391-3-1-.02 PROVISIONS. AMENDED.

(1) GENERAL REQUIREMENT: No person shall construct or operate any facility from which air contaminants are or may be emitted in such a manner as to fail to comply with:

(a) Any applicable standard of performance or other requirements established by EPA pursuant to Section 111 of the Federal Act; and

(b) Any applicable emission standard or other requirement for a hazardous air pollutant established by EPA pursuant to Section 112 of the Federal Act.

(c) Any applicable increment, precondition for permit, or other requirement established for the Prevention of Significant Deterioration pursuant to Part C, Title I of the Federal Act; and

(d) Any applicable standard, precondition for permit, or other requirement established for sources in areas designed by the Director as being nonattainment with National Ambient Air Quality Standards pursuant to, or as part of Georgia's State Implementation Plan to meet the requirements of, Part D, Title I of the Federal Act.

THIS IS THE FEDERALLY APPROVED REGULATION AS OF SEPTEMBER 18, 1979

	Date Submitted to EPA	Date Approved by EPA	Federal Register
Original Reg:	JAN 27, 1972	MAY 31, 1972	37 FR 10842
1st Revision:	DEC 16, 1975	AUG 20, 1976	41 FR 35184
2nd Revision:	JAN 17, 1979	SEP 18, 1979	44 FR 54047

(2) EMISSION STANDARDS:

(a) General Provisions: 1. In cases where more than one section of these regulations applies, the section allowing the least emission of air contaminants to the atmosphere shall prevail.

2. Notwithstanding any other emission limitation or other requirement provided in the regulations, more stringent emission limitations or other requirements may be required of a facility as deemed necessary by the Director to

(i) meet any existing Federal laws or regulations, or

(ii) safeguard the public health, safety and welfare of the people of the State of Georgia.

3. Notwithstanding any other requirement of this Chapter, in no event shall that part of a stack, which came into existence after December 31, 1970, which exceeds good engineering practice stack height, or any other dispersion technique, be taken into account for the purpose of determining the degree of emission limitations required for control of any pollutant for which there is an ambient air standard established under the Act of the Federal Act. The terms and definitions of "dispersion techniques", "good engineering practice (GEP)", "nearby", and "excessive concentration" are those definitions found in 40 CFR 51.100(hh), (ii), (jj), and (kk) respectively.

4. If the Director finds, after notice and opportunity for public hearing, that a particular instance of violation or noncompliance by a source, owner, or operator, with any emission limitation or standard or other requirement under the Act, is de minimis (as defined pursuant to 42 U.S.C. Section 7420 as amended) in nature, and duration, he may, as allowed by the Act and the Federal Act, exempt such source, owner or operator from the noncompliance penalties provided in Section 22 of the Act.

THIS IS THE FEDERALLY APPROVED REGULATION AS OF MARCH 16, 2006

	Date Submitted to EPA	Date Approved by EPA	Federal Register
Original Reg:	JAN 27, 1972	MAY 31, 1972	37 FR 10842
1st Revision:	JAN 17, 1979	SEP 18, 1979	44 FR 54047
2nd Revision:	DEC 15, 1986	JAN 26, 1993	58 FR 6093
	JAN 03, 1991	JAN 26, 1993	58 FR 6093
3rd Revision	OCT 31, 2005	MAR 16, 2006	71 FR 13551

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

(i) For all sources of VOC emissions otherwise subject to any limitation or requirement of subsection (t) through (ff) [inclusive]; and (hh) through (nn) [inclusive of this section 391-3-1-.02(2), the following sources shall not be subject to any requirement of such subsection:

(I) Sources whose potential emissions of volatile organic compounds are not more than 100 tons per year; and

Comment: *The March 19, 2012 submission revised .02(2)(a)(6)(i)(l): "(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), (aal through (ff) [inclusive], (hh) (kk), ~~through~~ (ll), (nn) ~~[inclusive]~~, and (qq) of this section 391-3-1-.02(2)." However, the version of this section is different, therefore, the changes cannot be reflected.*

(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 (u), (v), (x), (aa) through (ff) [inclusive], (kk), (II), and (qq) of this section 391-3-1-.02(2).

