

PROPOSED AMENDMENTS TO THE RULES OF THE
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION
RELATING TO AIR QUALITY, CHAPTER 391-3-1

The Rules of the Department of Natural Resources, Chapter 391-3-1, Air Quality Control are hereby amended, added to, repealed in part, revised, as hereinafter explicitly set forth in the attached amendments, additions, partial repeals, and revisions for specific rules, or such subdivisions thereof as may be indicated.

[Note: Underlined text is proposed to be added. Lined-through text is proposed for deletion.]

Rule 391-3-1-.01(nnnn), “Procedures for Testing and Monitoring Sources of Air Pollutants,” is amended to read as follows:

(nnnn) “Procedures for Testing and Monitoring Sources of Air Pollutants” or “PTM” means the Georgia Department of Natural Resources **Procedures for Testing and Monitoring Sources of Air Pollutants** dated ~~February 1, 2011~~ October 1, 2011.

Rule 391-3-1-.02(2)(a)6., “VOC Emission Standards, Exemptions, Area Designations, Compliance Schedules and Compliance Determinations,” is being amended to read as follows:

6. VOC Emission Standards, Exemptions, Area Designations, Compliance Schedules and Compliance Determinations

(i) Exemptions and Area Designations.

(I) Sources located outside Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding, and Rockdale counties whose potential emissions of volatile organic compounds are not more than 100 tons per year shall not be subject to subparagraphs ~~(t)(u), (v), (x), (aa) through (ff)~~ (u), (v), (x), (aa) through (ff) [inclusive], (hh), (kk), ~~through (ll), (nn)~~ [inclusive], and (qq) of this section 391-3-1-.02(2).

(II) Sources used exclusively for chemical or physical analysis or determination of product quality and commercial acceptance shall not be subject to subsections (t) through (ff) [inclusive], (hh) through (nn) [inclusive], (qq), and (tt) of this section 391-3-1-.02(2), provided:

I. The operation of the source is not an integral part of the production process; and provided;

II. The emissions from the source do not exceed 800 pounds in any calendar month; and provided;

III. The exemption from such source is approved in writing by the Director.

(III) Sources located within Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding, or Rockdale counties whose actual emissions of volatile organic compounds are less than 15 pounds per day shall not be subject to subsections ~~(t)~~(u), (v), (x), (aa) through (ff) [inclusive], ~~(ii) through (kk)~~, ~~(ll)~~ [inclusive], and (qq) of this section 391-3-1-.02(2).

(IV) Coatings, inks and other VOC-containing materials in use at sources of VOC emissions subject to any limitations or requirements of subsections (t) through (aa) [inclusive], (ii), (jj), (mm), and (tt) of this section 391-3-1.02(2) shall not be subject to any requirements of such subsections, provided the source's total aggregate use of such materials is not in excess of 55 gallons per year and such exemption is approved in writing by the Division.

(ii) Compliance Schedules.

(I) All sources of VOC emissions subject to any limitation or requirement of, or under, section 391-3-1-.02(2) prior to the effective date of this amended Rule 391-3-1-.02, shall be in compliance or on an approved compliance schedule.

(iii) Compliance Determinations.

(I) Compliance determinations for coatings expressed as pounds of VOC per gallon of coating, excluding water, shall treat organic compounds that are not defined as VOCs as water for purposes of calculating the "excluding water" part of the coating composition.

Rule 391-3-1-.02(2)(t) "VOC Emissions from Automobile and Light-Duty Truck Manufacturing," is being amended to read as follows:

(t) VOC Emissions from Automobile and Light-Duty Truck Manufacturing.

1. No person shall cause, let, permit, suffer or allow the emissions of VOC from automobile and/or light-duty truck manufacturing facilities to exceed:

(i) 1.2 pounds of VOC per gallon of coating excluding water, as a monthly weighted average, from each electrophoretic applied prime operation;

(ii) 15.1 pounds of VOC per gallon of applied coating solids, as a daily weighted average, from each spray prime operation;

(iii) 15.1 pounds of VOC per gallon of applied coating solids, as a daily weighted average, from each topcoat operation;

(iv) 4.8 pounds of VOC per gallon of coating delivered to the coating applicator from each final repair operation. If any coating delivered to the coating applicator contains more than 4.8 pounds of VOC per gallon of coating, the limit shall be 13.8 pounds of VOC per gallon of coating solids sprayed, as a daily weighted average.

- (v) 3.5 pounds of VOC per gallon of sealer, excluding water, delivered to an applicator that applies sealers in amounts less than 25,000 gallons during a 12 consecutive month period;
- (vi) 1.0 pounds of VOC per gallon of sealer, excluding water, delivered to a coating applicator that applies sealers in amounts greater than 25,000 gallons during a 12 consecutive month period;
- (vii) 3.5 pounds of VOC per gallon of adhesive, excluding water, delivered to an applicator that applies adhesives, except body glass adhesives;
- (viii) 6.9 pounds of VOC per gallon of cleaner, excluding water, delivered to an applicator that applies cleaner to the edge of body glass prior to priming;
- (ix) 5.5 pounds of VOC per gallon of primer, excluding water, delivered to an applicator that applies primer to the body glass or to the body to prepare the glass and body for bonding;
- (x) 1.0 pounds of VOC per gallon of adhesive, excluding water, delivered to an applicator that applies adhesive to bond body glass to the body;
- (xi) 4.4 pounds of VOC per gallon of coating delivered to any applicator that applies clear coating to fascias. No coating may be used that exceeds this limit;
- (xii) 4.4 pounds of VOC per gallon of coating delivered to any applicator that applies base coat to fascias, on a daily weighted average basis;
- (xiii) 3.5 pounds of VOC per gallon of material, excluding water, for all other materials not subject to some other emission limitation stated in this paragraph.

2. No person shall cause, let, permit, suffer or allow the emissions of VOC from automobile and/or light-duty truck manufacturing facilities to exceed:

(i) 0.7 pounds of VOC per gallon of coating solids applied, as a monthly weighted average, from each electrodeposition primer (EDP) operation when the solids turnover ratio is greater than or equal to 0.16. For purposes of this subsection an EDP operation includes application area, spray/rinse stations, and curing oven.

(ii) Electrodeposition Primer Operation: the value calculated by the following formula, as a monthly weighted average, from each electrodeposition primer (EDP) operation when the solids turnover ratio is less than 0.160 and greater than or equal to 0.040:

(l) pounds of VOC per gallon of coating solids applied

$$= \frac{(8.34 \text{ lb / gal})(0.084)(350^{0.160 - R_T})}{1}$$

where R_T = Solids Turnover Ratio

(iii) 12.0 pounds of VOC per gallon of deposited solids, as a daily weighted average basis from each of the following: primer-surfacer operation; topcoat operation; combined primer-surfacer and topcoat operations. For purposes of this subsection each operation includes application area, flash-off area, and oven.

(iv) 4.8 pounds of VOC per gallon of coating, less water and less exempt solvents, as a daily weighted average, from each final repair operation.

(v) 3.5 pounds of VOC per gallon of sealer, excluding water, delivered to an applicator that applies sealers in amounts less than 25,000 gallons during a 12 consecutive-month period;

(vi) 1.0 pounds of VOC per gallon of sealer, excluding water, delivered to a coating applicator that applies sealers in amounts greater than 25,000 gallons during a 12 consecutive-month period;

(vii) 250 grams of VOC per liter of adhesive (2.08 lb/gallon), excluding water, delivered to an applicator that applies adhesives, except body glass adhesives and weatherstrip adhesives;

(viii) 1.0 pounds of VOC per gallon of adhesive, excluding water, delivered to an applicator that applies adhesive to bond body glass to the body;

(ix) 6.9 pounds of VOC per gallon of cleaner, excluding water, delivered to an applicator that applies cleaner to the edge of body glass prior to priming;

(x) 5.5 pounds of VOC per gallon of primer, excluding water, delivered to an applicator that applies glass bonding primer to the body glass or to the body to prepare the glass and body for bonding;

(xi) 4.4 pounds of VOC per gallon of coating delivered to any applicator that applies clear coating to fascias. No coating may be used that exceeds this limit;

(xii) 4.4 pounds of VOC per gallon of coating delivered to any applicator that applies base coat to fascias, on a daily weighted average basis;

(xiii) 200 grams of VOC per liter of coating (1.669 lb/gal), excluding water, delivered to an applicator that applies one of the following: gasket/gasket sealing material; bedliner;

(xiv) 3.5 pounds of VOC per gallon of material, excluding water, for all other materials not subject to some other emission limitation stated in this paragraph. This includes but is not limited to coatings such as cavity wax, deadener, underbody coating, interior coating, weatherstrip adhesive, and/or lubricating wax/compound.

2.3. The emission limits stated in paragraphs 1. and 2. shall be achieved by the application of low solvent technology or a system demonstrated to have equivalent control efficiency on the basis of pounds of VOC per gallon of solids.

3.4. No person shall cause, let, permit, suffer or allow the emissions of VOC from the use of wipe-off solvents to exceed 1.0 pounds per unit of production as a rolling, 12-month average. Wipe-off solvents shall include those solvents used to clean dirt, grease, excess sealer and

adhesive, or other foreign matter from the car body in preparation for painting or other production-related operation.

~~4. 5.~~ No person shall cause, let, permit, suffer or allow the emission of VOCs from flush or clean paint application systems including paint lines, tanks and applicators, unless such solvents are captured to the maximum degree feasible by being directed into containers that prevent evaporation into the atmosphere.

~~5. 6.~~ No person shall store solvents or waste solvents in drums, pails, cans or other containers unless such containers have air-tight covers which are in place at all times when materials are not being transferred into or out of the container.

~~6. 7.~~ No person shall cause, let, permit, suffer or allow the emissions of VOC from the cleaning of oil and grease stains on the body shop floor to exceed 0.1 pounds per unit of production.

~~7. 8.~~ For the purpose of this subsection; the following definitions apply:

(i) "Adhesive" means any chemical substance that is applied for the purpose of bonding two surfaces together without regard to the substrates involved other than by mechanical means.

(ii) "Automobile" means all passenger cars or passenger car derivatives capable of seating a maximum of 12 or fewer passengers;

(iii) "Bedliner" means a multi-component coating, used at an automobile or light-duty truck assembly coating facility, applied to a cargo bed after the application of topcoat and outside of the topcoat operation to provide additional durability and chip resistance.

(iv) "Cavity wax" means a coating, used at an automobile or light-duty truck assembly coating facility, applied into the cavities of the vehicle primarily for the purpose of enhancing corrosion protection.

(v) "Deadener" means a coating, used at an automobile or light-duty truck assembly coating facility, applied to selected vehicle surfaces primarily for the purpose of reducing the sound of road noise in the passenger compartment.

~~(vi) "Topcoat Operation" means the topcoat spray booth, flash-off area and bake oven(s) which are used to apply and dry or cure the final coating(s) on the components of automobile and light-duty truck bodies;~~

~~(vii) "Final Repair Operation" means the final repair spray booth, flash-off area and bake oven(s) which are used to apply and dry or cure the final repair coating(s) on automobile and light-duty truck bodies after they are fully assembled.~~

(vi) "Electrodeposition primer" means a process of applying a protective, corrosion-resistant waterborne primer on exterior and interior surfaces that provides thorough coverage of recessed areas. It is a dip coating method that uses an electrical field to apply or deposit the conductive coating onto the part. The object being painted acts as an electrode that is oppositely charged

from the particles of paint in the dip tank. Also referred to as E-coat, Uni-Prime, and ELPO Primer.

~~(iv)~~ (vii) “Electrophoretic Applied Prime Operation” means the dip tank flash-off area and bake oven(s) which are used to apply and dry or cure the initial coating on components of automobile and light-duty truck bodies by submerging the body components in a coating bath with an electrical potential difference between the components and the bath, and drying or curing such coating on the components in bake oven(s);

(viii) “Final repair” means the operations performed and coating(s) applied to completely-assembled motor vehicles or to parts that are not yet on a completely assembled vehicle to correct damage or imperfections in the coating. The curing of the coatings applied in these operations is accomplished at a lower temperature than that used for curing primer-surfacer and topcoat. This lower temperature cure avoids the need to send parts that are not yet on a completely assembled vehicle through the same type of curing process used for primer-surfacer and topcoat and is necessary to protect heat sensitive components on completely assembled vehicles.

(ix) “Gasket/gasket sealing material” means a fluid, used at an automobile or light-duty truck assembly coating facility, applied to coat a gasket or replace and perform the same function as a gasket. Automobile and light-duty truck gasket/gasket sealing material includes room temperature vulcanization (RTV) seal material.

(x) “Glass bonding primer” means a primer, used at an automobile or light-duty truck assembly coating facility, applied to windshield or other glass, or to body openings, to prepare the glass or body opening for the application of glass bonding adhesives or the installation of adhesive bonded glass. Automobile and light-duty truck glass bonding primer includes glass bonding/cleaning primers that perform both functions (cleaning and priming of the windshield or other glass, or body openings) prior to the application of adhesive or the installation of adhesive bonded glass.

(xi) “In-line repair” means the operation performed and coating(s) applied to correct damage or imperfections in the topcoat on parts that are not yet on a completely assembled vehicle. The curing of the coatings applied in these operations is accomplished at essentially the same temperature as that used for curing the previously applied topcoat. Also referred to as high bake repair or high bake reprocess. In-line repair is considered part of the topcoat operation.

(xii) “Interior coating” means a coating, used at an automobile or light-duty truck assembly coating facility outside of the primer-surfacer and topcoat operations, applied to the trunk interior to provide chip protection.

~~(iii)~~ (xiii) “Light-Duty Trucks” means any motor vehicles rated 8500 pounds gross weight or less which are designed primarily for the purpose of transportation or are derivatives of such vehicles;

(xiv) “Lubricating wax/compound” means a protective lubricating material, used at an automobile or light-duty truck assembly coating facility, applied to vehicle hubs and hinges.

~~(j)~~ (xv) “Manufacturing Facility” means a facility which assembles twenty (20) or more automobiles or light-duty trucks per day (either separately or in combination) ready for sale to vehicle dealers. Customizers, body shops and other repainters are not part of this definition;

(xvi) “Primer-surfacer” means an intermediate protective coating applied over the electrodeposition primer and under the topcoat. Primer-surfacer provides adhesion, protection, and appearance properties to the total finish. Primer-surfacer may also be called guide coat or surfacer. Primer-surfacer operations may include other coating(s) (e.g., anti-chip, lower-body anti-chip, chip-resistant edge primer, spot primer, blackout, deadener, interior color, basecoat replacement coating, etc.) that is (are) applied in the same spray booth(s).

(xvii) “Sealer” means a high viscosity material, used at an automobile or light-duty truck assembly coating facility, generally, but not always, applied in the paint shop after the body has received an electrodeposition primer coating and before the application of subsequent coatings (e.g., primer-surfacer). The primary purpose of automobile and light-duty truck sealer is to fill body joints completely so that there is no intrusion of water, gases or corrosive materials into the passenger area of the body compartment. Such materials are also referred to as sealant, sealant primer, or caulk.

(xviii) “Solids turnover ratio (R_T)” means the ratio of total volume of coating solids that is added to the EDP system in a calendar month divided by the total volume design capacity of the EDP system.

~~(k)~~ (xix) “Spray Prime Operation” means the spray prime booth, flash-off area and bake oven(s) which are used to apply and dry or cure a surface coating between the electrophoretic applied prime and topcoat operations on the components of automobile and light-duty truck bodies;

(xx) “Topcoat” means the final coating system applied to provide the final color and/or a protective finish. The topcoat may be a monocoat color or basecoat/clearcoat system. In-line repair and two-tone are part of topcoat. Topcoat operations may include other coating(s) (e.g., blackout, interior color, etc.) that is (are) applied in the same spray booth(s).

(xxi) “Underbody coating” means a coating, used at an automobile or light-duty truck assembly coating facility, applied to the undercarriage or firewall to prevent corrosion and/or provide chip protection.

(xxii) “Weatherstrip adhesive” means an adhesive, used at an automobile or light-duty truck assembly coating facility, applied to weatherstripping materials for the purpose of bonding the weatherstrip material to the surface of the vehicle.

9. Applicability: Prior to January 1, 2015, the requirements of this subparagraph (t) shall apply to facilities at which actual emissions of volatile organic compounds from the use of automobile and light-duty truck assembly coatings equal or exceed 2.7 tons per 12-month rolling period and are located in Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding, and Rockdale Counties as follows:

(i) All applicable facilities shall comply with the provisions of subparagraphs 1, 3, 4, 5, 6, 7, and 8.

10. Applicability. Prior to January 1, 2015, the requirements of this subparagraph (t) shall apply to facilities at which the potential emissions of volatile organic compounds from the use of automobile and light-duty truck assembly coatings equal or exceed 100 tons per year and are located outside the counties of Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding, and Rockdale as follows:

(i) All applicable facilities shall comply with the provisions of subparagraphs 1, 3, 4, 5, 6, 7, and 8.

11. Applicability: On and after January 1, 2015, the requirements of this subparagraph (t) shall apply to facilities at which actual emissions of volatile organic compounds from the use of automobile and light-duty truck assembly coatings equal or exceed 2.7 tons per 12-month rolling period and are located in Barrow, Bartow, Carroll, Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Hall, Henry, Newton, Paulding, Rockdale, Spalding, and Walton Counties as follows:

(i) All applicable facilities shall comply with the provisions of subparagraphs 2, 3, 4, 5, 6, 7, and 8.

(ii) Any physical or operational changes that are necessary to comply with the provisions specified in subparagraph 2 are subject to the compliance schedule specified in subparagraph 14.

12. On and after January 1, 2015, the requirements of this subparagraph (t) shall apply to facilities at which the potential emissions of volatile organic compounds from the use of automobile and light-duty truck assembly coatings equal or exceed 100 tons per year and are located outside the counties of Barrow, Bartow, Carroll, Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Hall, Henry, Newton, Paulding, Rockdale, Spalding and Walton as follows:

(i) All applicable facilities shall comply with the provisions of subparagraphs 1, 3, 4, 5, 6, 7, and 8.

13. Applicability: The requirements of subparagraphs 11. and 12. will no longer be applicable by the compliance deadlines if the counties specified in those subparagraphs are re-designated to attainment for the 1997 National Ambient Air Quality Standard for ozone prior to January 1, 2015 and such counties continue to maintain that Standard thereafter. Instead, the provisions of subparagraphs 9. and 10. will continue to apply on and after January 1, 2015. In the event the 1997 National Ambient Air Quality Standard for ozone is violated in the specified counties, the requirements of subparagraphs 11. and 12. will only be reinstated if the Director determines that the measure is necessary to meet the requirements of the contingency plan.

