed units of any portion of a missile launching system used on undersea ships.

"Waterproof resorcinol glue" means a two-part resorcinol-resin-based adhesive designed for applications where the bond line must be resistant to conditions of continuous immersion in fresh or salt water.

4.3 Requirements

4.3.1 Except as provided in 4.3.5 and 4.4 of this regulation, on and after May 1, 2009, no person shall sell, supply or offer for sale in the State of Delaware any adhesive, sealant, adhesive primer or sealant primer manufactured on or after May 1, 2009, or manufacture for sale in the State of Delaware any adhesive, sealant, adhesive primer or sealant primer with a VOC content in excess of the applicable VOC content limits specified in Table 4-1 of this regulation.

4.3.2 Except as provided in 4.3.5 and 4.4 of this regulation, on and after May 1, 2009, no person shall use or apply any adhesive, sealant, adhesive primer or sealant primer within the State of Delaware with a VOC content in excess of the applicable VOC content limits specified in Table 4-1 of this regulation.

4.3.3 The VOC content limits in Table 4-1 of this regulation for "Adhesives Applied by Substrate" shall apply as follows:

4.3.3.1 For any adhesive or sealant subject to a specific VOC content limit for such adhesive or sealant in Table 4-1 of this regulation, such specific limit is applicable rather than any "Adhesives Applied by Substrate" limit; and

4.3.3.2 If an adhesive is used to bond dissimilar substrates together, the applicable "Adhesives Applied by Substrate" limit that provides for the highest VOC content shall be the limit for such use.

4.3.4 Any person subject to 4.0 of this regulation using a surface preparation solvent or a cleanup solvent shall:

4.3.4.1 Except as provided in 4.3.4.2 of this regulation, not use any surface preparation solvent containing VOCs unless the VOC content of such surface preparation solvent is less than 70 grams per liter;

4.3.4.2 Not use any surface preparation solvent containing VOCs in applying single-ply roofing unless the composite vapor pressure, excluding water and exempt compounds, of the surface preparation solvent is equal to or less than 45 mm Hg at 20 degrees Celsius;

4.3.4.3 Except as provided in 4.3.4.4 of this regulation, not use any cleanup solvent containing VOCs for the removal of adhesives, sealants, adhesive primers or sealant primers from surfaces unless the composite vapor pressure of such solvent used is less than 45 mm Hg at 20 degrees Celsius; and

4.3.4.4 Not use any cleanup solvent containing VOCs for the removal of an adhesive, sealant, adhesive primer or sealant primer from the parts of spray application equipment, unless:

4.3.4.4.1 All cleaning is conducted in an enclosed cleaning system, or equivalent cleaning system as determined by the test method identified in 4.6.8 of this regulation;

4.3.4.4.2 Except as provided for in 4.3.4.4.3 of this regulation, only solvent is used with a VOC content of equal to or less than 70 grams of VOC per liter of material, and

4.3.4.4.3 Parts containing dried adhesive may be soaked in a solvent if the composite vapor pressure of the solvent, excluding water and exempt compounds, is equal to or less than 9.5 mm Hg at 20 degrees Celsius, and the parts and solvent are in a closed container that remains closed except when adding parts to or removing parts from the container.

- 4.3.5 A person using or applying an adhesive, sealant, adhesive primer or sealant primer subject to 4.0 of this regulation may comply with 4.3.2 and 4.3.4 of this regulation using add-on air pollution control equipment if such equipment meets the following requirements:
- 4.3.5.1 The VOC emissions from the use or application of all adhesives, sealants, adhesive primers or sealant primers subject to 4.0 of this regulation are reduced by an overall capture and control efficiency of at least 85%, by weight; and
- 4.3.5.2 The requirements of 4.3.5.1 of this regulation, and any monitoring, recordkeeping and reporting that is necessary to make such requirements enforceable as a practicable manner, are included in a permit issued by the Department pursuant to 7 DE Admin. Code 1102.
- 4.3.6 Any person using or applying adhesives, sealants, adhesive primers, sealant primers, surface preparation solvents or clean-up solvents subject to 4.0 of this regulation shall store or dispose of all absorbent materials, such as cloth or paper, which are moistened with adhesives, sealants, primers or solvents, in non-absorbent containers that shall be closed except when placing materials in or removing materials from the container.
- 4.3.7 No person shall solicit, require the use or specify the application of any adhesive, sealant, adhesive primer, sealant primer, surface preparation or clean-up solvent if such use or application results in a violation of the provisions of 4.0 of this regulation. The prohibition of 4.3.7 of this regulation shall apply to all written or oral contracts under which any adhesive, sealant, adhesive primer, sealant primer, surface preparation solvents or clean-up solvent subject to 4.0 of this regulation is to be used at any location in the State of Delaware.