(IV) Coatings, ink, and other VOC-containing materials in use at sources of VOC emissions subject to an 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.

(V) Sources located within Barrow, Bartow, Carroll, Hall, Newton, Spalding, or Walton Counties whose actual emissions of volatile organic compounds are greater than or equal to 15 pounds per day shall be subject to subparagraphs (u), (v), (x), (aa) through (ff) [inclusive], (hh), (kk), (ll), (nn), and (qq) of this section 391-3-1-.02(2) effective January 1. 2015. The requirements of this subparagraph (V) will no longer be applicable if the counties specified in this subparagraph (V) 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 these counties or the counties specified in subparagraph (Ill) above, the requirements of this subparagraph (V) will only be reinstated if the Director determines that the measure is necessary to meet the requirements of the contingency plan.

(VI) When determining applicability for a standard specified in this subparagraph 6.(i), only those emission sources that belong to the source category covered by each specific standard shall be included when compared against the applicability thresholds and provisions included in this subparagraph 6.(i).

(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.

7. Excess emissions:

(i) Excess emissions resulting from startup, shutdown, malfunction of any source which occur through ordinary diligence is employed shall be allowed provided that (I) the best operational practices to minimize emissions are adhered to, and (II) all associated air pollution control equipment is operated in a manner consistent with good air pollution control practice for minimizing emissions, and (III) the duration of excess emissions is minimized.

(ii) Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction are prohibited and are violations of this Chapter (391-3-1).

(iii) The provisions of this paragraph 7. shall apply only to those sources which are not subject to any requirement under section (8) of this Rule, (i.e. Rule 391-3-1-.02) or any requirement of 40 CFR, Part 60, as amended, concerning New Source Performance Standards.

THIS IS THE FEDERALLY APPROVED REGULATION AS OF JULY 28, 2017

	Date Submitted to EPA	Date Approved by EPA	Federal Register
Original Reg:	JAN 27, 1972	MAY 31, 1972	37 FR 10842
1st Revision:	DEC 16, 1975	AUG 20, 1976	41 FR 35184
2nd Revision:	JAN 17, 1979	SEP 18, 1979	44 FR 54047
		AUG 14, 1979	44 FR 47557
		JAN 03, 1980	45 FR 780
5th REVISION	JUN 25, 2008	JUN 11, 2009	74 FR 27713
6th Revision	MAR 19, 2012	SEP 28, 2012	77 FR 59554
7th Revision	SEP 7, 2012	SEP 28, 2012	77 FR 59554
8th Revision	JUL 25, 2014	JUL 28, 2017	82 FR 35106

8. Emission Standards: With respect to the emission standards and limitations contained in this Chapter (391-3-1), as such requirements are applied to more than one process or piece of equipment at a single source, the Director is hereby authorized to allow to the extent consistent with the Act and the Federal Act, under such conditions as he shall deem appropriate, Equivalent Alternative Emission Reduction Options provided that:

   (i) The source or facility proposing to use an equivalent alternative emission reduction option is and continues to be in compliance, pending consideration of any such proposal (and any associated review), with either:

      I. The applicable emission requirements under this Chapter (391- 3-1); or

      II. Any final order or agreement of the Director (or any court decree) with respect to such source then currently in effect and containing a timetable and schedule of compliance requiring expeditious compliance with the applicable emission requirements under this Chapter (391-3-1) and providing for resolution of penalties, issues and other sanctions; and

   (ii) Such option will not interfere with the attainment and maintenance of ambient air quality standards as expeditiously as practicable and does not result in any delay in compliance by any source; and

   (iii) Such option is equivalent in pollution reduction, enforceability, and environmental impact to existing individual process or equipment standards; and

   (iv) The source or facility proposing to use an option agrees, pending consideration of any such proposal (and any associated review), not to seek a stay of enforcement of or relief from such requirement, order, agreement, or degree (see (i) above) in any administrative or judicial proceeding in State or Federal Courts and tribunals; and

   (v) The source or facility proposing to use an option shall have the burden of demonstrating to the satisfaction of the Director, compliance with the requirements of subparagraphs (ii) and (iii) hereof; and

   (vi) Provided further that any such option must receive the approval of EPA prior to becoming effective.