14. Compliance Schedule:

(i) An application for a permit to construct and operate volatile organic compound emission control systems and/or modifications of process and/or coatings used must be submitted to the Division no later than **July 1, 2014.**

(ii) On-site of construction of emission control systems and/or modification of process or coatings must be completed by **November 1, 2014.**

(iii) Full compliance with the applicable requirements specified in subparagraph 2 must be completed before **January 1, 2015.**

Rule 391-3-1-.02(2)(w) “VOC Emissions from Paper Coating,” is being amended to read as follows:

(w) VOC Emissions from Paper Coating.

1. No person shall cause, let, permit, suffer, or allow the emissions of VOC from paper coating to exceed:

(i) 2.9 pounds per gallon of coating, excluding water, delivered to the coating applicator from a paper coating line. This limit shall apply to roll, knife, rotogravure and saturation coater(s) and drying oven(s) of paper coating. If any coating delivered to the coating applicator contains more than 2.9 pounds VOC per gallon, the solids equivalent limit shall be 4.79 pounds VOC per gallon of coating solids delivered to the coating applicator.

2. The emission limits in ~~subsection~~ subparagraph 1. shall be achieved by:

(i) the application of low solvent coating technology where each and every coating meets the limit of 2.9 pounds VOC per gallon of coating, excluding water, ~~stated in paragraph 1. of this subsection;~~ or

(ii) the application of low solvent coating technology where the 24-hour weighted average of all coatings on a single coating line or operation meets the solids equivalent limit of 4.79 pounds VOC per gallon of coating solids, ~~stated in paragraph 1. of this subsection;~~ averaging across lines is not allowed; or

(iii) control equipment, including but not limited to incineration, carbon adsorption and condensation, with a capture system approved by the Director, provided that 90 percent of the non-methane volatile organic compounds which enter the control equipment are recovered or destroyed, and that overall VOC emissions do not exceed the solids equivalent limit of 4.79 pounds VOC per gallon of coating solids ~~stated in paragraph 1. of this subsection.~~

~~3. For the purpose of this subsection, the following definitions apply:~~

~~(i) “Knife Coating” means the application of a coating material to a substrate by means of drawing the substrate beneath a knife that spreads the coating evenly over the full width of the substrate;~~

~~(ii) “Paper Coating” means the application of a coating on paper and pressure sensitive tapes, including plastic film and metallic foil, regardless of substrate, in which the coating is distributed uniformly across the web;~~

(iii) “Roll Coating” means the application of a coating material to a substrate by means of hard rubber or steel rolls;

(iv) “Rotogravure Coating” means the application of a coating material to a substrate by means of a roll coating technique in which the pattern to be applied is etched on the coating roll. The coating material is picked up in these recessed areas and is transferred to the substrate.

3. No person shall cause, let, permit, suffer, or allow the emissions of VOC from paper, film and foil coating unless:

(i) VOC emission reduction equipment with an overall VOC control efficiency is 90 percent for each coating line is installed and operated; or

(ii) VOC emissions are less than 0.08 pounds per pound of coating for each coating line except pressure sensitive tape and label coating; or

(ii) VOC emissions are less than 0.40 pounds per pound of solids applied for each coating line except pressure sensitive tape and label coating.

4. No person shall cause, let, permit, suffer, or allow the emissions of VOC from pressure sensitive tape and label coating unless:

(i) VOC emission reduction equipment with an overall VOC control efficiency is 90 percent for each coating line is installed and operated; or

(ii) VOC emissions are less than 0.067 pounds per pound of coating for each coating line; or

(ii) VOC emissions are less than 0.20 pounds per pound of solids applied for each coating line.

5. Each owner or operator of a facility that coats paper, film or foil including pressure sensitive tape and label coating shall comply with the following housekeeping requirements for any affected cleaning operation:

(i) store all VOC-containing cleaning materials and used shop towels in closed containers;

(ii) ensure that storage containers used for VOC-containing cleaning materials are kept closed at all times except when depositing or removing these materials;

(iii) minimize spills of VOC-containing cleaning materials;

(iv) convey VOC-containing cleaning materials from one location to another in closed containers or pipes; and

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

6. For the purpose of this subparagraph, the following definitions apply:

(i) "Knife Coating" means the application of a coating material to a substrate by means of drawing the substrate beneath a knife that spreads the coating evenly over the full width of the substrate;

(ii) "Paper Coating" means the application of a coating on paper and pressure sensitive tapes, including plastic film and metallic foil, regardless of substrate, in which the coating is distributed uniformly across the web;

(iii) "Roll Coating" means the application of a coating material to a substrate by means of hard rubber or steel rolls;

(iv) "Rotogravure Coating" means the application of a coating material to a substrate by means of a roll coating technique in which the pattern to be applied is etched on the coating roll. The coating material is picked up in these recessed areas and is transferred to the substrate.

7. Applicability. Prior to January 1, 2015, the requirements of this subparagraph (w) shall apply to facilities at which the actual emissions of volatile organic compounds from paper, film, and foil coating, including pressure sensitive tape and label coating, equal or exceed 15 pounds per day and are located in Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding, and Rockdale Counties as follows:

(i) All applicable facilities shall comply with the provisions of subparagraphs 1., 2., and 6.

8. Applicability. Prior to January 1, 2015, the requirements of this subparagraph (w) shall apply to facilities at which the potential emissions of volatile organic compounds from paper, film, and foil coating, including pressure sensitive tape and label coating, equal or exceed 100 tons per year and are located outside the counties of Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding, and Rockdale Counties as follows:

(i) All applicable facilities shall comply with the provisions of subparagraphs 1., 2., and 6

9. Applicability. On and after January 1, 2015, the requirements of this Subparagraph (w) shall apply to facilities at which actual emissions of volatile organic compounds from paper, film, and foil coating, including pressure sensitive tape and label coating, equal or exceed 15 pounds per day (or 2.7 tons per 12-month rolling period) for facilities located in Barrow, Bartow, Carroll, Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Hall, Henry, Newton, Paulding, Rockdale, Spalding, and Walton Counties as follows:

(i) All applicable facilities shall comply with the provisions of subparagraphs 5. and 6.

(ii) Individual surface coating lines that have potential emissions of volatile organic compounds from paper, film, and foil coating, including pressure sensitive tape and label coating, that equal or exceed 25 tons per year shall comply with the provisions of subparagraphs 3. and 4.

(iii) Individual surface coating lines that have potential emissions of volatile organic compounds from paper, film, and foil coating, including pressure sensitive tape and label coating, that do not equal or exceed 25 tons per year and are located in Cherokee, Clayton, Cobb, Coweta, DeKalb,

Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding, or Rockdale County shall comply with the provisions of subparagraphs 1. and 2.

(iv) Individual surface coating lines that have potential emissions of volatile organic compounds from paper, film, and foil coating, including pressure sensitive tape and label coating, that do not equal or exceed 25 tons per year but are located at facilities that have potential emissions of volatile organic compounds from paper coating that equal or exceed 100 tons per year and are located in Barrow, Bartow, Carroll, Hall, Newton, Spalding, or Walton County shall comply with the provisions of subparagraphs 1. and 2.

(v) Any physical or operational changes that are necessary to comply with the provisions specified in subparagraphs 3., 4., or 5. are subject to the compliance schedule specified in subparagraph 12.

10. Applicability. On and after January 1, 2015, the requirements of this subparagraph (w) shall apply to facilities at which potential emissions of volatile organic compounds from paper, film, and foil coating, including pressure sensitive tape and label coating, equal or exceed 100 tons per year and are located outside of counties of Barrow, Bartow, Carroll, Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Hall, Henry, Newton, Paulding, Rockdale, Spalding, and Walton Counties as follows:

(i) All applicable facilities shall comply with the provisions of subparagraphs 1., 2., and 6.

11. Applicability. The requirements of subparagraphs 9. and 10. will no longer be applicable by the compliance deadlines if the counties specified in those subparagraphs are re-designated to attainment for the 1997 National Ambient Air Quality Standard for ozone prior to January 1, 2015 and such counties continue to maintain that Standard thereafter. Instead, the provisions of subparagraphs 7. and 8. will continue to apply on and after January 1, 2015. In the event the 1997 National Ambient Air Quality Standard for ozone is violated in the specified counties, the requirements of subparagraphs 9. and 10. will only be reinstated if the Director determines that the measure is necessary to meet the requirements of the contingency plan.

12. Compliance schedule.

(i) An application for a permit to construct and operate volatile organic compound emission control systems and/or modifications of process and/or coatings used must be submitted to the Division no later than **July 1, 2014.**

(ii) On-site of construction of emission control systems and/or modification of process or coatings must be completed by **November 1, 2014.**

(iii) Full compliance with the applicable requirements of subparagraphs 3., 4., and 5. must be completed before **January 1, 2015.**

Rule 391-3-1-.02(2)(y) “VOC Emissions from Metal Furniture Coating,” is being amended to read as follows:

(y) VOC Emissions from Metal Furniture Coating.

1. No person shall cause, let, permit, suffer, or allow the emissions of VOC from metal furniture coating operations to exceed:

(i) 3.0 pounds per gallon of coating, excluding water, delivered to the coating applicator from prime and topcoat or single coat operations. If any coating delivered to the coating applicator contains more than 3.0 pounds VOC per gallon, the solids equivalent limit shall be 5.06 pounds VOC per gallon of coating solids delivered to the coating applicator.

(ii) The emission limit in this subparagraph shall apply to the application area(s), flashoff area(s) and oven(s) of metal furniture coating lines involved in prime and topcoat or single coat operations.

2. The emission limits in ~~subsection~~ subparagraph 1. shall be achieved by:

(i) the application of low solvent coating technology where each and every coating meets the limit of 3.0 pounds VOC per gallon of coating, excluding water, ~~stated in paragraph 1. of this subsection;~~ or

(ii) the application of low solvent coating technology where the 24-hour or monthly weighted average of all coatings on a single coating line or operation meets the solids equivalent limit of 5.06 pounds VOC-per-gallon of coating solids, ~~stated in paragraph 1. of this subsection~~ (averaging across lines is not allowed); or

(iii) control equipment, including but not limited to incineration, carbon adsorption and condensation, with a capture system approved by the Director, provided that 90 percent of the nonmethane volatile organic compounds which enter the control equipment are recovered or destroyed, and that overall VOC emissions do not exceed the solids equivalent limit of 5.06 pounds VOC per gallon of coating solids ~~stated in paragraph 1. of this subsection.~~

~~3. For the purpose of this subsection, the following definitions apply:~~

~~(i) "Application Area" means the area where the coating is applied by spraying, dipping or flow coating techniques;~~

~~(ii) "Metal Furniture Coating" means the surface coating of any furniture made of metal or any metal part which will be assembled with other metal wood, fabric, plastic or glass parts to form a furniture piece.~~

3. No person shall cause, let, permit, suffer, or allow the emissions of VOC from metal furniture coating operations for baked coatings to exceed:

(i) 2.3 pounds per gallon of coating, excluding water, delivered to the coating applicator from general one-component, and general multi-component coatings. If any coating delivered to the coating applicator contains more than 2.3 pounds VOC per gallon, the solids equivalent limit shall be 3.3 pounds VOC per gallon of coating solids as applied.

(ii) 3.0 pounds per gallon of coating, excluding water, delivered to the coating applicator from extreme high gloss, extreme performance, heat resistant, metallic, solar absorbent and

pretreatment coatings. If any coating delivered to the coating applicator contains more than 3.0 pounds VOC per gallon, the solids equivalent limit shall be 5.06 pounds VOC per gallon of coating solids as applied.

4. No person shall cause, let, permit, suffer, or allow the emissions of VOC from metal furniture coating operations for air-dried coatings to exceed:

(i) 2.3 pounds per gallon of coating, excluding water, delivered to the coating applicator from general one-component coatings. If any coating contains more than 2.3 pounds VOC per gallon, the solids equivalent limit shall be 3.3 pounds VOC per gallon of coating solids as applied.

(ii) 2.8 pounds per gallon of coating, excluding water, delivered to the coating applicator from general multi-component, and extreme high gloss coatings. If any coating delivered to the coating applicator contains more than 2.8 pounds VOC per gallon, the solids equivalent limit shall be 4.5 pounds VOC per gallon of coating solids as applied.

(ii) 3.0 pounds per gallon of coating, excluding water, delivered to the coating applicator from extreme performance, heat resistant, metallic, solar absorbent and pretreatment coatings. If any coating delivered to the coating applicator contains more than 3.0 pounds VOC per gallon, the solids equivalent limit shall be 5.06 pounds VOC per gallon of coating solids as applied.

5. Each owner or operator of a facility that coats metal furniture shall ensure that all coating application systems utilize one or more of the application techniques stated below:

(i) Electrostatic spray application;

(ii) High volume low pressure (HVLP) spraying;

(iii) Flow/curtain application;

(iv) Roll coating;

(v) Dip coat application including electrodeposition;

(vi) Brush coat;

(vii) Airless spray;

(viii) Air-assisted airless spray; or

(ix) Other coating application methods that achieve transfer efficiency equivalent to HVLP or electrostatic spray application methods, as determined by the Director.

6. Each owner or operator of a facility that coats metal furniture shall comply with the following work practice standards:

(i) store all VOC-containing coatings, thinners, and coating-related waste materials in closed containers;

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

(iii) minimize spills of VOC-containing coatings, thinners, and coating-related waste materials; and

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

7. Each owner or operator of a facility that coats metal furniture shall comply with the following housekeeping requirements for any affected cleaning operation:

(i) store all VOC-containing cleaning materials and used shop towels in closed containers;

(ii) ensure that storage containers used for VOC-containing cleaning materials are kept closed at all times except when depositing or removing these materials;

(iii) minimize spills of VOC-containing cleaning materials;

(iv) convey VOC-containing cleaning materials from one location to another in closed containers or pipes; and

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

8. The VOC limits specified in this subparagraphs 3. and 4. do not apply to the following types of metal furniture coatings and/or coating operations:

(i) Touch-up and repair coatings;

(ii) Stencil coatings;

(iii) Safety-indicating coatings;

(iv) Solid-film lubricants;

(v) Electric-insulating and thermal-conducting coatings; and

(vi) Coating application utilizing hand-held aerosol cans.

9. The emission limits in subparagraphs 3. and 4. shall be achieved by:

(i) the application of low solvent coating technology where each and every coating meets the limit expressed in pounds VOC per gallon of coating, excluding water, stated in subparagraphs 3. and 4. of this subparagraph; or

(ii) the application of low solvent coating technology where the 24-hour weighted average of all coatings on a single coating line or operation meets the solids equivalent limit expressed in pounds VOC per gallon of coating solids, stated in subparagraphs 3. and 4. of this subparagraph; averaging across lines is not allowed; or

(iii) control equipment, including but not limited to incineration, carbon adsorption and condensation, with a capture system approved by the Director, provided that 90 percent of the nonmethane volatile organic compounds which enter the control equipment are recovered or destroyed, and that overall VOC emissions do not exceed the solids equivalent limit, expressed in pounds VOC per gallon of coating solids stated in subparagraphs 3. and 4. of this subparagraph.

10. For the purpose of this subparagraph, the following definitions apply:

(i) "Application Area" means the area where the coating is applied by spraying, dipping or flow coating techniques.

(ii) "Metal Furniture Coating" means the surface coating of any furniture made of metal or any metal part, which will be assembled with other metal wood, fabric, plastic or glass parts to form a furniture piece.

11. Applicability: Prior to January 1, 2015, the requirements of this subparagraph (y) shall apply to facilities at which the actual emissions of volatile organic compounds from the use of metal furniture coatings equal or exceed 15 pounds per day and are located in Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding, and Rockdale Counties as follows:

(i) All applicable facilities shall comply with the provisions of subparagraphs 1., 2., and 10.

12. Applicability. Prior to January 1, 2015, the requirements of this subparagraph (y) shall apply to facilities at which the potential emissions of volatile organic compounds from the use of metal furniture coatings equal or exceed 100 tons per year and are located outside the counties of in Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding, and Rockdale Counties as follows:

(i) All applicable facilities shall comply with the provisions of subparagraphs 1., 2., and 10.

13. Applicability. On and after January 1, 2015, the requirements of this subparagraph (y) shall apply to facilities at which the actual emissions of volatile organic compounds from the use of metal furniture coatings, before controls, equal or exceed 15 pounds per day (or 2.7 tons per 12-month rolling period) for facilities located in Barrow, Bartow, Carroll, Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Hall, Henry, Newton, Paulding, Rockdale, Spalding, and Walton Counties as follows:

(i) All applicable facilities shall comply with the provisions of subparagraphs 3., 4., 5., 6., 7., 8., 9., and 10.

(ii) Any physical or operational changes that are necessary to comply with the provisions specified in subparagraphs 3., 4., 5., 6., 7., 8., or 9. are subject to the compliance schedule specified in subparagraph 16.

14. On and after January 1, 2015, the requirements of this subparagraph (y) shall apply to facilities at which the potential emissions of volatile organic compounds from the use of metal furniture coatings equal or exceed 100 tons per year and are located outside the counties of Barrow, Bartow, Carroll, Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Hall, Henry, Newton, Paulding, Rockdale, Spalding, and Walton as follows:

(i) All applicable facilities shall comply with the provisions of subparagraphs 1., 2., and 10.

15. Applicability. The requirements of subparagraphs 13. and 14. will no longer be applicable by the compliance deadlines if the counties specified in those subparagraphs are re-designated to attainment for the 1997 National Ambient Air Quality Standard for ozone prior to January 1, 2015 and such counties continue to maintain that Standard thereafter. Instead, the provisions of subparagraphs 11. and 12. will continue to apply on and after January 1, 2015. In the event the 1997 National Ambient Air Quality Standard for ozone is violated in the specified counties, the requirements of subparagraphs 13. and 14. will only be reinstated if the Director determines that the measure is necessary to meet the requirements of the contingency plan.

16. Compliance schedule:

(i) An application for a permit to construct and operate volatile organic compound emission control systems and/or modifications of process and/or coatings used must be submitted to the Division no later than **July 1, 2014.**

(ii) On-site of construction of emission control systems and/or modification of process or coatings must be completed by **November 1, 2014.**

(iii) Full compliance with the applicable requirements of subparagraphs 3., 4., 5., 6., 7., 8., and 9. must be completed before **January 1, 2015.**

Rule 391-3-1-.02(2)(z) “VOC Emissions from Large Appliance Surface Coating,” is being amended to read as follows:

(z) VOC Emissions from Large Appliance Surface Coating.