Table 4-1. VOC Content Limits for Adhesives, Sealants, Adhesive Primers, Sealant Primers and Adhesives Applied by Substrate

<u>Adhesive, Sealant, Adhesive Primer or Sealant Primer Category</u>	<u>VOC Content Limit (grams VOC per liter*)</u>
<u>Adhesives</u>	
<u>ABS welding</u>	<u>400</u>
<u>Ceramic tile installation</u>	<u>130</u>
<u>Computer diskette jacket manufacturing</u>	<u>850</u>
<u>Contact bond</u>	<u>250</u>
<u>Cove base installation</u>	<u>150</u>
<u>CPVC welding</u>	<u>490</u>
<u>Indoor floor covering installation</u>	<u>150</u>
<u>Metal to urethane/rubber molding or casting</u>	<u>850</u>
<u>Multipurpose construction</u>	<u>200</u>
<u>Nonmembrane roof installation/repair</u>	<u>300</u>
<u>Other plastic cement welding</u>	<u>510</u>
<u>Outdoor floor covering installation</u>	<u>250</u>
<u>PVC welding</u>	<u>510</u>
<u>Single-ply roof membrane installation/repair</u>	<u>250</u>
<u>Structural glazing</u>	<u>100</u>
<u>Thin metal laminating</u>	<u>780</u>
<u>Tire retread</u>	<u>100</u>
<u>Perimeter bonded sheet vinyl flooring installation</u>	<u>660</u>
<u>Waterproof resorcinol glue</u>	<u>170</u>
<u>Sheet-applied rubber installation</u>	<u>850</u>

<u>Sealants</u>	
<u>Architectural</u>	<u>250</u>
<u>Marine deck</u>	<u>760</u>
<u>Nonmembrane roof installation/repair</u>	<u>300</u>
<u>Roadway</u>	<u>250</u>
<u>Single-ply roof membrane</u>	<u>450</u>
<u>Other</u>	<u>420</u>
<u>Adhesive Primers</u>	
<u>Automotive glass</u>	<u>700</u>
<u>Plastic cement welding</u>	<u>650</u>
<u>Single-ply roof membrane</u>	<u>250</u>
<u>Traffic marking tape</u>	<u>150</u>
<u>Other</u>	<u>250</u>
<u>Sealant Primers</u>	
<u>Non-porous architectural</u>	<u>250</u>
<u>Porous architectural</u>	<u>775</u>
<u>Marine deck</u>	<u>760</u>
<u>Other</u>	<u>750</u>
<u>Adhesive Applied by Substrate</u>	
<u>Flexible vinyl</u>	<u>250</u>
<u>Fiberglass</u>	<u>200</u>
<u>Metal</u>	<u>30</u>
<u>Porous material</u>	<u>120</u>
<u>Rubber</u>	<u>250</u>
<u>Other substrates</u>	<u>250</u>

* The VOC content is determined as the weight of volatile compounds, less water and exempt compounds as specified pursuant to 4.6 of this regulation.

4.4 Exemptions and Exceptions

4.4.1 The requirements of 4.0 of this regulation shall not apply to the following compounds:

- 4.4.1.1 Adhesives, sealants, adhesive primers or sealant primers being tested or evaluated in any research and development, quality assurance or analytical laboratory, provided records are maintained as required in 4.5 of this regulation;
- 4.4.1.2 Adhesives, sealants, adhesive primers and sealant primers that are subject to 2.0 of this regulation;
- 4.4.1.3 Adhesives and sealants that contain less than 20 grams of VOC per liter of adhesive or sealant, less water and less exempt compounds, as applied;
- 4.4.1.4 Adhesives, sealants, adhesive primers and sealant primers that are subject to 7 DE Admin Code 1124
- 4.4.1.5 Cyanoacrylate adhesives; and
- 4.4.1.6 Except for plastic cement welding adhesives and contact adhesives, any adhesive, sealant, adhesive primer or sealant primer that is sold or supplied by the manufacturer or

supplier in containers with a net volume of 16 fluid ounces or less, or a net weight of one pound or less.

4.4.1.7 Contact adhesives that are sold or supplied by the manufacturer or supplier in containers with a net volume of one gallon or less.

4.4.2 The requirements of 4.0 of this regulation shall not apply to the use of adhesives, sealants, adhesive primers, sealant primers, surface preparation and cleanup solvents in the following operations:

4.4.2.1 Tire repair operations, provided the label of the adhesive states "For tire repair only."

4.4.2.2 Assembly, repair and manufacture of aerospace or undersea-based weapon systems;

4.4.2.3 Medical equipment manufacturing;

4.4.2.4 Automobile and light duty truck original equipment manufacture regulated under other VOC limiting regulations by the State of Delaware.