THIS IS THE FEDERALLY APPROVED REGULATION AS OF JULY 28, 2017

	Date Submitted to EPA	Date Approved by EPA	Federal Register
Original Reg:	JAN 17, 1979	SEP 18, 1979	44 FR 54047

9. [Reserved]

THIS IS THE FEDERALLY APPROVED REGULATION AS OF JULY 28, 2017

	Date Submitted to EPA	Date Approved by EPA	Federal Register
Original Reg:	JAN 08, 1982	JUL 08, 1983	48 FR 50868
1st Revision:	JUN 03, 1988	SEP 30, 1988	53 FR 38290
2nd Revision	JUL 25, 2014	JUL 28, 2017	82 FR 35106

(b) Visible Emissions:

1. Except as may be provided in other more restrictive or specific rules or subdivisions of this Chapter, no person shall cause, let, suffer, permit, or allow emissions from any air contaminant source the opacity of which is equal to or greater than forty (40) percent.

2. Upon written application to the Director, a person owning or operating an air pollution source may request that visible emission evaluations (opacity measurements) be conducted during particulate emissions tests for a source, for the purpose of demonstrating compliance with a particulate emission standard. Any such tests or evaluations shall be conducted according to methods, procedures and requirements approved by the Division. All test results shall be subject to verification by the Division. The correlated visible emissions opacity determined during any such particulate emission tests which demonstrate compliance (with results verified by the Division) may, if greater than any applicable visible emissions opacity standard of this Chapter 391-3-1, be established by the Director as the visible emissions standard (opacity standard) for the source. Such visible emissions standards if so established shall be incorporated as a condition of the operating permit for the air pollution source.

3. The visible emission limitation of this subsection applies to direct sources of emissions such as stationary structures, equipment, machinery, stacks, flues, pipes, exhausts, vents, tubes, chimneys or similar structures.

4. The provisions of this subsection (b), apply only to facilities or sources subject to some other emission limitation under this section 391-3-1-.02(2).

THIS IS THE FEDERALLY APPROVED REGULATION AS OF SEPTEMBER 18, 1979

	Date Submitted to EPA	Date Approved by EPA	Federal Register
Original Reg:	JAN 27, 1972	MAY 31, 1972	37 FR 10842
1st Revision:	JAN 17, 1979	SEP 18, 1979	44 FR 54047

(c) Incinerators:

1. Except as specified in the section dealing with conical burners, no person shall cause, let, suffer, permit, or allow the emissions of fly ash and/or other particulate matter from any incinerator, in amounts equal to or exceeding the following:

   (i) Units with charging rates of 500 pounds per hour or less of combustible waste, including water, shall not emit fly ash and/or particulate matter in quantities exceeding 1.0 pound per hour.

   (ii) Units with charging rates in excess of 500 pounds per hour of combustible waste, including water, shall not emit fly ash and/or particulate matter in excess of 0.20 pounds per 100 pounds of charge.

2. No person shall cause, let, suffer, permit, or allow from any incinerator, visible emissions the opacity of which is equal to or greater than twenty (20) percent except for one (1) six minute period per hour of not more than twenty-seven (27) percent opacity.

3. No person shall cause or allow particles to be emitted from an incinerator which are individually large enough to be visible to the unaided eye.

4. No person shall operate an existing incinerator unless:

   (i) it is a duel or multiple chamber incinerator;

   (ii) it is equipped with an auxiliary burner in the primary chamber for the purpose of creating a pre-ignition temperature of 800 degrees F;

   (iii) it has a secondary burner to control smoke and/or odors and maintain a temperature of at least 1500 degrees F in the secondary chamber.

5. Designs other than those mentioned in subparagraph 4. above shall be considered on an individual basis and will be exempt from the provisions if, in the judgment of the Director, said design results in performance which meets the standard set forth in paragraphs (2)(c)1., 2. and 3. above.