1. No person shall cause, let, permit, suffer, or allow the emissions of VOC from the surface coating of large appliances to exceed:

(i) 2.8 pounds per gallon of coating, excluding water, delivered to the coating applicator from prime single or topcoat operations. If any coating delivered to the coating applicator contains more than 2.8 pounds VOC per gallon, the solids equivalent limit shall be 4.52 pounds VOC per gallon of coating solids delivered to the coating applicator;

(ii) The emission limits in this ~~subsection~~ subparagraph shall apply to the application area(s), flashoff area(s) and oven(s) of large appliance coating lines involved in prime, single or topcoat coating operations;

(iii) The emission limit in this ~~subsection~~ subparagraph shall not apply to the use of quick drying lacquers used for repair of scratches and nicks.

2. The emission limits in ~~this subsection~~ subparagraph 1. shall be achieved by:

(i) the application of low solvent coating technology where each and every coating meets the limit of 2.8 pounds VOC per gallon of coating, excluding water, ~~stated in paragraph 1. of this subsection;~~ or

(ii) the application of low solvent coating technology where the 24-hour weighted average of all coatings on a single coating line or operation meets the solids equivalent limit of 4.52 pounds VOC per gallon of coating solids, ~~stated in paragraph 1. of this subsection;~~ averaging across lines is not allowed; or

(iii) control equipment, including but not limited to incineration, carbon adsorption and condensation, with a capture system approved by the Director, provided that 90 percent of the non-methane volatile organic compounds which enter the control equipment are recovered or destroyed, and that overall VOC emissions do not exceed the solids equivalent limit of 4.52 pounds VOC per gallon of coating solids ~~stated in paragraph 1. of this subsection.~~

~~3. For the purpose of this subsection, the following definitions apply:~~

~~(i) "Application Area" means the area where the coating is applied by spraying, dipping or flow coating techniques;~~

~~(ii) "Single Coat" means a single film of coating applied directly to the metal substrate omitting the primer application;~~

~~(iii) "Large Appliances" means doors, cases, lids, panels and interior support parts of residential and commercial washers, dryers, ranges, refrigerators, freezers, water heaters, dishwashers, trash compactors, air conditioners and other similar products.~~

3. No person shall cause, let, permit, suffer, or allow the emissions of VOC from the surface coating of large appliances using baked coatings to exceed:

(i) 2.3 pounds per gallon of coating, excluding water and exempt compounds, delivered to the coating applicator general one component and general multi-component coatings. If any coating delivered to the coating applicator contains more than 2.3 pounds VOC per gallon, the solids equivalent limit shall be 3.3 pounds VOC per gallon of coating solids delivered to the coating applicator;

(ii) 2.8 pounds per gallon of coating, excluding water and exempt compounds, delivered to the coating applicator from extreme high gloss, extreme performance, heat resistant, metallic, and solar absorbent, and pretreatment coatings. If any coating delivered to the coating applicator

contains more than 2.8 pounds VOC per gallon, the solids equivalent limit shall be 4.5 pounds VOC per gallon of coating solids delivered to the coating applicator;

4. No person shall cause, let, permit, suffer, or allow the emissions of VOC from the surface coating of large appliances using air-dried coatings to exceed:

(i) 2.3 pounds per gallon of coating, excluding water and exempt compounds, delivered to the coating applicator from general one-component coatings. If any coating delivered to the coating applicator contains more than 2.3 pounds VOC per gallon, the solids equivalent limit shall be 3.3 pounds VOC per gallon of coating solids delivered to the coating applicator;

(ii) 2.8 pounds per gallon of coating, excluding water and exempt compounds, delivered to the coating applicator from general multi-component, extreme high gloss, extreme performance, heat resistant, metallic, solar absorbent and pretreatment coatings. If any coating delivered to the coating applicator contains more than 2.8 pounds VOC per gallon, the solids equivalent limit shall be 4.5 pounds VOC per gallon of coating solids delivered to the coating applicator;

5. Each owner or operator of a facility that coats large appliances shall ensure that all coating application systems utilize one or more of the application techniques stated below:

(i) Electrostatic spray application;

(ii) High volume low pressure (HVLP) spraying;

(iii) Flow/curtain application;

(iv) Roll coating;

(v) Dip coat application including electrodeposition;

(vi) Brush coat;

(vii) Airless spray;

(viii) Air-assisted airless spray; or

(ix) Other coating application methods that achieve transfer efficiency equivalent to HVLP or electrostatic spray application methods, as determined by the Director.

6. Each owner or operator of a facility that coats large appliances shall comply with the following work practice standards:

(i) store all VOC-containing coatings, thinners, and coating-related waste materials in closed containers;

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

(iii) minimize spills of VOC-containing coatings, thinners, and coating-related waste materials; and

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

7. Each owner or operator of a facility that coats large appliances shall comply with the following housekeeping requirements for any affected cleaning operation:

(i) store all VOC-containing cleaning materials and used shop towels in closed containers;

(ii) ensure that storage containers used for VOC-containing cleaning materials are kept closed at all times except when depositing or removing these materials;

(iii) minimize spills of VOC-containing cleaning materials;

(iv) convey VOC-containing cleaning materials from one location to another in closed containers or pipes; and

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

8. The VOC limits specified in subparagraphs 3. and 4. do not apply to the following types of large appliance coatings and/or coating operations:

(i) Touch-up and repair coatings;

(ii) Stencil coatings;

(iii) Safety-indicating coatings;

(iv) Solid-film lubricants;

(v) Electric-insulating and thermal-conducting coatings; and

(vi) Coating application utilizing hand-held aerosol cans.

9. The emission limits in subparagraphs 3. and 4. shall be achieved by:

(i) the application of low solvent coating technology where each and every coating meets the limit expressed in pounds VOC per gallon of coating, excluding water, stated in subparagraphs 3. and 4. of this subparagraph; or

(ii) the application of low solvent coating technology where the 24-hour weighted average of all coatings on a single coating line or operation meets the solids equivalent limit expressed in pounds VOC per gallon of coating solids, stated in subparagraphs 3. and 4. of this subparagraph (averaging across lines is not allowed); or

(iii) control equipment, including but not limited to incineration, carbon adsorption and condensation, with a capture system approved by the Director, provided that 90 percent of the nonmethane volatile organic compounds which enter the control equipment are recovered or destroyed, and that overall VOC emissions do not exceed the solids equivalent limit, expressed in pounds VOC per gallon of coating solids stated in subparagraphs 3. and 4. of this subparagraph.

10. For the purpose of this subparagraph, the following definitions apply:

(i) "Application Area" means the area where the coating is applied by spraying, dipping or flow coating techniques.

(ii) "Single Coat" means a single film of coating applied directly to the metal substrate omitting the primer application.

(iii) "Large Appliances" means doors, cases, lids, panels and interior support parts of residential and commercial washers, dryers, ranges, refrigerators, freezers, water heaters, dishwashers, trash compactors, air conditioners and other similar products.

11. Applicability. Prior to January 1, 2015, the requirements of this subparagraph (z) shall apply to facilities at which the actual emissions of volatile organic compounds from the use of large appliance coatings equal or exceed 15 pounds per day and are located in Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding, and Rockdale Counties as follows:

(i) All applicable facilities shall comply with the provisions of subparagraphs 1., 2., and 10.

12. Applicability. Prior to January 1, 2015, the requirements of this subparagraph (z) shall apply to facilities at which the potential emissions of volatile organic compounds from the use of large appliance coatings equal or exceed 100 tons per year and are located outside the counties of Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding, and Rockdale Counties as follows:

(i) All applicable facilities shall comply with the provisions of subparagraphs 1, 2, and 10

13. Applicability. On and after January 1, 2015, the requirements of this subparagraph (z) apply to facilities at which actual emissions of volatile organic compounds from the use of large appliance coatings, before controls, equal or exceed 15 pounds per day (or 2.7 tons per 12-month rolling period) for facilities located in Barrow, Bartow, Carroll, Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Hall, Henry, Newton, Paulding, Rockdale, Spalding, and Walton Counties as follows:

(i) All applicable facilities shall comply (i) with the provisions of subparagraphs 3., 4., 5., 6., 7., 8., 9. and 10.

(ii) Any physical or operational changes that are necessary to comply with the provisions specified in subparagraphs 3., 4., 5., 6., 7., 8., or 9. are subject to the compliance schedule specified in subparagraph 16.

14. Applicability. On and after January 1, 2015, the requirements of this subparagraph (z) shall apply to facilities at which potential emissions of volatile organic compounds from the use of large appliance coatings equal or exceed 100 tons per year and are located outside of counties of Barrow, Bartow, Carroll, Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Hall, Henry, Newton, Paulding, Rockdale, Spalding, and Walton Counties as follows:

(i) All applicable facilities shall comply with the provisions of subparagraphs 1., 2, and 10.

15. Applicability: The requirements of subparagraphs 13. and 14. will no longer be applicable by the compliance deadlines if the counties specified in those subparagraphs are re-designated to attainment for the 1997 National Ambient Air Quality Standard for ozone prior to January 1, 2015 and such counties continue to maintain that Standard thereafter. Instead, the provisions of subparagraphs 11. and 12. will continue to apply on and after January 1, 2015. In the event the 1997 National Ambient Air Quality Standard for ozone is violated in the specified counties, the requirements of subparagraphs 13. and 14. will only be reinstated if the Director determines that the measure is necessary to meet the requirements of the contingency plan.

16. Compliance schedule: All existing facilities subject to this subparagraph shall comply with the following compliance schedule:

(i) An application for a permit to construct and operate volatile organic compound emission control systems and/or modifications of process and/or coatings used must be submitted to the Division no later than **July 1, 2014.**

(ii) On-site of construction of emission control systems and/or modification of process or coatings must be completed by **November 1, 2014.**

(iii) Full compliance with the applicable requirements of subparagraphs 3., 4., 5., 6., 7., 8., and 9. must be completed before **January 1, 2015.**

Rule 391-3-1-.02(2)(ii) "VOC Emissions from Surface Coating of Miscellaneous Metal Parts and Products," is being amended to read as follows:

(ii) VOC Emissions from Surface Coating of Miscellaneous Metal Parts and Products.

1. No person shall cause, let, permit, suffer, or allow the emissions of VOC from surface coating of miscellaneous metal parts and products to exceed:

(i) 4.3 pounds per gallon of coating, excluding water, delivered to a coating applicator that applies clear coatings. If any coating delivered to the coating applicator contains more than 4.3 pounds VOC per gallon, the solids equivalent limit shall be 10.3 pounds VOC per gallon of coating solids delivered to the coating applicator.

(ii) 3.5 pounds per gallon of coating, excluding water, delivered to a coating applicator in a coating application system that is air dried or forced warm air dried at temperatures up to 194°F. If any coating delivered to the coating applicator contains more than 3.5 pounds VOC per

gallon, the solids equivalent limit shall be 6.67 pounds VOC per gallon of coating solids delivered to the coating applicator.

(iii) 3.5 pounds per gallon of coating, excluding water, delivered to a coating applicator that applies extreme performance coatings. If any coating delivered to the coating applicator contains more than 3.5 pounds VOC per gallon, the solids equivalent limit shall be 6.67 pounds VOC per gallon of coating solids delivered to the coating applicator.

(iv) 6.2 pounds per gallon of coating, excluding water, delivered to a coating applicator in a high performance architectural coating operation; and

(v) 3.0 pounds per gallon of coating, excluding water, delivered to a coating applicator for all other coatings and coating application systems. If any coating delivered to the coating applicator contains more than 3.0 pounds VOC per gallon, the solids equivalent limit shall be 5.06 pounds VOC per gallon of coating solids delivered to the coating applicator.

2. No person shall cause, let, permit, suffer, or allow the emissions of VOC from surface coating of miscellaneous metal parts and products using air-dried coatings to exceed:

(i) 2.8 pounds per gallon of coating, excluding water, delivered to a coating applicator that applies anyone of the following air-dried coatings: general one component; general multi component; military specification; drum coating - new exterior. If any coating delivered to the coating applicator contains more than 2.8 pounds VOC per gallon, the solids equivalent limit shall be 4.52 pounds VOC per gallon of coating solids delivered to the coating applicator

(ii) 3.5 pounds per gallon of coating, excluding water, delivered to a coating applicator that applies any one of the following air-dried coatings: camouflage; electric-insulating varnish; etching filler; high temperature; metallic; mold-seal; pan backing; pretreatment; drum coating – new interior; drum coating - reconditioned, exterior; silicone release; vacuum-metalizing; extreme high-gloss; extreme performance; heat-resistant; drum coating - reconditioned interior; solar-absorbent; prefabricated architectural multi-component; prefabricated architectural one-component. If any coating delivered to the coating applicator contains more than 3.5 pounds VOC per gallon, the solids equivalent limit shall be 6.67 pounds VOC per gallon of coating solids delivered to the coating applicator.

(iii) 3.5 pounds per gallon of coating, excluding water, delivered to a coating applicator that applies the following air-dried coating: repair and touch-up.

(iv) 6.2 pounds per gallon of coating, excluding water, delivered to a coating applicator that applies the following air-dried coating: high performance architectural.

3. No person shall cause, let, permit, suffer, or allow the emissions of VOC from surface coating of miscellaneous metal parts and products using baked coatings to exceed:

(i) 2.3 pounds per gallon of coating, excluding water, delivered to a coating applicator that applies anyone of the following baked coatings: general one component; general multi-component; military specification; prefabricated architectural multi-component; prefabricated architectural one-component. If any coating delivered to the coating applicator contains more

than 2.3 pounds VOC per gallon, the solids equivalent limit shall be 3.35 pounds VOC per gallon of coating solids delivered to the coating applicator.

(ii) 2.8 pounds per gallon of coating, excluding water, delivered to a coating applicator that applies drum coating - new exterior coating. If any coating delivered to the coating applicator contains more than 2.8 pounds VOC per gallon, the solids equivalent limit shall be 4.52 pounds VOC per gallon of coating solids delivered to the coating applicator.

(iii) 3.0 pounds per gallon of coating, excluding water, delivered to a coating applicator that applies anyone of the following baked coatings: drum coating – reconditioned interior; camouflage; electric-insulating varnish; etching filler; extreme high-gloss; extreme performance; heat-resistant; high temperature; metallic; mold-seal; pan backing; pretreatment; drum coating – new interior; drum coating - reconditioned exterior; silicone release; solar-absorbent; and vacuum-metalizing. If any coating delivered to the coating applicator contains more than 3.0 pounds VOC per gallon, the solids equivalent limit shall be 5.06 pounds VOC per gallon of coating solids delivered to the coating applicator.

(iv) 6.2 pounds per gallon of coating, excluding water, delivered to a coating applicator that applies the following baked coating: high performance architectural.

(v) 3.0 pounds per gallon of coating, excluding water, delivered to a coating applicator that applies repair and touch-up coatings.

4. No person shall cause, let, permit, suffer, or allow the emissions of VOC from surface coating of motor vehicle materials at a facility that is not an automobile or light-duty truck manufacturing facility to exceed:

(i) 1.7 pounds per gallon of coating, excluding water, delivered to a coating applicator that applies the following motor vehicle materials: gasket/gasket sealing material and bedliner.

(ii) 3.5 pounds per gallon of coating, excluding water, delivered to a coating applicator that applies the following motor vehicle materials: cavity wax, sealer, deadener, underbody coating, trunk interior coating, and lubricating wax/compound.

2.5. If more than one emission limitation in this subsection ~~subparagraph~~ (ii) applies to a specific coating, then the least stringent emission limitation in this subparagraph (ii) of this subsection shall be applied.

3.6. All VOC emissions from solvent washings shall be considered in the emission limitations unless the solvent is directed into containers that prevent evaporation into the atmosphere.

4.7. The emission limits in this subsection shall be achieved by:

(i) the application of low solvent coating technology where each and every coating meets the limit expressed in pounds VOC per gallon of coating, excluding water, stated in paragraphs 1., 2., 3., and 4. of this subsection; or

(ii) the application of low solvent coating technology where the 24-hour weighted average of all coatings on a single coating line or operation meets the solids equivalent limit expressed in

pounds VOC per gallon of coating solids, stated in paragraphs 1., 2., and 3. of this subsection; averaging across lines is not allowed; or

(iii) control equipment, including but not limited to incineration, carbon adsorption and condensation, with a capture system approved by the Director, provided that 90 percent of the nonmethane volatile organic compounds which enter the control equipment are recovered or destroyed, and that overall VOC emissions do not exceed the solids equivalent limit, expressed in pounds VOC per gallon of coating solids stated in paragraphs 1., 2., 3., and 4. of this subsection.

(iv) for high performance architectural coatings, compliance may be achieved only as stated in subparagraph 7.(i) or 7.(iii)4.(i) or 4.(iii). There is no solids equivalent limit for such coatings.

(v) for motor vehicle materials, compliance may be achieved only as stated in subparagraph 7.(i). There is no solids equivalent limit for such coatings.

(vi) for repair and touch-up materials, compliance may be achieved only as stated in subparagraphs 7.(i). There is no solids equivalent limit for such coatings.

~~5.8.~~ For the purpose of this subsection, the following definitions apply:

~~(vii)(i)~~ “Air dried coating” means coatings which are dried by the use of air or forced warm air at temperatures up to 194°F;

(ii) “Baked coating” means a coating that is cured at a temperature at or above 194°F.

(iii) “Bedliner” means a multi-component coating, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied to a cargo bed after the application of topcoat to provide additional durability and chip resistance.

(iv) “Cavity wax” means a coating, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied into the cavities of the vehicle primarily for the purpose of enhancing corrosion protection.

(v) “Camouflage coating” means a coating used, principally by the military, to conceal equipment from detection.

(vi) “Clear coating” means a colorless coating which contains binders, but no pigment, and is formulated to form a transparent film.

~~(vii)~~ “Coating application system” means all operations and equipment which applies, conveys, and dries a surface coating, including, but not limited to spray booths, flow coaters, flashoff areas, air dryers and ovens.

~~(v) “Heat sensitive material” means materials which cannot consistently be exposed to temperatures greater than 200°F;~~

(viii) "Deadener" means a coating, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied to selected vehicle surfaces primarily for the purpose of reducing the source of road noise in the passenger compartment.

(ix) "Drum" means any cylindrical metal shipping container larger than 12 gallons capacity but no larger than 110 gallons capacity.

(x) "Electric dissipating coating" means a coating that rapidly dissipates a high-voltage electric charge.

~~(viii) "Clear coat" means a coating which lacks color and opacity or is transparent and uses the undercoat as a reflectant base or undertone color;~~

(xi) "Electric-insulating varnish" means a non-convertible-type coating applied to electric motors, components of electric motors, or power transformers, to provide electrical, mechanical, and environmental protection or resistance.

(xii) "EMI/RFI Shielding" means a coating used on electrical or electronic equipment to provide shielding against electromagnetic interference, radio frequency interference, or static discharge.

~~(ix) "Extreme performance coatings" means coatings designed for harsh exposure or extreme environmental conditions;~~

(xiii) "Etching filler" means a coating that contains less than 23 percent solids by weight, at least 0.5 percent acid by weight, and is used instead of applying a pretreatment coating followed by a primer.