4.4.3 The provisions of 4.0 of this regulation shall not apply if the total VOC emissions from all adhesives, sealants, adhesive primers and sealant primers used at the source are less than 200 pounds per calendar year, or an equivalent volume. Any person claiming exemption pursuant to 4.4.3 of this regulation shall record and maintain monthly operational records sufficient to demonstrate compliance and in accordance with 4.5 of this regulation.

4.4.4 The provisions of 4.3.2 and 4.3.4 of this regulation shall not apply to the use of any adhesives, sealants, adhesive primers, sealant primers, cleanup solvents and surface preparation solvents provided the total volume of noncomplying adhesives, sealants, primers, cleanup and surface preparation solvents applied facility-wide does not exceed 55 gallons per calendar year. Any person claiming exemption pursuant to 4.4.4 of this regulation shall record and maintain monthly operational records sufficient to demonstrate compliance with this exemption and in accordance with 4.5 of this regulation.

4.4.5 The provisions of 4.0 of this regulation shall not apply to a manufacturer or distributor who sells, supplies or offers for sale in the State of Delaware any adhesive, sealant, adhesive primer or sealant primer that does not comply with 4.3.1 of this regulation provided that such manufacturer or distributor makes and keeps records demonstrating:

4.4.5.1 The adhesive, sealant, adhesive primer or sealant primer is intended for shipment and use outside of the State of Delaware; and

4.4.5.2 The manufacturer or distributor has taken reasonable precautions to assure that the adhesive, sealant, adhesive primer or sealant primer is not distributed to or within the State of Delaware.

4.4.6 The provisions of 4.4.5 of this regulation shall not apply to any adhesive, sealant, adhesive primer or sealant primer that is sold, supplied or offered for sale by any person to a retail outlet in the State of Delaware.

4.4.7 The provisions of 4.3.1 of this regulation shall not apply to the sale of any adhesive, sealant, adhesive primer or sealant primer to a person using State of Delaware permitted add-on air pollution control equipment, pursuant to 4.3.5 of this regulation, to comply with the requirements of 4.0 of this regulation.

4.5 Administrative Requirements

4.5.1 Each person subject to 4.0 of this regulation shall maintain records of each adhesive, sealant, adhesive primer, sealant primer cleanup solvent and surface preparation solvent in use and in storage at the facility, including, but not limited to, the following information:

4.5.1.1 A list of each adhesive, sealant, adhesive primer, sealant primer cleanup solvent and surface preparation solvent;

4.5.1.2 A data sheet or material list which provides the material name, manufacturer identification, and material application;

4.5.1.3 Catalysts, reducers or other components used, and the mix ratio;

4.5.1.4 The VOC content of each product as supplied;

- 4.5.1.5 The final VOC content or vapor pressure, as applied; and
4.5.1.6 The monthly volume of each adhesive, sealant, adhesive primer, sealant primer, cleanup or surface preparation solvent used.
- 4.5.2 All records made to determine compliance with 4.0 of this regulation shall be maintained for five (5) years from the date such record is created and shall be made available to the Department within 90 days of a request.
- 4.5.3 For adhesives, sealants, adhesive primers and sealant primers subject to the laboratory testing exemption pursuant to 4.4.1.1 of this regulation, the person conducting the testing shall make and maintain records of all such materials used, including, but not limited to, the product name, the product category of the material or type of application and the VOC content of each material.
- 4.6 Compliance procedures and test methods**
- 4.6.1 Except as provided in 4.6.3, 4.6.4 and 4.6.5 of this regulation, the VOC and solids content of all non-aerosol adhesives, adhesive primers and cleanup solvents shall be determined using U.S. EPA Reference Method 24, as identified in 40 CFR 60, Appendix A, or SCAQMD Method 304 hereby incorporated by reference.
- 4.6.2 The organic content of exempt organic compounds shall be determined using ASTM D4457-85, as applicable, hereby incorporated by reference.
- 4.6.3 The VOC content of any plastic welding cement adhesive or primer shall be determined using SCAQMD Method 316A, hereby incorporated by reference.
- 4.6.4 To determine if a diluent is a reactive diluent, the percent of the reactive organic compound that becomes an integral part of the finished materials shall be determined using SCAQMD Method 316A.
- 4.6.5 The composite vapor pressure of organic compounds in cleaning materials shall be determined by quantifying the amount of each compound in the blend using gas chromatographic analysis (ASTM D 1045-95), hereby incorporated by reference, for organics and ASTM D3792-05, hereby incorporated by reference, for water content, as applicable, and the following equation:

where:

$$Pp_c = \frac{\sum_{i=1}^n (W_i)(VP_i)/Mw_i}{W_w/Mw_w + \sum_{j=1}^m We_j/Mwe_j + \sum_{i=1}^n W_i/Mw_i}$$