6. The provisions of this subsection (c) shall not apply to:

   (i) any hazardous waste incinerator subject to Section 391-3-11 of the Georgia Rules for Hazardous Waste Management, 40 CFR 264, Subpart O, as adopted by reference, "Standards for Owners and Operators of Hazardous Waste Treatment, Storage and Disposal Facilities," as amended;

(ii) any incinerator subject to Section 391-3-1-.02(8)(b)71. of the Georgia Rules for Air Quality Control, “Standards of Performance for Municipal Waste Combustors for Which Construction is Commenced after September 20, 1994," as amended;

(iii) any incinerator subject to the Georgia State Plan, under section 111(d) of the federal Act, for "Municipal Waste Combustors for which construction is commenced on or before September 20, 1994," as amended;

(iv) any incinerator subject to Section 391-3-1-.02(8)(b)73. of the Georgia Rules for Air Quality Control “Standards of Performance for New Stationary Sources: Hospital/Medical/Infectious Waste Incinerators," as amended;

(v) any incinerator subject to Section 391-3-1-.02(2)(iii) of the Georgia Rules for Air Quality Control “Hospital/Medical/Infectious Waste Incinerators," as amended.

(vi) any incinerator subject to Section 391-3-1-.02(8)(b)75. of the Georgia Rules for Air Quality Control “Standards of Performance for Commercial and Industrial Solid Waste Incineration Units,” as amended; or

(vii) any incinerator subject to Section 391-3-1-02.(2)(ppp) of the Georgia Rules for Air Quality Control “Commercial and Industrial Solid Waste Incineration Units,” as amended; or

(viii) any vent gas incineration devices that are used as air pollution control equipment and boilers and industrial furnaces that burn waste (excluding hazardous waste) as fuel.

(ix) any incinerator subject to Section 391-3-1-.02(8)(b)20. of the Georgia Rules for Air Quality Control "Standards of Performance for Sewage Treatment Plants," as amended:

(x) any incinerator subject to Section 391-3-1-.02(8}(b}74. of the Georgia Rules for Air Quality Control "Standards of Performance for Small Municipal Waste Combustion Units for Which
Construction is Commenced After August 30, 1999," as amended:

(xi) any incinerator subject to Section 391-3-1-.02(8)(b}76. of the Georgia Rules for Air Quality Control "Standards of Performance for Other Solid Waste Incinerator Units for Which
Construction is Commenced After December 9, 2004, or for Which Modification or Reconstruction is Commenced on or After June 16, 2006," as amended:

(xii) any incinerator subject to Section 391-3-1-.02(8)(b)83. of the Georgia Rules for Air Quality Control "Standards of Performance for New Sewage Sludge Incineration Units" as amended: or

(xiii)any incinerator subject to Section 391-3-1-.02(2)(www) of the Georgia Rules for Air Quality Control "Sewage Sludge Incineration Units as amended:

THIS IS THE FEDERALLY APPROVED REGULATION AS OF OCTOBER 1, 2020

	Date Submitted to EPA	Date Approved by EPA	Federal Register
Original Reg:	JAN 27, 1972	MAY 31, 1972	37 FR 10842
1st Revision:	DEC 16, 1975	AUG 20, 1976	41 FR 35184
2nd Revision:	JAN 17, 1979	SEP 18, 1979	44 FR 54047
3rd Revision:	MAY 22, 1985	JUL 6, 1988	53 FR 25329
4th Revision	JUL 10, 1999	DEC 2, 1999	64 FR 67491
5th Revision	JUL 1, 2002	JUL 9, 2003	68 FR 40786
6th Revision	JUL 26, 2012	APR 9, 2013	78 FR 21065
7th Revision	AUG 2, 2018	NOV 22, 2019	84 FR 64427

(d) Fuel-burning Equipment:

1. No person shall cause, let, suffer, permit, or allow the emission of fly ash and/or other particulate matter from any fuel-burning in operation or under construction on or before January 1, 1972; in amounts equal to or exceeding the following:

   (i) for equipment less than 10 million BTU heat input per hour:

   $P = 0.7$ pounds per million BTU heat input;

   (ii) for equipment equal to or greater than 10 million BTU heat input per hour, and equal to or less than 2,000 million BTU heat input per hour:

   $P = 0.7\ (10/R)^{0.202}$ pounds per million BTU heat input;

   (iii) equipment larger than 2,000 million BTU heat input per hour;

   $P = 0.24$ pounds per million BTU heat input.