(xiv) "Extreme high-gloss coating" means a coating which, when tested by the American Society for Testing Material Test Method D-523 adopted in 1980, shows a reflectance of 75 or more on a 60 degree meter.

(xv) "Extreme-performance coating" means a coating used on a metal or plastic surface where the coated surface is, in its intended use, subject to the following: (a) Chronic exposure to corrosive, caustic or acidic agents, chemicals, chemical fumes, chemical mixtures or solutions; or (b) Repeated exposure to temperatures in excess of 250°F; or (c) Repeated heavy abrasion, including mechanical wear and repeated scrubbing with industrial grade solvents, cleansers or scouring agents. Extreme performance coatings include, but are not limited to, coatings applied to locomotives, railroad cars, farm machinery, and heavy duty trucks.

~~(xi)~~(xvi) "Extreme environmental conditions" means exposure to any of: the weather all of the time, temperatures consistently above 200°F, detergents, abrasive and scouring agents, solvents, corrosive atmospheres, or similar environmental conditions;

(xvii) "Gasket/sealing material" means a fluid, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied to coat a gasket or replace and perform the same function as a gasket. Automobile and light-duty truck gasket/gasket sealing material includes room temperature vulcanization (RTV) seal material.

(xviii) "Heat-resistant coating" means a coating that must withstand a temperature of at least 400°F during normal use.

(xix) "High-performance architectural coating" means a coating used to protect architectural subsections and which meets the requirements of the Architectural Aluminum Manufacturer Association's publication number AAMA 2604-05 (Voluntary Specification, Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels) or 2605-05 (Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels).

~~(xiii) "High performance architectural coating" means a coating needed to protect architectural subsections and which satisfies the most recent requirements of the Architectural Aluminum Manufacturer's Association Publication Number AAMA 605.2.~~

(xx) "High-temperature coating" means a coating that is certified to withstand a temperature of 1000°F for 24 hours.

~~(iv)~~(xxi) "Low solvent coating" means coatings which contain less organic solvent than the conventional coatings used by the industry. Low solvent coatings include water-borne, higher solids, electrodeposition and powder coatings.;

(xxii) "Lubricating wax/compound" means a protective lubricating material, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied to vehicle hubs and hinges.

(xxiii) "Mask coating" means thin film coating applied through a template to coat a small portion of a substrate.

(xxiv) "Metallic coating" means a coating which contains more than five grams of metal particles per liter of coating as applied. "Metal particles" are pieces of a pure elemental metal or combination of elemental metals.

~~(xii)~~(xxv) "Miscellaneous metal parts and products" means surface coating of products manufactured by the following industrial source categories: large farm machinery, small farm machinery, small appliances, commercial machinery, industrial machinery, fabricated metal products and any other industrial category which coats metal parts or products under the Standard Industry Classification Code Major Groups 33, 34, 35, 36, 37, 38, 40, and 41. The miscellaneous metal parts and products source category does not include:

- (I) automobiles and light-duty trucks;
- (II) metal cans;
- (III) flat metal sheets and strips in the form of rolls or coils;
- (IV) magnet wire for use in electrical machinery;
- (V) metal furniture;

(VI) large appliances;

(VII) aerospace manufacturing and rework operations;

(VIII) automobile refinishing;

(IX) customized top coating of automobiles and trucks, if production is less than 35 vehicles per day; and

(X) exterior of marine vessels.

(xxvi) "Military specification coating" means a coating which has a formulation approved by a United States Military Agency for use on military equipment.

(xxvii) "Mold seal coating" means the initial coating applied to a new mold or a repaired mold to provide a smooth surface which, when coated with a mold release coating, prevents products from sticking to the mold.

(xxviii) "Multi-colored coating" means a coating which exhibits more than one color when applied, and which means packaged in a single container and applied in a single coat.

(xxix) "Multi-component coating" means a coating requiring the addition of a separate reactive resin, commonly known as a catalyst or hardener, before application to form an acceptable dry film.

(xxx) "One-component coating" means a coating that is ready for application as it comes out of its container to form an acceptable dry film. A thinner, necessary to reduce the viscosity, is not considered a component.

(xxxi) "Optical coating" means a coating applied to an optical lens.

(xxxii) "Pan-backing coating" means a coating applied to the surface of pots, pans, or other cooking implements that are exposed directly to a flame or other heating elements.

(xxxiii) "Prefabricated architectural component coatings" are coatings applied to metal parts and products which are to be used as an architectural structure.

(xxxiv) "Pretreatment coating" means a coating which contains no more than 12 percent solids by weight, and at least 0.5 percent acid by weight, is used to provide surface etching, and is applied directly to metal surfaces to provide corrosion resistance, adhesion, and ease of stripping.

(ii)(xxxv) "Prime coat" means the first of two or more films of coating applied to a metal surface;

(xxxvi) "Repair coating" means a coating used to re-coat portions of a previously coated product which has sustained mechanical damage to the coating following normal coating operations.

(xxxvii) "Sealer" means a high viscosity material, used at a facility that is not an automobile or light-duty truck assembly coating facility, generally, but not always, applied in the paint shop after the body has received an electrodeposition primer coating and before the application of subsequent coatings (e.g., primer-surfacer). The primary purpose of automobile and light-duty truck sealer is to fill body joints completely so that there is no intrusion of water, gases or corrosive materials into the passenger area of the body compartment. Such materials are also referred to as sealant, sealant primer, or caulk.

(xxxviii) "Shock-free coating" means a coating applied to electrical components to protect the user from electric shock. The coating has characteristics of being of low capacitance and high resistance, and having resistance to breaking down under high voltage.

(xxxix) "Silicone-release coating" means any coating which contains silicone resin and is intended to prevent food from sticking to metal surfaces such as baking pans.

~~(i)~~ (xl) "Single coat" means one film of coating applied to a metal surface.

(xli) "Solar-absorbent coating" means a coating which has as its prime purpose the absorption of solar radiation.

(xlii) "Stencil coating" means an ink or a pigmented coating which is rolled or brushed onto a template or stamp in order to add identifying letters, symbols and/or numbers.

~~(iii)~~ (xliii) "Topcoat" means the final film or series of films of coating applied in a two-coat or more operation.

(xliv) "Touch-up coating" means a coating used to cover minor coating imperfections appearing after the main coating operation.

(xlv) "Translucent coating" means a coating which contains binders and pigment and is formulated to form a colored, but no opaque, film.

~~(vi)~~ (xlvi) "Transfer efficiency" means the weight (or volume) of coating solids adhering to the surface being coated divided by the total weight (or volume) of coating solids delivered to the applicator.

(xlvii) "Trunk interior coating" means a coating, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied to the trunk interior to provide chip protection.

(xlviii) "Two-component coating" means a coating requiring the addition of a separate reactive resin, commonly known as a catalyst, before application to form an acceptable dry film.

(xlix) "Underbody coating" means a coating, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied to the undercarriage or firewall to prevent corrosion and/or provide chip protection.

(l) "Vacuum-metalizing coating" means the undercoat applied to the substrate on which the metal is deposited or the overcoat applied directly to the metal film. Vacuum metalizing/physical

vapor deposition (PVD) is the process whereby metal is vaporized and deposited on a substrate in a vacuum chamber.

~~6. The requirements of this subsection shall not apply to facilities at which the potential to emit volatile organic compounds, from all surface coating of miscellaneous metal parts and products, is less than 10 tons per year.~~

9. Applicability. Prior to January 1, 2015, the requirements of this subparagraph (ii) shall apply to facilities at which the potential emissions of volatile organic compounds from all surface coating of miscellaneous parts and products equal or exceed 10 tons per year and are located in Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding, and Rockdale Counties as follows:

(i) All applicable facilities shall comply with the provisions of subparagraphs 1., 5., 6., 7., and 8.

10. Applicability. Prior to January 1, 2015, the requirements of this subparagraph (ii) shall apply to facilities at which the potential emissions of volatile organic compounds from all surface coating of miscellaneous parts and products equal or exceed 100 tons per year and are located outside the counties of Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding, and Rockdale as follows:

(i) All applicable facilities shall comply with the provisions of subparagraphs 1., 5., 6., 7., and 8.

11. Applicability. On and after January 1, 2015, the requirements of this subparagraph (ii) shall apply to facilities at which the potential emissions of volatile organic compounds from all surface coating of miscellaneous parts and products equal or exceed 10 tons per year and are located in Barrow, Bartow, Carroll, Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Hall, Henry, Newton, Paulding, Rockdale, Spalding, and Walton Counties as follows:

(i) All applicable facilities shall comply with the provisions of subparagraphs 2., 3., 4., 5., 6., 7., and 8.

(ii) Any physical or operational changes that are necessary to comply with the provisions specified in subparagraphs 2., 3., or 4. are subject to the compliance schedule specified in subparagraph 14.

12. Applicability. On and after January 1, 2015, the requirements of this subparagraph (ii) shall apply to facilities at which the potential emissions of volatile organic compounds from all surface coating of miscellaneous parts and products equal or exceed 100 tons per year and are located outside the counties of Barrow, Bartow, Carroll, Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Hall, Henry, Newton, Paulding, Rockdale Spalding, and Walton as follows:

(i) All applicable facilities shall comply with the provisions of subparagraphs 1., 5., 6., 7., and 8.

13. Applicability: The requirements of subparagraphs 11. and 12. will no longer be applicable by the compliance deadlines if the counties specified in those subparagraphs are re-designated to attainment for the 1997 National Ambient Air Quality Standard for ozone prior to January 1,

2015 and such counties continue to maintain that Standard thereafter. Instead, the provisions of subparagraphs 9. and 10. will continue to apply on and after January 1, 2015. In the event the 1997 National Ambient Air Quality Standard for ozone is violated in the specified counties, the requirements of subparagraphs 11. and 12. will only be reinstated if the Director determines that the measure is necessary to meet the requirements of the contingency plan.

14. Compliance Schedule:

(i) An application for a permit to construct and operate volatile organic compound emission control systems and/or modifications of process and/or coatings used must be submitted to the Division no later than **July 1, 2014.**

(ii) On-site of construction of emission control systems and/or modification of process or coatings must be completed by **November 1, 2014.**

(iii) Full compliance with the applicable requirements specified in subparagraphs 2., 3., and 4. must be completed before **January 1, 2015.**

Rule 391-3-1-.02(2)(jj) “VOC Emissions from Surface Coating of Flat Wood Paneling,” is being amended to read as follows:

(jj) VOC Emissions from Surface Coating of Flat Wood Paneling.

1. No person shall cause, let, permit, suffer, or allow the emissions of VOC from surface coating of flat wood paneling to exceed:

(i) 6.0 pounds per 1000 square feet of coated finished product from printed interior panels, regardless of the number of coats applied;

(ii) 12.0 pounds per 1000 square feet of coated finished product from natural finish hardwood plywood panels, regardless of the number of coats applied; and

(iii) 10.0 pounds per 1000 square feet of coated finished product from Class II finishes on hardboard panels, regardless of the number of coats applied.

2. The emission limits in this ~~subsection~~-subparagraph shall be achieved by:

(i) the application of low solvent coating technology where the 24-hour of all coatings on a single coating line or operation meets the limits stated in subparagraph 1. of this subsection ~~subparagraph~~; averaging across lines is not allowed; or

(ii) control equipment, including but not limited to incineration, carbon adsorption and condensation, with a capture system approved by the Director, provided that 90 percent of the nonmethane volatile organic compounds which enter the control equipment are recovered or destroyed, and that overall VOC emissions do not exceed the limits stated in subparagraph 1. of this subsection ~~subparagraph~~.

(iii) control equipment demonstrated to have control efficiency equivalent to or greater or VOC emissions equal to or less than required in (i) or (ii) of this subparagraph and approved by the Director.

~~3. For the purpose of this section, the following definitions also apply:~~

~~(i) "Class II hardboard paneling finish" means finishes which meet the specifications of Voluntary Product Standard PS-59-73 as approved by the American National Standards Institute.~~

~~(ii) "Hardboard" is a panel manufactured primarily from interfelted lignocellulosic fibers which are consolidated under heat and pressure in a hot press.~~

~~(iii) "Hardwood plywood" is plywood whose surface layer is a veneer.~~

~~(iv) "Natural finish hardwood plywood panels" means panels whose original grain pattern is enhanced by essentially transparent finishes frequently supplemented by fillers and toners.~~

~~(v) "Thin particleboard" is a manufactured board 1/4 inch or less in thickness made of individual wood particles which have been coated with a binder and formed into flat sheets by pressure.~~

~~(vi) "Printed interior panels" means panels whose grain or natural surface is obscured by fillers and basecoats upon which a simulated grain or decorative pattern is printed.~~

~~(vii) "Tileboard" means paneling that has a colored waterproof surface coating.~~

~~(viii) "Coating application system" means all operations and equipment which apply, convey, and dry a surface coating, including, but not limited to, spray booths, flow coaters, conveyers, flashoff areas, air dryers and ovens.~~

3. No person shall cause, let, permit, suffer, or allow the emissions of VOC from the inks, coatings, and adhesives used by flat wood paneling coating facilities to exceed:

(i) 2.1 lbs VOC per gallon (250 grams per liter) of coating, excluding water, and exempt compounds, or

(ii) 2.9 lbs VOC per gallon (350 grams per liter) of solids.

4. Averaging across lines for the VOC limits in subparagraph 3. is not permitted.

5. Should product performance requirements or other needs dictate the use of higher VOC coatings, than those specified in subparagraph 3., add-on control equipment with an overall control efficiency of 90% may be used as an alternative.

6. Each owner or operator of a facility that manufactures flat wood paneling shall comply with the following work practice standards:

(i) store all VOC-containing materials in closed containers;

(ii) ensure that mixing and storage containers used for VOC-containing materials are kept closed at all times except when depositing or removing these materials;

(iii) minimize spills of VOC-containing materials; and

(iv) convey VOC-containing materials from one location to another in closed containers or pipes.

7. For the purpose of this subparagraph, the following definitions also apply:

(i) "Class II hardboard paneling finish" means finishes which meet the specifications of Voluntary Product Standard PS-59-73 as approved by the American National Standards Institute.

(ii) "Coating application system" means all operations and equipment which apply, convey, and dry a surface coating, including, but not limited to, spray booths, flow coaters, conveyers, flashoff areas, air dryers and ovens.

(iii) "Flat wood paneling" means both interior and exterior panels used in construction and typically include decorative interior panels, exterior siding and tileboard. Flat wood paneling includes hardboard, hardwood plywood, natural finish hardwood plywood panels, printed interior panels, thin particleboard and tileboard.

(iv) "Hardboard" is a panel manufactured primarily from interfelted lignocellulosic fibers which are consolidated under heat and pressure in a hot press.

(v) "Hardwood plywood" is plywood whose surface layer is a veneer.

(vi) "Natural finish hardwood plywood panels" means panels whose original grain pattern is enhanced by essentially transparent finishes frequently supplemented by fillers and toners.

(vii) "Thin particleboard" is a manufactured board 1/4 inch or less in thickness made of individual wood particles which have been coated with a binder and formed into flat sheets by pressure.

(viii) "Tileboard" means paneling that has a colored waterproof surface coating.

(ix) "Printed interior panels" means panels whose grain or natural surface is obscured by fillers and basecoats upon which a simulated grain or decorative pattern is printed.

8. Applicability. Prior to January 1, 2015, the requirements of this subparagraph (ij) shall apply to facilities at which the actual emissions of volatile organic compounds from the surface coating of flat wood paneling equal or exceed 15 pounds per day and are located in Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding, and Rockdale Counties as follows:

(i) All applicable facilities shall comply with the provisions of subparagraphs 1., 2., and 7.

9. Applicability. Prior to January 1, 2015, the requirements of this subparagraph (ij) shall apply to facilities at which the potential emissions of volatile organic compounds from the surface

coating of flat wood paneling equal or exceed 100 tons per year and are located outside the counties of Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding, and Rockdale Counties as follows:

(i) All applicable facilities shall comply with the provisions of subparagraphs 1., 2., and 7.

10. Applicability. On and after January 1, 2015, the requirements of this subparagraph (ii) shall apply to facilities at which actual emissions of volatile organic compounds from the surface coating of flat wood paneling, before controls, equal or exceed 15 pounds per day (or 2.7 tons per 12-month rolling period) for facilities located in Barrow, Bartow, Carroll, Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Hall, Henry, Newton, Paulding, Rockdale, Spalding, and Walton Counties as follows:

(i) All applicable facilities shall comply with the provisions of subparagraphs 3., 4., 5., 6., and 7.

(ii) Any physical or operational changes that are necessary to comply with the provisions specified in subparagraphs 3., 4., 5., or 6. are subject to the compliance schedule specified in subparagraph 13.

11. Applicability. On and after January 1, 2015, the requirements of this subparagraph (ii) shall apply to facilities at which potential emissions of volatile organic compounds from the surface coating of flat wood paneling equal or exceed 100 tons per year and are located outside of counties of Barrow, Bartow, Carroll, Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Hall, Henry, Newton, Paulding, Rockdale, Spalding, and Walton Counties as follows:

(i) All applicable facilities shall comply with the provisions of subparagraphs 1., 2., and 7.

12. Applicability. The requirements of subparagraphs 10. and 11. will no longer be applicable by the compliance deadlines if the counties specified in those subparagraphs are re-designated to attainment for the 1997 National Ambient Air Quality Standard for ozone prior to January 1, 2015 and such counties continue to maintain that Standard thereafter. Instead, the provisions of subparagraphs 8. and 9. will continue to apply on and after January 1, 2015. In the event the 1997 National Ambient Air Quality Standard for ozone is violated in the specified counties, the requirements of subparagraphs 10. and 11. will only be reinstated if the Director determines that the measure is necessary to meet the requirements of the contingency plan.

13. Compliance Schedule:

(i) An application for a permit to construct and operate volatile organic compound emission control systems and/or modifications of process and/or coatings used must be submitted to the Division no later than **July 1, 2014.**

(ii) On-site of construction of emission control systems and/or modification of process or coatings must be completed by **November 1, 2014.**

(iii) Full compliance with the applicable requirements specified in subparagraph 10.(i) must be completed before **January 1, 2015.**

Rule 391-3-1-.02(2)(mm) “VOC Emissions from Graphic Arts Systems,” is being amended to read as follows:

(mm) VOC Emissions from Graphic Arts Systems.

1. No person shall cause, let, permit, suffer, or allow the operation of a packaging rotogravure, publication rotogravure or flexographic printing facility unless:

(i) For packaging rotogravure and flexographic printing, the VOC content of any ink or coating as applied is equal to or less than one of the following:

(I) 25 percent by volume of the volatile content of the coating or ink; or

(II) 40 percent by volume of the coating or ink, minus water; or

(III) 0.5 pounds of VOC per pound of coating solids.