(4-1)

- Pp_c = VOC composite partial pressure at 20°C, in mm Hg
W_i = Weight of the "i"th VOC compound, in grams, as determined by ASTM E 260-91
W_w = Weight of water, in grams as determined by ASTM D 3792-05
We_j = Weight of the "j"th exempt compound, in grams, as determined by ASTM D 1045-95
Mw_i = Molecular weight of the "i"th VOC compound, in grams per g-mole, as given in chemical reference literature
Mw_w = Molecular weight of water, 18 grams per g-mole
Mwe_j = Molecular weight of the "j"th exempt compound, in grams per g-mole, as given in chemical reference literature
VP_i = Vapor pressure of the "i"th VOC compound at 20°C, in mm Hg, as determined by 4.6.6 of this regulation

- 4.6.6 The vapor pressure of each single component compound may be determined from ASTM D2879-97, hereby incorporated by reference, or by any method approved by the Department and EPA.
- 4.6.7 If air pollution control equipment is used to meet the requirements of this rule, the owner or operator shall make the following determinations:
- 4.6.7.1 The measurement of capture efficiency shall be conducted and reported in accordance with the EPA Technical Document "Guidelines for Determining Capture Efficiency," issued January 9, 1995, hereby incorporated by reference; and
- 4.6.7.2 The control efficiency shall be determined in accordance with U.S. EPA Methods 25, 25A, 25B or CARB Method 100, hereby incorporated by reference.
- 4.6.8 The active and passive solvent losses from spray gun cleaning systems shall be determined using SCAQMD's "General Test Method for Determining Solvent Losses from Spray Gun Cleaning Systems," dated October 3, 1989, hereby incorporated by reference. The test solvent for this determination shall be any lacquer thinner with a minimum vapor pressure of 105 mm of Hg at 20 degrees Celsius, and the minimum test temperature shall be 15 degrees Celsius.
- 4.6.9 For adhesives that do not contain reactive diluents, grams of VOC per liter of adhesive, less water and exempt compounds, shall be calculated according to the following equation:

$$VOC, \text{ grams per liter of adhesive} = \frac{Ws - Ww - We}{Vm - Vw - Ve}$$

(4-2)

where

- Ws = weight of volatile compounds, in grams
Ww = weight of water, in grams
We = weight of exempt compounds, in grams
Vm = volume of material, in liters
Vw = volume of water, in liters
Ve = volume of exempt compounds, in liters

- 4.6.10 For adhesives that contain reactive diluents, the VOC content of the adhesive is determined after curing. The grams of VOC per liter of adhesive, less water and exempt compounds, shall be calculated according to the following equation:

$$VOC, \text{ grams per liter of adhesive} = \frac{Wrs - Wrw - Wre}{Vrm - Vrw - Vre}$$

(4-3)

where

- Wrs = weight of volatile compounds not consumed during curing, in grams
Wrw = weight of water not consumed during curing, in grams
Wre = weight of exempt compounds not consumed during curing, in grams
Vrm = volume of material not consumed during curing, in liters
Vrw = volume of water not consumed during curing, in liters
Vre = volume of exempt compounds not consumed during curing, in liters

- 4.6.11 Grams of VOC per liter of material shall be calculated according to the following equation:

$$VOC, \text{ grams per liter of materials} = \frac{Ws - Ww - We}{Vm}$$

(4-4)

where

Ws = weight of volatile compounds, in grams

Ww = weight of water, in grams

We = weight of exempt compounds, in grams

Vm = volume of material, in liters

4.6.12 Percent VOC by weight shall be calculated according to the following equation:

$$\% VOC \text{ by weight} = \frac{Wv}{W} \times 100$$

(4-5)

where

Wv = weight of VOCs in grams

W = weight of material in grams

4.7 Container labeling. Each manufacturer of an adhesive, sealant, adhesive primer or sealant primer subject to 4.0 of this regulation shall display the following information on the product container or label:

- 4.7.1 A statement of the manufacturer's recommendation regarding thinning, reducing, or mixing of the product, except that:
 - 4.7.1.1 This requirement does not apply to the thinning of a product with water; and
 - 4.7.1.2 If thinning of the product prior to use is not necessary, the recommendation must specify that the product is to be applied without thinning;
- 4.7.2 The maximum or the actual VOC content of the product in accordance with 4.6 of this regulation, as supplied, displayed in grams of VOC per liter of product; and
- 4.7.3 The maximum or the actual VOC content of the product in accordance with 4.6 of this regulation, which includes the manufacturer's maximum recommendation for thinning, as applied, displayed in grams of VOC per liter of product.

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