(ii) For publication rotogravure printing, the VOC content of any ink or coating as applied is equal to or less than one of the following:

(I) 25 percent by volume of the volatile content of the coating or ink; or

(II) 40 percent by volume of the coating or ink, minus water.

2. As an alternative to compliance with the limits in subparagraph 1., an owner or operator of a packaging rotogravure, publication rotogravure or flexographic printing facility may comply with the requirements of this ~~subparagraph~~ subsection by:

(i) Averaging on a 24-hour weighted basis the VOC content of all inks and coatings, as applied, on a single printing line, where the average does not exceed the limits in subparagraph 1.; averaging across lines is not allowed; or

(ii) Installing and operating volatile organic compound emission reduction equipment having at least 90.0 percent reduction efficiency, and a capture system approved by the Director.

~~3. For the purpose of this subsection, the following definitions shall apply:~~

~~(i) “Packaging rotogravure printing” means rotogravure printing upon paper, paperboard, metal foil, plastic film, and other substrates, which are in subsequent operations, formed into packaging products and labels for articles to be sold.~~

~~(ii) “Publication rotogravure printing” means rotogravure printing upon paper which is subsequently formed into books, magazines, catalogues, brochures, directories, newspaper supplements, and other types of printed materials.~~

~~(iii) “Flexographic printing” means the application of words, designs and pictures to a substrate by means of a roll printing technique in which the pattern to be applied is raised above the printing roll and the image carrier is made of rubber or other elastomeric materials.~~

~~(iv) "Rotogravure printing" means the application of words, designs and pictures to a substrate by means of a roll printing technique which involves intaglio or recessed image areas in the form of cells.~~

~~(v) "Roll printing" means the application of words, designs and pictures to a substrate usually by means of a series of hard rubber or steel rolls each with only partial coverage.~~

3. If, as an alternative to compliance with the limits in subparagraph 1.(i), volatile organic compound emission reduction equipment is installed and operated at a flexible packaging printing facility to comply with subparagraph 2.(ii) it shall have an overall VOC control efficiency that is equal to or greater than the percentage specified in the following subparagraphs (i) through (iv).

(i) 65 percent for a press that was first installed prior to March 14, 1995, and that is controlled by an add-on air pollution control device whose first installation date was prior to February 19, 2012;

(ii) 70 percent for a press that was first installed prior to March 14, 1995, and that is controlled by an add-on air pollution control device whose first installation date was on or after February 19, 2012;

(iii) 75 percent for a press that was first installed on or after to March 14, 1995, and that is controlled by an add-on air pollution control device whose first installation date was prior to February 19, 2012; and

(iv) 80 percent for a press that was first installed on or after March 14, 1995, and that is controlled by an add-on air pollution control device whose first installation date was on or after February 19, 2012.

~~4. The requirements of this subsection do not apply to facilities with potential emissions of volatile organic compounds less than 25 tons per year.~~

4. Each owner or operator of a facility that prints flexible packaging shall comply with the following housekeeping requirements for any affected cleaning operation:

(i) store all VOC-containing cleaning materials and used shop towels in closed containers;

(ii) ensure that storage containers used for VOC-containing cleaning materials are kept closed at all times except when depositing or removing these materials;

(iii) minimize spills of VOC-containing cleaning materials;

(iv) convey VOC-containing cleaning materials from one location to another in closed containers or pipes; and

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

5. ~~Compliance determinations for inks shall treat volatile compounds not defined as VOCs as water for the purposes of calculating the “percent by volume or more of water” and the “less water” parts of the ink composition.~~

5. For the purpose of this subparagraph, the following definitions shall apply:

(i) “Cleaning” for flexible packaging printing means cleaning of a press, press parts, or removing dried ink from areas around a press. It does not include cleaning electronic components of a press, cleaning in-press or post-press operations or the use of janitorial supplies to clean areas around a press.

(ii) “Flexible packaging printing” refers to printing upon any package or part of a package the shape of which can be readily changed. Flexible packaging includes, but is not limited to, bags, pouches, liners, and wraps utilizing paper, plastic, film, aluminum foil, metalized or coated paper or film, or any combination of these materials.

(iii) “Flexographic printing” means the application of words, designs and pictures to a substrate by means of a roll printing technique in which the pattern to be applied is raised above the printing roll and the image carrier is made of rubber or other elastomeric materials.

(iv) “Packaging rotogravure printing” means rotogravure printing upon paper, paperboard, metal foil, plastic film, and other substrates, which are in subsequent operations, formed into packaging products and labels for articles to be sold.

(v) “Publication rotogravure printing” means rotogravure printing upon paper which is subsequently formed into books, magazines, catalogues, brochures, directories, newspaper supplements, and other types of printed materials.

(vi) “Rotogravure printing” means the application of words, designs and pictures to a substrate by means of a roll printing technique which involves intaglio or recessed image areas in the form of cells.

(vii) “Roll printing” means the application of words, designs and pictures to a substrate usually by means of a series of hard rubber or steel rolls each with only partial coverage.

6. Applicability. Prior to January 1, 2015, the requirements of this subparagraph (mm) shall apply to facilities at which the potential emissions of volatile organic compounds from packaging rotogravure, publication rotogravure, and flexographic printing equal or exceed 25 tons per year and are located in Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding, and Rockdale Counties as follows:

(i) All applicable facilities shall comply with the provisions of subparagraphs 1., 2., and 5.

7. Applicability. Prior to January 1, 2015, the requirements of this subparagraph (mm) shall apply to facilities at which the potential emissions of volatile organic compounds from packaging rotogravure, publication rotogravure, and flexographic printing equal or exceed 100 tons per year and are located outside the counties of Cherokee, Clayton, Cobb, Coweta, DeKalb,

Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding, and Rockdale Counties as follows:

(i) All applicable facilities shall comply with the provisions of subparagraphs 1., 2., and 5.

8. Applicability. On and after January 1, 2015, the requirements of this subparagraph (mm) shall apply to facilities at which actual emissions of volatile organic compounds from flexible package printing, before controls, equal or exceed 15 pounds per day (or 2.7 tons per 12-month rolling period) for facilities located in Barrow, Bartow, Carroll, Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Hall, Henry, Newton, Paulding, Rockdale, Spalding, and Walton Counties as follows:

(i) Individual presses that have potential emissions of volatile organic compounds from flexible package printing that equal or exceed 25 tons per year shall comply with the provisions of subparagraphs 1.(i), 2, and 3.

(ii) Individual presses that have potential emissions of volatile organic compounds from flexible package printing that do not equal or exceed 25 tons per year shall comply with the provisions of subparagraphs 1.(i) and 2.

(iii) All applicable facilities shall comply with the provisions of subparagraphs 4., 5., and 14.

(iv) Any physical or operational changes that are necessary to comply with the provisions specified in subparagraph 8.(i) or (iii) are subject to the compliance schedule specified in subparagraph 13.

9. Applicability. On and after January 1, 2015, the requirements of this subparagraph (mm) shall apply to facilities at which potential emissions of volatile organic compounds from packaging rotogravure, publication rotogravure, and flexographic printing equals or exceeds 25 tons per year but at which the actual emissions of volatile organic compounds from flexible package printing, before controls, is less than 15 pounds per day (or 2.7 tons per 12-month rolling period) and are located in Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding, and Rockdale Counties as follows:

(i) All applicable facilities shall comply with the provisions of subparagraphs 1., 2., and 5.

10. Applicability. On and after January 1 2015, the requirements of this subparagraph (mm) shall apply to facilities at which potential emissions of volatile organic compounds from packaging rotogravure, publication rotogravure, and flexographic printing equal or exceeds 100 tons per year but at which the actual emissions of volatile organic compounds from flexible package printing, before controls, is less than 15 pounds per day (or 2.7 tons per 12-month rolling period) and are located Barrow, Bartow, Carroll, Hall, Newton, Spalding, and Walton Counties as follows:

(i) All applicable facilities shall comply with the provisions of subparagraphs 1., 2., and 5.

11. Applicability. On and after January 1, 2015, the requirements of this subparagraph (mm) shall apply to facilities at which the potential emissions of volatile organic compounds from packaging rotogravure, publication rotogravure, and flexible package printing equal or exceed

100 tons per year and are located outside of counties of Barrow, Bartow, Carroll, Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Hall, Henry, Newton, Paulding, Rockdale, Spalding, and Walton Counties as follows:

(i) All applicable facilities shall comply with the provisions of subparagraphs 1., 2., and 5.

12. Applicability: The requirements of subparagraphs 8., 9., 10., and 11. will no longer be applicable by the compliance deadlines if the counties specified in those subparagraphs are re-designated to attainment for the 1997 National Ambient Air Quality Standard for ozone prior to January 1, 2015 and such counties continue to maintain that Standard thereafter. Instead, the provisions of subparagraphs 6. and 7. will continue to apply on and after January 1, 2015. In the event the 1997 National Ambient Air Quality Standard for ozone is violated in the specified counties, the requirements of subparagraphs 8., 9., 10., and 11. will only be reinstated if the Director determines that the measure is necessary to meet the requirements of the contingency plan.

13. Compliance schedule:

(i) An application for a permit to construct and operate volatile organic compound emission control systems and/or modifications of process and/or coatings used must be submitted to the Division no later than July 1, 2014.

(ii) On-site of construction of emission control systems and/or modification of process or coatings must be completed by November 1, 2014.

(iii) Full compliance with the applicable requirements specified in subparagraph 8.(i) and (iii) must be completed before January 1, 2015.

14. Compliance determinations for inks shall treat volatile compounds not defined as VOCs as water for the purposes of calculating the “percent-by-volume-or-more of water” and the “less water” parts of the ink composition.

Rule 391-3-1-.02(2)(ddd) “VOC Emissions from Offset Lithography,” is being amended by changing the name of the rule to “VOC Emissions from Offset Lithography and Letterpress” and revising it to read as follows:

(ddd) VOC Emissions from Offset Lithography and Letterpress.

1. No person shall cause, let, permit, suffer, or allow the operation of any offset lithography printing facility unless:

(i) Offset presses utilize fountain solutions containing 8 percent or less by volume VOCs; and

(ii) The owner or operator installs and operates a VOC emission reduction system for all heatset offset printing operations approved by the Director to have at least a 90 percent reduction efficiency and a capture system approved by the Director, or an equivalent VOC emission rate.

2. No person shall cause, let, permit, suffer, or allow the operation of any sheet-fed offset lithography printing facility unless the VOC content of the on-press (as-applied) fountain solution is:

(i) 5.0 percent alcohol or less (by weight); or

(ii) 8.5 percent alcohol or less (by weight) and the fountain solution is refrigerated to below 60°F (15.5 °C); or

(iii) 5 percent alcohol substitute or less (by weight) and no alcohol in the fountain solution.

~~2. For the purpose of this subsection, the following definitions shall apply:~~

~~(i) "Fountain Solution" means the mixture of water and additional ingredients such as etchant, gum arabic and dampening aid which coats the nonimage areas of the printing plate.~~

~~(ii) "Offset lithography printing" means the application of words, designs, and pictures to a substrate by means of a roll printing technique in which the pattern to be applied is transferred from a roller chemically treated to accept ink in certain areas to a roller which then transfers the pattern to the substrate.~~

~~(iii) "Sheet fed" refers to the process in which the substrate is cut into sheets before being printed.~~

~~(iv) "Web-fed" refers to the process in which the substrate is supplied to the press in the form of rolls.~~

3. Sheet-fed offset lithography presses with a sheet size of 11 inches by 17 inches or smaller, and presses with a total fountain solution reservoir of less than 1 gallon are exempt.

~~3. The requirements of this subsection shall apply to facilities with VOC emissions exceeding 25 tons per year and located in the counties of Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding and Rockdale and to facilities with potential VOC emissions exceeding 100 tons per year and located in the counties of Barrow, Bartow, Carroll, Hall, Newton, Spalding, and Walton.~~

4. No person shall cause, let, permit, suffer or allow the operation of any cold-set web-fed offset lithography printing facility unless the VOC content of the on-press (as applied) fountain solution is 5 percent alcohol substitute or less (by weight) and no alcohol in the fountain solution.

~~4. Compliance Dates.~~

~~(i) All sources subject to this subsection and located in the counties of Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding and Rockdale shall be in compliance.~~

~~(ii) All sources subject to this subsection; located in the counties of Bartow, Carroll, Hall, Newton, Spalding, and Walton; and in operation on or before October 1, 1999, shall be in compliance with this subsection by May 1, 2003.~~

~~(iii) All sources subject to this subsection; located in the counties of Bartow, Carroll, Hall, Newton, Spalding, and Walton; and which begin initial operation after October 1, 1999, shall be in compliance with this subsection upon startup.~~

~~(iv) All sources subject to this subsection and located in Barrow County shall be in compliance by March 1, 2009.~~

5. No person shall cause, let, permit, suffer, or allow the operation of any heatset web-fed offset lithography printing facility unless the VOC content of the on-press (as-applied) fountain solutions is:

(i) 1.6 percent alcohol or less (by weight); or

(ii) 3.0 percent alcohol or less (by weight) and the fountain solution is refrigerated to below 60°F (15.5°C); or

(iii) 5.0 percent alcohol substitute or less (by weight) and no alcohol in the fountain solution.

6. For heatset web-fed offset lithographic and letterpress printing presses, the owner or operator shall install and operate a VOC emission reduction system for all dryers with a potential to emit greater than or equal to 25 tons of VOC emissions per year prior to controls.

(i) Control devices with an initial installation date on or before January 1, 2015, shall be approved by the Director to have at least a 90 percent reduction efficiency and a capture system approved by the Director.

(ii) Control devices with an initial installation date after January 1, 2015, shall be approved by the Director to have at least a 95 percent reduction efficiency and a capture system approved by the Director.

(iii) For situations where the inlet concentration is so low that 90 or 95 percent efficiency cannot be achieved, an outlet concentration of 20 ppmv as hexane on a dry basis may be used as an alternative.

(iv) Heatset presses used for book printing and heatset presses with a maximum web width of 22 inches or less are exempt from the requirements in of subparagraph 6.(i) through (iii).

(v) The following materials are exempt from the requirements of subparagraph 6.(i) through (iii):

(I) sheet-fed or coldset web-fed inks;

(II) sheet-fed or coldset web-fed varnishes; and

(III) waterborne coatings or radiation (ultra-violet light or electron beam) cured materials used on offset lithographic or letterpress presses.

7. All cleaners used for blanket washing, roller washing, plate cleaners, impression cylinder cleaners, rubber rejuvenators and other cleaners used for cleaning a press, press parts, or to

remove dried ink from areas around a press shall have a VOC composite vapor pressure less than 10 mm Hg at 20°Celsius or contain less than 70 weight percent VOC. For those tasks that cannot be carried out with low VOC composite vapor pressure cleaning materials or reduced VOC content cleaning materials, 110 gallons per year of cleaning materials that do not meet the requirements of this subsection may be used.

8. All cleaning materials and used shop towels are to be kept in closed containers.

9. For the purpose of this subsection, the following definitions shall apply:

(i) "Cleaning Materials" means the materials used to remove excess printing inks, oils, and residual paper from press equipment. These materials are typically mixtures of organic (often petroleum-based) solvents.

(ii) "Fountain Solution" means the mixture of water and additional ingredients such as etchant, gum arabic and dampening aid which coats the non-image areas of the printing plate.

(iii) "Letterpress printing" means a printing process in which the image area is raised relative to the non-image area and the past ink is transferred to the substrate directly from the image surface.

(iv) "Lithographic printing" means a printing process where the image and the non-image areas are chemically differentiated; the image area is oil receptive and non-image area is water receptive.

(v) "Offset lithography printing" means a printing process that transfers the ink film from the lithographic plate to an intermediary surface (blanket) which then transfers the ink film to the substrate.

(vi) "Sheet-fed" refers to the process in which the substrate is cut into sheets before being printed.

(vii) "Web-fed" refers to the process in which the substrate is supplied to the press in the form of rolls.

10. Applicability. Prior to January 1, 2015, the requirements of this subparagraph (ddd) shall apply to facilities at which the potential emissions of volatile organic compounds from offset lithography printing equal or exceed 25 tons per year and are located in Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding, and Rockdale Counties as follows:

(i) All applicable facilities shall comply with the provisions of subparagraphs 1. and 9.

11. Applicability. Prior to January 1, 2015, the requirements of this subparagraph (ddd) shall apply to facilities at which the potential emissions of volatile organic compounds from offset lithography printing equal or exceed 100 tons per year and are located in Barrow, Bartow, Carroll, Hall, Newton, Spalding, and Walton Counties as follows:

(i) All applicable facilities shall comply with the provisions of subparagraphs 1. and 9.

12. Applicability. Prior to January 1, 2015, all letterpress printing operations are subject to the applicability and control requirements of subparagraph 391-3-1-.02(2)(tt).

13. Applicability. On and after January 1, 2015, the requirements of this subparagraph (ddd) shall apply to facilities at which actual emissions of volatile organic compounds from offset lithographic printing and letter press printing, before controls, equal or exceed 15 pounds per day (or 2.7 tons per 12-month rolling period) for facilities located in Barrow, Bartow, Carroll, Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Hall, Henry, Newton, Paulding, Rockdale, Spalding, and Walton Counties as follows:

(i) Individual heatset web offset lithographic printing presses and individual heatset web letterpress printing presses that have potential emissions of volatile organic compounds from the dryer, prior to controls, that equal or exceed 25 tons per year shall comply with the provisions of subparagraph 6;

(ii) Individual heatset web offset lithographic printing presses that have potential emissions of volatile organic compounds from the dryer, prior to controls, that do not equal or exceed 25 tons per year and are located at facilities at which the potential emissions of volatile organic compounds from offset lithography printing equal or exceed 25 tons per year in Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding, and Rockdale Counties shall comply with the provisions of subparagraph 1.(ii);

(iii) Individual heatset web offset lithographic printing presses that have potential emissions of volatile organic compounds from the dryer, prior to controls, that do not equal or exceed 25 tons per year and are located at facilities at which the potential emissions of volatile organic compounds from offset lithography printing equal or exceed 100 tons per year in Barrow, Bartow, Carroll, Hall, Newton, Spalding, and Walton Counties shall comply with the provisions of subparagraph 1.(ii).

(iv) All applicable facilities shall comply with the provisions of subparagraphs 2., 3., 4., 5., 7., 8., and 9.

(v) Any physical or operational changes that are necessary to comply with the provisions specified in subparagraphs 13.(i) or (iv) are subject to the compliance schedule specified in subparagraph 15.

14. Applicability: The requirements of subparagraph 13. will no longer be applicable by the compliance deadlines if the counties specified in those subparagraphs are re-designated to attainment for the 1997 National Ambient Air Quality Standard for ozone prior to January 1, 2015 and such counties continue to maintain that Standard thereafter. Instead, the provisions of subparagraphs 10., 11., and 12. will continue to apply on and after January 1, 2015. In the event the 1997 National Ambient Air Quality Standard for ozone is violated in the specified counties, the requirements of subparagraph 13. will only be reinstated if the Director determines that the measure is necessary to meet the requirements of the contingency plan.

15. Compliance Schedule:

(i) An application for a permit to construct and operate volatile organic compound emission control systems and/or modifications of process and/or coatings used must be submitted to the Division no later than **July 1, 2014.**

(ii) On-site of construction of emission control systems and/or modification of process or coatings must be completed by **November 1, 2014.**

(iii) Full compliance with the applicable requirements specified in subparagraphs 13.(i) and (iv) must be completed before **January 1, 2015.**

Rule 391-3-1-.02(2)(vvv) “VOC Emissions from Surface Coating of Miscellaneous Plastic Parts and Products,” is being added to read as follows:

(vvv) VOC Emissions from Surface Coating of Miscellaneous Plastic Parts and Products.

1. No person shall cause, let, permit, suffer, or allow the emissions of VOC from surface coating of miscellaneous plastic parts and products that does not fall under subparagraphs 2., 3., 4., 5., 6., 7., and/or 8. of this subsection to exceed:

(i) 2.3 pounds per gallon of coating, excluding water, delivered to a coating application system that applies a general one-component coating. If any coating delivered to the coating application system contains more than 2.3 pounds VOC per gallon, the solids equivalent limit shall be 3.35 pounds VOC per gallon of coating solids delivered to the coating application system.

(ii) 2.8 pounds per gallon of coating, excluding water, delivered to a coating application system that applies a military specification (1-pack) coating. If any coating delivered to the coating application system contains more than 2.8 pounds VOC per gallon, the solids equivalent limit shall be 4.52 pounds VOC per gallon of coating solids delivered to the coating application system.

(iii) 3.5 pounds per gallon of coating, excluding water, delivered to a coating application system that applies one or more of the following coatings: general multi-component; extreme-performance (2-pack) coating ; metallic coating; and military specification (2-pack) coating. If any coating delivered to the coating application system contains more than 3.5 pounds VOC per gallon, the solids equivalent limit shall be 6.67 pounds VOC per gallon of coating solids delivered to the coating application system.

(iv) 5.7 pounds per gallon of coating, excluding water, delivered to a coating application system that applies a multi-colored coating. If any coating delivered to the coating application system contains more than 5.7 pounds VOC per gallon, the solids equivalent limit shall be 25.3 pounds VOC per gallon of coating solids delivered to the coating application system.

(v) 6.3 pounds per gallon of coating, excluding water, delivered to a coating application system that applies a mold-seal coating. If any coating delivered to the coating application system contains more than 6.3 pounds VOC per gallon, the solids equivalent limit shall be 43.7 pounds VOC per gallon of coating solids delivered to the coating application system.

(vi) 6.7 pounds per gallon of coating, excluding water, delivered to a coating application system that applies an electric dissipating coating, shock-free coating, optical coating, or vacuum metalizing coating. If any coating delivered to the coating application system contains more than 6.7 pounds VOC per gallon, the solids equivalent limit shall be 74.7 pounds VOC per gallon of coating solids delivered to the coating application system.

2. No person shall cause, let, permit, suffer, or allow the emissions of VOC from surface coating of plastic parts of automobiles and trucks at a facility that is not an automobile or light-duty truck manufacturing facility using baked coatings for interior and exterior parts to exceed:

(i) 3.5 pounds per gallon of coating, excluding water, delivered to a coating application system that applies a non-flexible primer. If any non-flexible primer coating delivered to the coating application system contains more than 3.5 pounds VOC per gallon, the solids equivalent limit shall be 6.67 pounds VOC per gallon of coating solids delivered to the coating application system.

(ii) 4.0 pounds per gallon of coating, excluding water, delivered to a coating application system that applies a clear coat. If any clear coat coating delivered to the coating application system contains more than 4.0 pounds VOC per gallon, the solids equivalent limit shall be 8.76 pounds VOC per gallon of coating solids delivered to the coating application system.

(iii) 4.3 pounds per gallon of coating, excluding water, delivered to a coating application system that applies a base coat or non-base coat/clear coat. If any one of these coatings delivered to the coating application system contains more than 4.3 pounds VOC per gallon, the solids equivalent limit shall be 8.76 pounds VOC per gallon of coating solids delivered to the coating application system.

(iv) 4.5 pounds per gallon of coating, excluding water, delivered to a coating application system that applies a flexible primer. If any coating delivered to the coating application system contains more than 4.5 pounds VOC per gallon, the solids equivalent limit shall be 11.58 pounds VOC per gallon of coating solids delivered to the coating application system.

3. No person shall cause, let, permit, suffer, or allow the emissions of VOC from surface coating of plastic parts of automobiles and trucks at a facility that is not an automobile or light-duty truck manufacturing facility using air dried coatings for exterior parts to exceed:

(i) 4.0 pounds per gallon of coating, excluding water, delivered to a coating application system that applies a clear coat. If any coating delivered to the coating application system contains more than 4.0 pounds VOC per gallon, the solids equivalent limit shall be 11.58 pounds VOC per gallon of coating solids delivered to the coating application system.

(ii) 4.8 pounds per gallon of coating, excluding water, delivered to a coating application system that applies a primer. If any coating delivered to the coating application system contains more than 4.8 pounds VOC per gallon, the solids equivalent limit shall be 13.80 pounds VOC per gallon of coating solids delivered to the coating application system.

(iii) 4.0 pounds per gallon of coating, excluding water, delivered to a coating application system that applies a base coat or a non-basecoat/clear coat. If any coating delivered to the coating application system contains more than 4.0 pounds VOC per gallon, the solids equivalent limit

shall be 13.4 pounds VOC per gallon of coating solids delivered to the coating application system.

4. No person shall cause, let, permit, suffer, or allow the emissions of VOC from surface coating of plastic parts of automobile and trucks at a facility that is not an automobile or light-duty truck manufacturing facility using air dried coatings for interior parts to exceed:

(i) 5.0 pounds per gallon of coating, excluding water, delivered to a coating application system that applies a coating. If any coating delivered to the coating application system contains more than 5.0 pounds VOC per gallon, the solids equivalent limit shall be 15.59 pounds VOC per gallon of coating solids delivered to the coating application system.

5. No person shall cause, let, permit, suffer, or allow the emissions of VOC from surface coating of plastic parts of automobile and trucks at a facility that is not an automobile or light-duty truck manufacturing facility using touchup and repair coatings to exceed:

(i) 5.2 pounds per gallon of coating, excluding water, delivered to a coating application system that applies a coating. If any coating delivered to the coating application system contains more than 5.2 pounds VOC per gallon, the solids equivalent limit shall be 17.72 pounds VOC per gallon of coating solids delivered to the coating application system.

6. No person shall cause, let, permit, suffer, or allow the emissions of VOC from surface coating of plastic parts of business machines to exceed:

(i) 2.2 pounds per gallon of coating, excluding water, delivered to a coating application system that applies a fog coat. If any coating delivered to the coating application system contains more than 2.2 pounds VOC per gallon, the solids equivalent limit shall be 3.14 pounds VOC per gallon of coating solids delivered to the coating application system.

(ii) 2.9 pounds per gallon of coating, excluding water, delivered to a coating application system that applies one or more of the following coatings: primer, topcoat, texture coat, touchup and repair. If any coating delivered to the coating application system contains more than 2.9 pounds VOC per gallon, the solids equivalent limit shall be 4.80 pounds VOC per gallon of coating solids delivered to the coating application system.

7. No person shall cause, let, permit, suffer, or allow the emissions of VOC from surface coating of miscellaneous motor vehicle plastic parts and products at a facility that is not an automobile or light-duty truck manufacturing facility to exceed:

(i) 1.7 pounds per gallon of coating, excluding water, delivered to a coating application system that applies the following motor vehicle materials: gasket/gasket sealing material and bedliner.

(ii) 3.5 pounds per gallon of coating, excluding water, delivered to a coating application system that applies the following motor vehicle materials: cavity wax, sealer, deadener, underbody coating, trunk interior coating, and lubricating wax/compound.

8. No person shall cause, let, permit, suffer, or allow the emissions of VOC from surface coating of plastic parts of automobile and trucks at a facility that is not an automobile or light-duty truck manufacturing facility using red or black coatings to exceed 1.15 times the applicable

limit in this subsection except in the case of touch-up and repair coatings in which the applicable limit shall apply.

9. Each owner or operator of a facility that coats plastic parts shall ensure that all coating application systems utilize one or more of the application techniques stated below:

(i) Electrostatic spray application;

(ii) High volume low pressure (HVLP) spraying;

(iii) Flow/curtain application;

(iv) Roll coating;

(v) Dip coat application including electrodeposition;

(vi) Airless spray;

(vii) Air-assisted airless spray; or

(viii) Other coating application methods that achieve transfer efficiency equivalent to HVLP or electrostatic spray application methods, as determined by the Director.

10. Each owner or operator of a facility that coats plastic parts shall comply with the following work practice standards:

(i) store all VOC-containing coatings, thinners, and coating-related waste materials in closed containers;

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

(iii) minimize spills of VOC-containing coatings, thinners, and coating-related waste materials; and

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

11. Each owner or operator of a facility that coats plastic parts shall comply with the following housekeeping requirements for any affected cleaning operation:

(i) store all VOC-containing cleaning materials and used shop towels in closed containers;

(ii) ensure that storage containers used for VOC-containing cleaning materials are kept closed at all times except when depositing or removing these materials;

(iii) minimize spills of VOC-containing cleaning materials;

(iv) convey VOC-containing cleaning materials from one location to another in closed containers or pipes; and

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

12. The VOC limits specified in this subsection do not apply to the following types of plastics coatings and/or coating operations:

(i) Touch-up and repair coatings;

(ii) Stencil coatings applied on clear or transparent substrates;

(iii) Clear or translucent coatings;

(iv) Coatings applied at a paint manufacturing facility while conducting performance tests on the coatings;

(v) Any individual coating category used in volumes less than 50 gallons in any one year, if substitute compliant coatings are not available, provided that the total usage of all such coatings does not exceed 200 gallons per year, per facility;

(vi) Reflective coating applied to highway cones;

(vii) Mask coatings that are less than 0.5 millimeter thick (dried) and the area coated is less than 25 square inches;

(viii) EMI/RFI shielding coatings; and

(ix) Heparin-benzalkonium chloride (HBAC)-containing coatings applied to medical devices, provided that the total usage of all such coatings does not exceed 100 gallons per year, per facility.

The recommended application methods and work practice standards specified in this subsection still apply.

13. Airbrush operations using five gallons or less per year of coating are exempt from the application technique requirements of this subsection but must comply with the VOC limits and work practices specified.

14. The VOC limits specified in this subsection do not apply to the coating of plastic parts of automobiles and trucks or the coating of plastic parts of business machines of the following types of coatings and/or coating operations:

(i) Texture coatings;

(ii) Vacuum metalizing coatings;

(iii) Gloss reducers;

(iv) Texture topcoats;

(v) Adhesion primers;

(vi) Electrostatic preparation coatings;

(vii) Resist coatings; and

(viii) Stencil coatings.

The application methods and work practice standards specified in this subsection still apply.

15. All VOC emissions from solvent washings shall be considered in the emission limitations unless the solvent is directed into containers that prevent evaporation into the atmosphere.

16. The emission limits in this subsection shall be achieved by:

(i) the application of low solvent coating technology where each and every coating meets the limit expressed in pounds VOC per gallon of coating, excluding water, stated in paragraphs 1., 2., 3., 4., 5., 6., 7., and 8 of this subsection; or

(ii) the application of low-solvent coating technology where the 24-hour weighted average of all coatings on a single coating line or operation meets the solids equivalent limit expressed in pounds VOC per gallon of coating solids stated in paragraphs 1., 2., 3., 4., 5., 6., and 8. of this subsection. Averaging across lines is not allowed; or

(iii) control equipment, including but not limited to incineration, carbon adsorption and condensation, with a capture system approved by the Director, provided that 90 percent of the nonmethane volatile organic compounds which enter the control equipment are recovered or destroyed, and that overall VOC emissions do not exceed the solids equivalent limit, expressed in pounds VOC per gallon of coating solids stated in paragraphs 1., 2., 3., 4., 5., 6., and 8. of this subsection; and

(iv) for motor vehicle plastic parts, compliance may be achieved only as stated in subparagraph 7. of this section. There is no solids equivalent limit for such coatings.

17. Definitions: For the purpose of this subsection, the following definitions apply:

(i) "2-pack coating" means a coating requiring the addition of a separate reactive resin, commonly known as a catalyst, before application to form an acceptable dry film. 2-pack coating may also be known as a "two-component coating".

(ii) "Adhesion primer" means a coating that is applied to a polyolefin part to promote the adhesion of a subsequent coating. An adhesion prime is clearly identified as an adhesion prime or adhesion promoter on its accompanying material safety data sheet.

(iii) "Air brush operations" means the application of a coating with a small, air-operated tool.

(iv) "Air-dried coating" means a coating that is dried by the use of air or forced warm air at temperatures up to 194°F.

(v) "Baked Coating" means a coating that is cured at a temperature at or above 90°C (194°F).

(vi) "Base Coat" means an initial coat of paint, generally after a primer, that is applied for protection or as a background color.

(vii) "Bedliner" means a multi-component coating, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied to a cargo bed after the application of topcoat to provide additional durability and chip resistance.

(viii) "Black coating" means a coating which meets both of the following criteria:

(1) maximum lightness: 23 units; and (2) saturation: less than 2.8, where saturation equals the square root of $A^2 + B^2$. These criteria are based on Cielab color space, 0/45 geometry. For spherical geometry, specular included, maximum lightness is 33 units.

(ix) "Business machine" means a device that uses electronic or mechanical methods to process information, perform calculations, print or copy information or convert sound into electrical impulses for transmission, including devices listed in standard industrial classification numbers 3572, 3573, 3579, and 3661 and photocopy machines, a subcategory of standard industrial classification number 3861.

(x) "Cavity wax" means a coating, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied into the cavities of the vehicle primarily for the purpose of enhancing corrosion protection.

(xi) "Clear coating" means a coating which lacks color and opacity or is transparent and uses the undercoat as a reflectant base or undertone color;

(xii) "Coating application system" means all operations and equipment which applies, conveys, and dries a surface coating including, but not limited to, spray booths, flow coaters, flashoff areas, air dryers and ovens.

(xiii) "Coating of plastic parts of automobiles and trucks" means the coating of any plastic part that is or shall be assembled with other parts to form an automobile or truck.

(xiv) "Coating of plastic parts of business machines" means the coating of any plastic part that is or shall be assembled with other parts to form a business machine.

(xv) "Deadener" means a coating, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied to selected vehicle surfaces primarily for the purpose of reducing the source of road noise in the passenger compartment.

(xvi) "Electric dissipating coating" means a coating that rapidly dissipates a high-voltage electric charge.

(xvii) “Electrostatic prep coat” means a coating that is applied to a plastic part solely to provide conductivity for the subsequent application of a primer, a topcoat, or other coating through the use of electrostatic application methods. An electrostatic prep coat is clearly identified as an electrostatic prep coat on its accompanying material safety data sheet.

(xviii) “EMI/RFI shielding coating” means a coating used on plastic electronics enclosures to reduce or eliminate electromagnetic or radio frequency interference.

(xix) “Extreme-performance coating” means a coating used on a plastic surface where the coated surface is, in its intended use, subject to the following: (a) chronic exposure to corrosive, caustic or acidic agents, chemicals, chemical fumes, chemical mixtures or solutions; or (b) repeated exposure to temperatures in excess of 250°F; or (c) repeated heavy abrasion, including mechanical wear and repeated scrubbing with industrial grade solvents, cleansers or scouring agents. Extreme-performance coatings include, but are not limited to, coatings applied to locomotives, railroad cars, farm machinery, and heavy duty trucks.

(xx) “Flexible coating” means any coating including but not limited to primer, base coat, clear coat or topcoat that is required to comply with engineering specifications for impact resistance, mandrel bend, or elongation as defined by the original equipment manufacturer.

(xxi) “Fog coat” means a coating that is applied to a plastic part for the purpose of color matching without masking a molded-in texture. A fog coat shall not be applied at a thickness of more than 0.5 mils of coating solids.

(xxii) “Gasket/sealing material” means a fluid, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied to coat a gasket or replace and perform the same function as a gasket. Automobile and light-duty truck gasket/gasket sealing material includes room temperature vulcanization (RTV) seal material.

(xxiii) “Gloss reducer” means a coating that is applied to a plastic part solely to reduce the shine of the part. A gloss reducer shall not be applied at a thickness of more than 0.5 mils of coating solids.

(xxiv) “Lubricating wax/compound” means a protective lubricating material, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied to vehicle hubs and hinges.

(xxv) “Metallic coating” means a coating which contains more than five grams of metal particles per liter of coating as applied. “Metal particles” are pieces of a pure elemental metal or combination of elemental metals.

(xxvi) “Miscellaneous plastic parts and products” means surface coating of products manufactured by the following industrial source categories: large farm machinery, small farm machinery, small appliances, commercial machinery, industrial machinery, fabricated plastic products and any other industrial category which coats plastic parts or products under the Standard Industry Classification Code Major Groups 33, 34, 35, 36, 37, 38, 40, and 41. The miscellaneous plastic parts and products source category does not include:

(l) automobiles and light-duty trucks;

(II) metal cans;

(III) flat metal sheets and strips in the form of rolls or coils;

(IV) magnet wire for use in electrical machinery;

(V) metal furniture;

(VI) large appliances;

(VII) aerospace manufacturing and rework operations;

(VIII) automobile refinishing;

(IX) customized top coating of automobiles and trucks, if production is less than 35 vehicles per day;

(X) exterior of marine vessels;

(XI) gel coats applied to fiber reinforced plastic (fiberglass composite) products removed from the mold or used as in-mold coatings in the production of fiberglass parts;

(XII) fiberglass boat manufacturing materials; and

(XIII) miscellaneous industrial adhesives.

(xxvii) "Military specification coating" means a coating which has a formulation approved by a United States Military Agency for use on military equipment.

(xxviii) "Mold-seal coating" means the initial coating applied to a new mold or a repaired mold to provide a smooth surface which, when coated with a mold release coating, prevents products from sticking to the mold.

(xxix) "Multi-colored coating" means a coating which exhibits more than one color when applied and is packaged in a single container and applied in a single coat.

(xxx) "Multi-component coating" means a coating requiring the addition of a separate reactive resin, commonly known as a catalyst or hardener, before application to form an acceptable dry film.

(xxxi) "Non-flexible Coating" means any coating that does not meet the definition of "flexible coating" as specified in this subsection.

(xxxii) "One-component coating" or "1-pack coating" means a coating that is ready for application as it comes out of its container to form an acceptable dry film. A thinner, necessary to reduce the viscosity, is not considered a component.

(xxxiii) "Optical coating" means a coating applied to an optical lens.

(xxxiv) “Primer” means the first layer and any subsequent layers of identically-formulated coating applied to the surface of a plastic part or product. Primers are typically used for corrosion prevention, protection from the environment, functional fluid resistance, and adhesion of subsequent coatings.

(xxxv) “Red coating” means a coating which meets all of the following criteria:

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

(II) Blue limit: the hue of monastrel red-violet.

(III) Lightness limit for metallics: 35 percent aluminum flake.

(IV) Lightness limit for solids: 50 percent titanium dioxide white.

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

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

(VII) These criteria are based on Cielab color space, 0/45 geometry. For spherical geometry, specular included, the upper limit is 49 units. The maximum lightness varies as the hue moves from violet to orange. This is a natural consequence of the strength of the colorants, and real colors show this effect.

(xxxvi) “Sealer” means a high viscosity material, used at a facility that is not an automobile or light-duty truck assembly coating facility, that is generally, but not always, applied in the paint shop after the body has received an electrodeposition primer coating and before the application of subsequent coatings (e.g., primer-surfacer). The primary purpose of automobile and light-duty truck sealer is to fill body joints completely so that there is no intrusion of water, gases or corrosive materials into the passenger area of the body compartment. Such materials are also referred to as sealant, sealant primer, or caulk.

(xxxvii) “Repair coating” means a coating used to re-coat portions of a previously coated product which has sustained mechanical damage to the coating following normal coating operations.

(xxxviii) “Resist coat” means a coating that is applied to a plastic part before metallic plating to prevent deposits of metal on portions of the plastic part.

(xxxix) “Shock-free coating” means a coating applied to electrical components to protect the user from electric shock. The coating has characteristics of being of low capacitance, high resistance, and having resistance to breaking down under high voltage.

(xl) “Stencil coating” means an ink or a pigmented coating which is rolled or brushed onto a template or stamp in order to add identifying letters, symbols and/or numbers.

(xli) “Texture coating” means a coating that is applied to a plastic part which, in its finished form, consists of discrete raised spots of the coating.

(xlii) "Topcoat" means any final coating applied to a plastic part or product.

(xliii) "Touch-up coating" means a coating used to cover minor coating imperfections appearing after the main coating operation.

(xliv) "Translucent coating" means a coating which contains binders and pigment and is formulated to form a colored, but no opaque, film.

(xlv) "Transfer efficiency" means the weight (or volume) of coating solids adhering to the surface being coated divided by the total weight (or volume) of coating solids delivered to the applicator.

(xlvi) "Trunk interior coating" means a coating, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied to the trunk interior to provide chip protection.

(xlvii) "Underbody coating" means a coating, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied to the undercarriage or firewall to prevent corrosion and/or provide chip protection.

(xlviii) "Vacuum-metalizing coating" means the undercoat applied to the substrate on which the metal is deposited or the overcoat applied directly to the metal film. Vacuum metalizing/physical vapor deposition (PVD) is the process whereby metal is vaporized and deposited on a substrate in a vacuum chamber.

18. Applicability: On and after January 1, 2015, the requirements of this subparagraph (vvv) shall apply to facilities at which the potential emissions of volatile organic compounds from all surface coating of miscellaneous plastic parts and products categories covered in subparagraphs 1. through 8. of this subparagraph equal or exceed 10 tons per year and are located in Barrow, Bartow, Carroll, Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Hall, Henry, Newton, Paulding, Rockdale, Spalding, and Walton counties. Any physical or operational changes that are necessary to comply with the provisions specified in this subparagraph are subject to the compliance schedule specified in subparagraph 20. Prior to January 1, 2015, such facilities shall comply with the provisions of subparagraph 391-3-1-.02(2)(tt), if applicable.

19. Applicability: The requirements of this Subparagraph (vvv) will no longer be applicable by the compliance deadlines if the counties specified in subparagraph 18. are re-designated to attainment for the 1997 National Ambient Air Quality Standard for ozone prior to January 1, 2015. In the event the 1997 National Ambient Air Quality Standard for ozone is violated in the specified counties, the requirements of this Subparagraph (vvv) will only be reinstated if the Director determines that the measure is necessary to meet the requirements of the contingency plan.

20. Compliance Schedule:

(i) An application for a permit to construct and operate volatile organic compound emission control systems and/or modifications of process and/or coatings used must be submitted to the Division no later than **July 1, 2014.**

(ii) On-site construction of emission control systems and/or modification of process or coatings must be completed by **November 1, 2014.**

(iii) Full compliance with the applicable requirements specified this subparagraph (vvv) must be completed before **January 1, 2015.**

Rule 391-3-1-.02(2)(yyy) “VOC Emissions from the Use of Miscellaneous Industrial Adhesives,” is being added to read as follows

(yyy) VOC Emissions from the Use of Miscellaneous Industrial Adhesives

1. No person shall cause, let, permit, suffer or allow the emissions of VOC from the use of miscellaneous industrial adhesives with general adhesive application processes to exceed:

(i) 0.3 pounds per gallon of adhesive or adhesive primer, excluding water, when used with one of the following substrates: metal; wood.

(ii) 1.0 pounds per gallon of adhesive or adhesive primer, excluding water, when used with porous material (except wood) substrates.

(iii) 1.7 pounds per gallon of adhesive or adhesive primer, excluding water, when used with reinforced plastic composite substrates.

(iv) 2.1 pounds per gallon of adhesive or adhesive primer, excluding water, when used with flexible vinyl or rubber substrates.

(v) 2.1 pounds per gallon of adhesive or adhesive primer, excluding water, when used with a substrate not specified in paragraphs 1.(i) through 1.(iv).

2. No person shall cause, let, permit, suffer, or allow the emissions of VOC from the use of miscellaneous industrial adhesives with specialty adhesive application processes to exceed:

(i) 0.8 pounds per gallon of adhesive or adhesive primer, excluding water, when used with one of the following: structural glazing; tire repair.

(ii) 1.1 pounds per gallon of adhesive or adhesive primer, excluding water, when used in ceramic tile installation.

(iii) 1.3 pounds per gallon of adhesive or adhesive primer, excluding water, when used with one of the following: cove base installation; indoor floor covering installation.

(iv) 1.4 pounds per gallon of adhesive or adhesive primer, excluding water, when used with waterproof resorcinol glue.

(v) 1.7 pounds per gallon of adhesive or adhesive primer, excluding water, when used with multipurpose construction.

(vi) 2.1 pounds per gallon of adhesive or adhesive primer, excluding water, when used with one of the following: contact bond adhesive; outdoor floor covering installation; motor vehicle adhesive; single-ply roof membrane installation/repair (except ethylene propylenediene monomer(EPDM) roof membrane installation/repair).

(vii) 3.3 pounds per gallon of adhesive or adhesive primer, excluding water, when used with plastic solvent welding (containing acrylonitrile-butadiene-styrene or ABS).

(viii) 4.2 pounds per gallon of adhesive or adhesive primer, excluding water, when used with plastic solvent welding (except ABS).

(ix) 5.5 pounds per gallon of adhesive or adhesive primer, excluding water, when used with perimeter-bonded sheet vinyl (floor covering installation).

(x) 6.3 pounds per gallon of adhesive or adhesive primer, excluding water, when used with motor vehicle weatherstrip adhesive.

(xi) 6.5 pounds per gallon of adhesive or adhesive primer, excluding water, when used with thin metal laminating.

(xii) 7.1 pounds per gallon of adhesive or adhesive primer, excluding water, when used with one of the following: metal to urethane/rubber molding or casting; sheet rubber lining installation.

3. No person shall cause, let, permit, suffer, or allow the emissions of VOC from the use of miscellaneous industrial adhesives with adhesive primer application processes to exceed:

(i) 7.5 pounds per gallon of adhesive or adhesive primer, excluding water, when used as motor vehicle glass bonding primer.

(ii) 5.4 pounds per gallon of adhesive or adhesive primer, excluding water, when used as a plastic solvent welding adhesive primer.

(iii) 2.1 pounds per gallon of adhesive or adhesive primer, excluding water, when used as an adhesive primer for an application process not specified in paragraphs 3.(i) through 3.(ii).

4. All volatile organic compounds containing materials applied by each miscellaneous industrial adhesive application process shall be used in one of the following application methods in conjunction with using low volatile organic compound adhesives or adhesive primers:

(i) Electrostatic spray;

(ii) High Volume-Low Pressure (HVLP) spray;

(iii) Flow coat;

(iv) Roll coat or hand application, including non-spray application methods similar to hand or mechanically-powered caulking gun, brush, or direct hand application;

(v) Dip coat (including electrodeposition);

(vi) Airless spray;

(vii) Air-assisted airless spray; or

(viii) Other adhesive application method capable of achieving a transfer efficiency equivalent to or better than achieved by HVLP spraying.

5. The VOC emission limits and the recommended application methods of this subsection do not apply to the following adhesives and adhesives primer application processes:

(i) Adhesives or adhesive primers being tested or evaluated in any research and development, quality assurance, or analytical laboratory.

(ii) Adhesives or adhesive primers used in the assembly, repair, or manufacture of aerospace or undersea-based weapon systems.

(iii) Adhesives or adhesive primers used in medical equipment manufacturing operations.

(iv) Cyanoacrylate adhesive application processes.

(v) Aerosol adhesive and aerosol adhesive primer application processes.

(vi) Processes using polyester bonding putties to assemble fiberglass parts at fiberglass boat manufacturing facilities and at other reinforced plastic composite manufacturing facilities.

(vii) Processes using adhesives and adhesive primers that are supplied to the manufacturer in containers with a net volume of 16 ounces or less, or a net weight of one pound or less.

The recommended work practice standards specified in this subsection still apply.

6. The emission limits in this subsection shall be achieved by the application of adhesive or adhesive primer where each and every adhesive meets the limit expressed in pounds VOC per gallon of coating, excluding water, stated in paragraphs 1., 2., and 3. of this subsection; or

7. Any miscellaneous industrial adhesive application process subject to this subsection, which chooses to use control equipment for adhesive application processes rather than to comply with the emission limits and requirements established in paragraphs 1., 2., 3., and 4. of this subsection, shall install control equipment with an overall control efficiency of at least 85 percent or use a combination of adhesives and add-on control equipment on an application process to meet limits established in paragraph 1. of this subsection.

8. If an adhesive is used to bond dissimilar substrates together in general adhesive application processes, then the applicable substrate category with the highest volatile organic compounds emission limit shall be established as the limit for such application.

9. For the purpose of this subsection; the following definitions apply:

- (i) “Acrylonitrile-butadiene-styrene” or “ABS welding” means any process to weld acrylonitrile-butadiene-styrene pipe.
- (ii) “Adhesive” means any chemical substance that is applied for the purpose of bonding two surfaces together other than by mechanical means.
- (iii) “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.
- (iv) “Adhesive primer application process” means any one of the following: motor vehicle glass bonding primer; plastic solvent welding adhesive primer; single-ply roof membrane adhesive primer; other adhesive primer.
- (v) “Aerosol adhesive” means an adhesive or adhesive primer 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.
- (vi) “Air-assisted airless spray” means a system that consists of an airless spray gun with a compressed air jet at the gun tip to atomize the adhesive.
- (vii) “Airless spray” means the application of an adhesive through an atomizing nozzle at high pressure (1,000 to 6,000 pounds per square inch) by a pump force.
- (viii) “Ceramic tile installation adhesive” means any adhesive intended by the manufacturer for use in the installation of ceramic tiles.
- (xi) “Contact bond 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 bond adhesive also 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.
- (xii) “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.
- (xiii) “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.
- (xiv) “Cyanoacrylate adhesive” means any adhesive with a cyanoacrylate content of at least 95 percent by weight.

(xv) “Dip coating” means application where substrates are dipped into a tank containing the adhesive. The substrates are then withdrawn from the tank and any excess adhesive is allowed to drain.

(xvii) “Electrostatic spray” means application where the adhesive and substrate are oppositely charged.

(xviii) “EPDM roof membrane” means a prefabricated single sheet of elastomeric material composed of ethylene propylenediene monomer (EPDM) and that is field applied to a building roof using one layer or membrane material.

(xix) “Flexible vinyl” means non-rigid polyvinyl chloride plastic with a 5 percent by weight plasticizer content.

(xx) “Flow coating” means conveying the substrate over an enclosed sink where the adhesive is applied at low pressure as the item passes under a series of nozzles.

(xxi) “General adhesive application processes” means the use of adhesive on any one of the following substrates: reinforced plastic composite; flexible vinyl; metal; porous material (except wood); rubber; wood; other substrates.

(xxii) “HVLP” means a system with specialized nozzles that provide better air and fluid flow at lower air pressure, shape spray pattern, and guide high volumes of atomized adhesive particles to the substrate using lower air pressure (10 pounds per square inch or less at the spray cap).

(xxiii) “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.

(xxv) “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.

(xxvi) “Miscellaneous industrial adhesive application” means an application process which consists of a series of one or more adhesive applicators and any associated drying area and/or oven wherein an adhesive is applied, dried, and/or cured. An application process ends at the point where the adhesive is dried or cured, or prior to any subsequent application of a different adhesive. It is not necessary for an application process to have an oven or flash-off area.

(xxvii) “Motor vehicle adhesive” means an adhesive, including glass bonding adhesive, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied for the purpose of bonding tow vehicle surfaces together without regard to the substrates involved.

(xxviii) “Motor vehicle glass bonding primer” means a primer, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied to a windshield or other glass, or to body openings, to prepare the glass or body opening for the application of glass bonding

adhesives or the installation of adhesive bonded glass. Motor vehicle glass bonding primer includes glass bonding/cleaning primers that perform both functions (cleaning and priming of the windshield or other glass, or body openings) prior to the application of adhesive or the installation of adhesive bonded glass.

(xxix) "Motor vehicle weatherstrip adhesive" means an adhesive, used at a facility that is not an automobile or light-duty truck assembly coating facility, applied to weatherstripping materials for the purpose of bonding the weatherstrip material to the surface of the vehicle.

(xxx) "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.

(xxxi) "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.

(xxxii) "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.

(xxxiii) "Perimeter bonded sheet vinyl 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.

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

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

(xxvi) "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.

(xxxvii) "Porous material" means a substance that has tiny openings, often microscopic, in which fluids may be absorbed or discharged, including, but not limited to, paper and corrugated paperboard. For the purpose of this section, porous material does not include wood.

(xl) "Reinforced plastic composite" means a composite material consisting of plastic reinforced with fibers.

(xli) "Roll coating", "brush coating", and "hand application" means application of high viscosity adhesives onto small surface area.

(xlii) "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.

(xlili) "Sheet rubber lining 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.

(xliv) "Single-ply roof membrane" means a prefabricated single sheet of rubber, normally ethylene-propylenediene terpolymer, that is field applied to a building roof using one layer of membrane material. For the purposes of this section, single-ply roof membrane does not include membranes prefabricated from ethylene-propylenediene monomer (EPDM).

(xlv) "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.

(xlvi) "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.

(xlvii) "Specialty adhesive application processes" means any one of the following: ceramic tile installation; contact bond adhesive; cove base installation; floor covering installation (indoor); floor covering installation (outdoor); floor covering installation (perimeter bonded sheet vinyl); metal to urethane/rubber molding or casting; motor vehicle adhesive; motor vehicle weatherstrip adhesive; multipurpose construction; plastic solvent welding (ABS); plastic solvent welding (except ABS); sheet rubber lining installation; single-ply roof membrane installation/repair (except EPDM); structural glazing; thin metal laminating; tire repair; and waterproof resorcinol glue.

(xlviii) "Structural glazing" means a process that includes the application of adhesive to bond glass, ceramic, metal, stone or composite panels to exterior building frames.

(xlix) "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(s) is less than 0.25 millimeters.

(l) "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.

(li) "Waterproof resorcinol glue" means a 2-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.

10. Applicability: On and after January 1, 2015, the requirements of this Subparagraph (yyy) shall apply:

(i) to facilities at which the actual emissions of volatile organic compounds from all miscellaneous industrial adhesive application processes at a facility equal or exceed 2.7 tons per 12-month rolling period for facilities located in Barrow, Bartow, Carroll, Cherokee, Clayton,

Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Hall, Henry, Newton, Paulding, Rockdale, Spalding, and Walton counties;

(ii) the facility is not subject to Georgia Rules 391-3-1-.02(2)(t), (u), (v), (w), (x), (y), (z), (jj), (ll), (mm), (ddd), or (kkk); and

(iii) any physical or operational changes that are necessary to comply with the provisions specified in this subparagraph are subject to the compliance schedule specified in Subparagraph 12.

Prior to January 1, 2015, facilities that meet the applicability provisions of subparagraphs 10.(i) and (ii) shall comply with the provisions of Subparagraph 391-3-1-.02(2)(tt), if applicable.

11. Applicability: The requirements of this Subparagraph (yyy) will no longer be applicable by the compliance deadlines if the counties specified in subparagraph 10. are re-designated to attainment for the 1997 National Ambient Air Quality Standard for ozone prior to January 1, 2015. In the event the 1997 National Ambient Air Quality Standard for ozone is violated in the specified counties, the requirements of this Subparagraph (yyy) will only be reinstated if the Director determines that the measure is necessary to meet the requirements of the contingency plan.

12. Compliance Schedule:

(i) An application for a permit to construct and operate volatile organic compound emission control systems and/or modifications of process and/or coatings used must be submitted to the Division no later than **July 1, 2014.**

(ii) On-site of construction of emission control systems and/or modification of process or coatings must be completed by **November 1, 2014.**

(iii) Full compliance with the applicable requirements specified in this Subparagraph (yyy) must be completed before **January 1, 2015.**

Rule 391-3-1-.02(2)(zzz) “VOC Emissions from the Fiberglass Boat Manufacturing,” is being added to read as follows:

(zzz) VOC Emissions from the Fiberglass Boat Manufacturing

1. No person shall cause, let, permit, suffer or allow the emissions of monomer VOC from open molding resin and gel coat operations to exceed the limit specified by Equation 1 of this section, based on a 12-month rolling average.

Equation 1:

$$\text{Monomer VOC Limit} = 46(M_R) + 159(M_{PG}) + 291(M_{CG}) + 54(M_{TR}) + 214(M_{TG})$$

where:

Monomer VOC Limit = total allowable monomer VOC that can be emitted from the open molding operations included in the average, kilograms per 12 consecutive-month period.

M_R = mass of production resin used in the previous 12 consecutive months, excluding any materials that are exempt (megagrams).

M_{PG} = mass of pigmented gel coat used in the previous 12 consecutive months, excluding any materials that are exempt (megagrams).

M_{CG} = mass of clear gel coat used in the previous 12 consecutive months, excluding any materials that are exempt (megagrams).

M_{TR} = mass of tooling resin used in the previous 12 consecutive months, excluding any materials that are exempt (megagrams).

M_{TG} = mass of tooling gel coat used in the previous 12 consecutive months, excluding any materials that are exempt (megagrams).

2. The emission limit specified by Equation 1 of this subsection shall be achieved by one or more of the options listed in paragraphs 2.(i) through 2.(iii) of this subsection:

(i) Emissions averaging option: Demonstrate that emissions from the open molding resin and gel coat operations included in the average meet the emission limit specified by Equation 1 of this subsection using the procedures described in subparagraph 3. of this subsection.

(I) Compliance with this option is based on a 12-month rolling average; and

(II) Those operations and materials not included in the emissions average must comply with either paragraph 2.(ii) or 2.(iii) of this subsection.

(ii) Compliant materials option: Demonstrate compliance by using resins and gel coats that meet the monomer VOC content requirements specified in subparagraph 4. of this subsection.

(I) Compliance with this option is based on a 12-month rolling average.

(iii) Add-on control option: Use an enclosure and add-on control device, and demonstrate that the resulting emissions meet the emission limit specified by Equation 1 of this subsection.

(I) Compliance with this option is based on control device performance testing and control device monitoring.

3. Emissions Averaging Option:

(i) Compliance using this option is demonstrated on a 12-month rolling average basis and is determined at the end of every month (12 times per year).

(ii) At the end of the first twelfth month after initial operation and at the end of every subsequent month, use Equation 2 of this subsection to demonstrate that the monomer VOC emissions from those operations included in the average do not exceed the emission limit specified by Equation

1 of this subsection for the same 12-month period. (Include terms in Equation 1 and Equation 2 of this subsection only for those operations and materials included in the average.)

Equation 2:

Monomer VOC emissions =

$$\frac{(PV_R)(M_R) + (PV_{PG})(M_{PG}) + (PV_{CG})(M_{CG}) + (PV_{TR})(M_{TR}) + (PV_{TG})(M_{TG})}{1}$$

where:

Monomer VOC emissions = Monomer VOC emissions calculated using the monomer VOC emission equations for each operation included in the average (kilograms).

PV_R = Weighted-average monomer VOC emission rate for production resin used in the past 12 months (kilograms per megagram).

M_R = Mass of production resin used in the past 12 months (megagrams).

PV_{PG} = Weighted-average monomer VOC emission rate for pigmented gel coat used in the past 12 months (kilograms per megagram).

M_{PG} = Mass of pigmented gel coat used in the past 12 months (megagrams).

PV_{CG} = Weighted-average monomer VOC emission rate for clear gel coat used in the past 12 months (kilograms per megagram).

M_{CG} = Mass of clear gel coat used in the past 12 months (megagrams).

PV_{TR} = Weighted-average monomer VOC emission rate for tooling resin used in the past 12 months (kilograms per megagram).

M_{TR} = Mass of tooling resin used in the past 12 months (megagrams).

PV_{TG} = Weighted-average monomer VOC emission rate for tooling gel coat used in the past 12 months (kilograms per megagram).

M_{TG} = Mass of tooling gel coat used in the past 12 months (megagrams).

(iii) At the end of every calendar month, use Equation 3 of this subsection to compute the weighted average monomer VOC emission rate for each open molding resin and gel coat operation included in the average:

Equation 3:

$$PV_{OP} = \frac{\sum_{i=1}^n [(M_i)(PV_i)]}{\sum_{i=1}^n (M_i)}$$

where:

PV_{OP} = Weighted-average monomer VOC emission rate for each open molding operation (PV_{B} , PV_{PG} , PV_{CG} , PV_{TR} , PV_{TG}) included in the average, kilograms of monomer VOC per megagram of material applied.

M_i = Mass of resin or gel coat i used within an operation in the past 12 months, megagrams.

n = Number of different open molding resins and gel coats used within an operation in the past 12 months.

PV_i = The monomer VOC emission rate for resin or gel coat i used within an operation in the past 12 months, kilograms of monomer VOC per megagram of material applied.

(iv) The monomer VOC emission rate (PV_i) from the atomization of production resin or tooling resin is computed by the following equation:

$$\underline{[(0.014)(\text{Resin VOC}\%^{2.425})]}$$

(v) The monomer VOC emission rate (PV_i) from the atomization plus vacuum bagging with roll-out of production resin or tooling resin is computed by the following equation:

$$\underline{[(0.01185)(\text{Resin VOC}\%^{2.425})]}$$

(vi) The monomer VOC emission rate (PV_i) from the atomization plus vacuum bagging without roll-out of production resin or tooling resin is computed by the following equation:

$$\underline{[(0.00945)(\text{Resin VOC}\%^{2.425})]}$$

(vii) The monomer VOC emission rate (PV_i) from the non-atomization of production resin or tooling resin is computed by the following equation:

$$\underline{[(0.014)(\text{Resin VOC}\%^{2.275})]}$$

(viii) The monomer VOC emission rate (PV_i) from the non-atomization plus vacuum bagging with roll-out of production resin or tooling resin is computed by the following equation:

$$\underline{\left[(0.0110) (\text{Resin VOC} \%^{2.275}) \right]}$$

(ix) The monomer VOC emission rate (PV_i) from the non-atomization plus vacuum bagging without roll-out of production resin or tooling resin is computed by the following equation:

$$\underline{\left[(0.0076) (\text{Resin VOC} \%^{2.275}) \right]}$$

(x) The monomer VOC emission rate (PV_i) from the application of any pigmented gel coat, clear gel coat or tooling gel coat is computed by the following equation:

$$\underline{\left[(0.445) (\text{Gel Coat VOC} \%^{1.675}) \right]}$$

4. Compliant Coating Option: For each open molding operation complying using the compliant materials option:

(i) The monomer VOC content requirements are specified in paragraphs 4.(i)(I) through 4.(i)(VII).

(I) The weighted-average monomer VOC content requirement for spray atomized production resin operations is 28 percent (weight percent).

(II) The weighted-average monomer VOC content requirement for nonatomized production resin operations is 35 percent (weight percent).

(III) The weighted-average monomer VOC content requirement for pigmented gel coat operations applied using any method is 33 percent (weight percent).

(IV) The weighted-average monomer VOC content requirement for clear coat gel operations using any method is 48 percent (weight percent).

(V) The weighted-average monomer VOC content requirement for atomized tool resin operations is 30 percent (weight percent).

(VI) The weighted-average monomer VOC content requirement for nonatomized tooling resin operations is 39 percent (weight percent).

(VII) The weighted-average monomer VOC content requirement for tooling gel coat operations applied using any method is 40 percent (weight percent).

(ii) Compliance using the monomer VOC content requirements listed in paragraph 4.(i)(I) through 4.(i)(VII) is based on a 12-month rolling average that is calculated at the end of every month.

(iii) At the end of the first twelfth month and at the end of every subsequent month, if all resins and gel coats used in an operation have monomer VOC contents no greater than the applicable monomer VOC content limits specified in paragraph 4.(i)(I) through 4.(i)(VII), then:

(I) Compliance with the emission limit specified by Equation 1 of this subsection for the particular operation is achieved; and

(II) There is no need to complete the calculations required by paragraph 4.(iv) for that operation.

(iv) If compliance as specified in subparagraph 4.(iii) is not achieved, calculate the weighted-average monomer VOC content for all resins and gel coats [excluding filled resins] used in the previous 12 months at the end of every month using Equation 4:

Equation 4:

Weighted-Average Monomer VOC Content (%) =

$$\left[\frac{\sum_{i=1}^n [(M_i)(VOC_i)]}{\sum_{i=1}^n (M_i)} \right]$$

where:

M_i = Mass of open molding resin or gel coat i used in the past 12 months in an operation (megagrams).

VOC_i = Monomer VOC content, by weight percent, of open molding resin or gel coat i used in the past 12 months in an operation.

n = Number of different open molding resins or gel coats used in the past 12 months in an operation.

(v) The monomer VOC emissions from the use of filled production resins and filled tooling resins shall be calculated using Equation 5:

(I) Equation 5:

$$(PV_F) = (PV_U) \left[\frac{(100 - \% \text{ Filler})}{100} \right]$$

where:

PV_F = The as-applied monomer VOC emission rate for the filled production resin or tooling resin (kilograms monomer VOC per megagram of filled material).

PV_U = The monomer VOC emission rate for the neat (unfilled) resin, before filler is added, as calculated using paragraphs 3.(iv) through 3.(x), whichever is applicable.

% Filler = The weight-percent of filler in the as-applied filled resin system.

(II) The value of PV_F calculated by Equation 5 shall not exceed 46 kilograms of monomer VOC per megagram of filled resin, as applied, if the filled resin used is a production resin.

(III) The value of PV_F calculated by Equation 5 shall not exceed 54 kilograms of monomer VOC per megagram of filled resin, as applied, if the filled resin used is a tooling resin.

(IV) The facility shall use the value of PV_F calculated using Equation 5 if the facility is including a filled resin in Equation 3 of this subsection.

5. Add-On Control Option: If product performance requirements or other needs dictate the use of higher monomer VOC materials than those that would meet the recommended emission limits specified in subparagraph 4. of this subsection, a fiberglass boat manufacturing facility shall:

(i) Install and operate a thermal oxidizer as an add-on control device and meet the operating limits specified in Table 4 of 40 CFR Part 63 Subpart VVV, as amended, that apply to the emission capture system and thermal oxidizer.

(ii) Use of an add-on control device other than a thermal oxidizer, or monitoring an alternative parameter and complying with a different operating limit must be approved by the Director.

6. The non-monomer VOC content of filled resins shall not exceed 5 percent (weight percent) for all resins and gel coats included in VOC limits described in paragraphs 1. through 5. of this subsection.

7. All resin and gel coat mixing containers with a capacity equal to or greater than 55 gallons, including those used for on-site mixing of putties and polyputties, shall have a cover with no visible gaps in place at all times except during the following operations:

(i) When mixing is being manually added to or removed from a container; and

(ii) When mixing or pumping equipment is being placed or removed from a container.

8. The VOC content of cleaning solvents for routine application equipment cleaning shall not contain in excess of 5 percent VOC by weight.

9. For the purpose of this subsection, the definitions specified in 40 CFR Part 63.5779, as amended, are hereby incorporated and adopted by reference with the following additions:

(i) "Fiberglass boat manufacturing" means a facility that manufactures hulls or decks of boats and related parts, builds molds to make fiberglass boat hulls or decks and related parts from fiberglass, or makes polyester resin putties for assembling fiberglass parts. For purposes of this subsection, fiberglass boat manufacturing does not include facilities that manufacture solely

parts of boats (such as hatches, seats, or lockers), or boat trailers, but not manufacture hulls or decks of boats from fiberglass, or build molds to make fiberglass boat hulls or decks. If a facility manufactures hulls or decks, or molds for hulls or decks, then the manufacture of all other fiberglass boat parts, including small parts such as hatches, seats, and lockers is also covered.

(ii) "Monomer" means a volatile organic compound that partly combines with itself, or other similar compounds, by a cross-linking reaction to become a part of the cured resin.

10. Applicability: On and after January 1, 2015, the requirements of this subparagraph (zzz) shall apply to facilities at which the actual emissions of volatile organic compounds from all non-exempt fiberglass boat manufacturing processes at a facility equal or exceed 2.7 tons per 12-month rolling period for facilities located in Barrow, Bartow, Carroll, Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Hall, Henry, Newton, Paulding, Rockdale, Spalding, and Walton counties. Any physical or operational changes that are necessary to comply with the provisions specified in this subparagraph are subject to the compliance schedule specified in subparagraph 12. Prior to January 1, 2015, such facilities shall comply with the provisions of subparagraph 391-3-1-.02(2)(tt), if applicable.

11. Applicability: The requirements of this Subparagraph (zzz) will no longer be applicable by the compliance deadlines if the counties specified in subparagraph 10. are re-designated to attainment for the 1997 National Ambient Air Quality Standard for ozone prior to January 1, 2015. In the event the 1997 National Ambient Air Quality Standard for ozone is violated in the specified counties, the requirements of this Subparagraph (zzz) will only be reinstated if the Director determines that the measure is necessary to meet the requirements of the contingency plan.

12. Compliance Schedule:

(i) An application for a permit to construct and operate volatile organic compound emission control systems and/or modifications of process and/or coatings used must be submitted to the Division no later than **July 1, 2014**.

(ii) On-site of construction of emission control systems and/or modification of process or coatings must be completed by **November 1, 2014**.

(iii) Full compliance with the applicable requirements specified Subparagraph (zzz) must be completed before **January 1, 2015**.

13. Applicability: The requirements of this subsection apply to the following operations at a fiberglass boat manufacturer:

(i) open molding and gel coat operations (including pigmented gel coat, clear gel coat, production resin, tooling gel coat, and tooling resin);

(ii) resins and gel coat mixing operations; and

(iii) resins and gel coat application equipment cleaning operations.

14. Applicability: The requirements of this subsection do not apply to the following operations at a fiberglass boat manufacturer:

- (i) Surface coating applied to fiberglass boats;
- (ii) Surface coating for fiberglass and metal recreational boats (pleasure craft); and
- (iii) industrial adhesives used in the assembly of fiberglass boats.

15. Exemptions: The following activities are exempt from the open molding emission limit specified in subparagraph 1. of this subsection:

(i) Production resins (including skin coat resins) that shall meet specifications for use in military vessels or shall be approved by the U.S. Coast Guard for use in the construction of lifeboats, rescue boats, and other life saving appliances approved under 46 CFR Subchapter Q, or the construction of small passenger vessels regulated by 46 CFR Subchapter T. Production resins for which this exemption is used must be applied with nonatomizing (non-spray) resin application equipment. You must keep a record of the resins for which you are using this exemption.

(ii) Pigmented, clear, and tooling gel coat used for part or mold repair and touch up. The total gel coat materials included in this exemption must not exceed 1 percent by weight of all gel coat used at the facility on a 12-month rolling average basis. You must keep a record of the amount of gel coats used per month for which you are using this exemption and copies of calculations showing that the exempt amount does not exceed 1 percent of all gel coat used.

(iii) Pure, 100 percent vinylester resin used for skin coats. This exemption does not apply to blends of vinylester and polyester resins used for skin coats. The total resin materials included in the exemption cannot exceed 5 percent by weight of all resin used at the facility on a 12-month rolling-average basis. You must keep a record of the amount of 100 percent vinylester skin coat resin used per month that is eligible for this exemption and copies of calculations showing that the exempt amount does not exceed 5 percent of all resin used.

Rule 391-3-1-.02(2)(aaaa) “Industrial Cleaning Solvents,” is being added to read as follows:

(aaaa) Industrial Cleaning Solvents.

1. No person shall cause, suffer, allow, or permit the use of organic solvents for cleaning operations such as mixing vessels (tanks), spray booths, parts drums or for other cleaning activities performed for the removal of material from substrate including actions such as wiping, flushing or spraying, unless the following requirements for control of emissions of the volatile organic compounds are satisfied:

(i) All containers used for organic solvent-related materials are kept closed at all times except when depositing or removing these materials;

(ii) All organic cleaning solvents and used solvent-related materials including shop towels shall be stored in closed containers;

(iii) Air circulation around cleaning-related operations and waste materials shall be minimized;

(iv) All used solvent materials and shop towels shall be disposed of in a manner that minimizes emissions (e.g., moving these items from one location to another in closed containers or pipes); and

(v.) Equipment shall be maintained in such a way that minimizes emissions (e.g., keeping parts cleaners covered, maintaining cleaning equipment to repair solvent leaks, etc.).

2. No person shall cause, suffer, allow, or permit volatile organic compound emissions from each cleaning process, spray gun cleaning, spray booth cleaning, large manufactured components cleaning, parts cleaning, equipment cleaning, line cleaning, floor cleaning, tank cleaning or small manufactured components cleaning to exceed 0.42 lbs of VOC per gallon (50 g/liter) of cleaning material unless the cleaning operation is equipped with an emission control system with an overall control efficiency of at least 85 percent. Alternatively, a VOC composite vapor pressure limit of 8 millimeters of mercury (mmHg) at 20° Celsius may be used as a replacement limit for VOC content limit.

3. The requirements of this subparagraph shall not apply to any cleaning operations in categories subject to other more specific VOC requirements contained in other subparagraphs of this Rule. The requirements of this subparagraph shall not apply to cleaners used for low temperature (below 40°F) applications, or the use of janitorial cleaners as relating to cleaning offices, bathrooms or other similar areas.

4. For the purpose of this subparagraph, the following definition shall apply:

(i) "Industrial cleaning solvents" means a variety of products that are used to remove contaminants such as adhesives, inks, paint, dirt, soil, oil, and grease from parts, products, tools, machinery, equipment, vessels, floors, walls, and other production related work areas for a variety of reasons including safety, operability, and to avoid product contamination.

5. Applicability: On and after January 1, 2015, the requirements of this Subparagraph (aaaa) shall apply to facilities at which actual emissions of volatile organic compounds from the use of organic solvents for cleaning operations equal or exceed 15 pounds per day for facilities located in Barrow, Bartow, Carroll, Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Hall, Henry, Newton, Paulding, Rockdale, Spalding, and Walton counties. Any physical or operational changes that are necessary to comply with the provisions specified in this Subparagraph (aaaa) are subject to the compliance schedule specified in Subparagraph 7. Prior to January 1, 2015, such facilities shall comply with the provisions of Subparagraph 391-3-1-.02(2)(tt), if applicable.

6. Applicability: The requirements of this Subparagraph (aaaa) will no longer be applicable by the compliance deadlines if the counties specified in subparagraph 5. are re-designated to attainment for the 1997 National Ambient Air Quality Standard for ozone prior to January 1, 2015. In the event the 1997 National Ambient Air Quality Standard for ozone is violated in the specified counties, the requirements of this Subparagraph (aaaa) will only be reinstated if the Director determines that the measure is necessary to meet the requirements of the contingency plan.

7. Compliance Schedule:

(i) An application for a permit to construct and operate volatile organic compound emission control systems and/or modifications of process and/or coatings used must be submitted to the Division no later than **July 1, 2014.**

(ii) On-site construction of emission control systems and/or modification of process or coatings must be completed by **November 1, 2014.**

(iii) Full compliance with the applicable requirements specified this Subparagraph (aaaa) must be completed before **January 1, 2015.**

Authority: O.C.G.A. Section 12-9-1 et seq., as amended.