2. No person shall cause, let, suffer, permit, or allow the emission of fly ash and/or other particulate matter from any fuel-burning equipment constructed after January 1, 1972, in amounts equal to or exceeding the following:

   (i) for equipment less than 10 million BTU heat input per hour:

   $P = 0.5$ pounds per million BTU heat input;

   (ii) for equipment equal to or greater than 10 million BTU heat input per hour, and equal to or less than 250 million BTU heat input per hour:

   $P = 0.5\ (10/R)^{0.5}$ pounds per million BTU heat input;

   (iii) for equipment greater than 250 million BTU heat input per hour:

   $P = 0.10$ pounds per million BTU heat input

   P = allowable weight of emissions of fly ash and/or other particulate matter in pounds per million BTU heat input

   R = heat input of fuel-burning equipment in million BTU per hour.

   * Figure 1 on page 212 represents the requirements of paragraph (d) above. [NOTE: THIS FIGURE APPEARS ON PAGE [391-3-1] - 21A]

3. No person shall cause, let, suffer, permit, or allow the emission from any fuel-burning equipment constructed or extensively modified after January 1, 1972, visible

emissions the opacity of which is equal to or greater than twenty (20) percent except for one six minute period per hour of not more than twenty-seven (27) percent opacity.

4. No person shall cause, let, permit, suffer, or allow the emission of nitrogen oxides (NO_x), reported as nitrogen dioxide, from any fuel-burning equipment equal to or greater than 250 million BTU per hour of heat input that is constructed or extensively modified after January 1, 1972, equal to or exceeding the following:

   (i) when firing coal--0.7 pounds of NO_x, per million BTU's of heat input;

   (ii) when firing oil--0.3 pounds of NO_x per million BTU's of heat input;
   (iii) when firing gas--0.2 pounds of NO_x per million BTU's of heat input;

   (iv) when different fuels are burned simultaneously in any combination the applicable standard, expressed as pounds of NO_x per million BTU's of heat input, shall be determined by proration. Compliance shall be determined by using the following formula:

$$\frac{x(0.20) + y(0.30) + z(0.70)}{x + y + z}$$

   where:

   x = percent of total heat input derived from gaseous fuel;

   y = percent of heat input derived from oil;

   z = percent of total heat input derived from coal.

THIS IS THE FEDERALLY APPROVED REGULATION AS OF FEBRUARY 9, 2010

	Date Submitted to EPA	Date Approved by EPA	Federal Register
Original Reg:	JAN 27, 1972	MAY 31, 1972	37 FR 10842
1st Revision:	JAN 17, 1979	SEP 18, 1979	44 FR 54047
2nd Revision	NOV 6, 2006	FEB 9, 2010	75 FR 6309

(e) Particulate Emission from Manufacturing Processes:

1. Except as may be specified in other sections of these regulations or as may be specified in a permit issued by the Director, no person shall cause, let, permit, suffer, or allow the rate of emission from any source, particulate matter in total quantities equal to or exceeding the amounts specified in subparagraphs (i) or (ii), below, as applicable. Equipment in operation, or under construction contract, on or before July 2, 1968, shall be considered existing equipment. All other equipment put in operation or extensively altered after said date is to be considered new equipment.

   (i) The following equations shall be used to calculate the allowable rates of emission from new equipment:

   $E = 4.1\ P^{0.67}$; for process input weight rate up to and including 30 tons per hour.

   $E = 55\ P^{0.11} - 40$; for process input weight rate above 30 tons per hour.

   (ii) The following equation shall be used to calculate the allowable rates of emission from existing:

   $E = 4.1\ P^{0.67}$

   E = emission rate in pounds per hour

   P = process weight rate in tons per hour.

THIS IS THE FEDERALLY APPROVED REGULATION AS OF JULY 28, 2017

	Date Submitted to EPA	Date Approved by EPA	Federal Register
Original Reg:	JAN 27, 1972	MAY 31, 1972	37 FR 10842
1st Revision:	JAN 17, 1979	SEP 18, 1979	44 FR 54047
2nd Revision	JUL 25, 2014	JUL 28, 2017	82 FR 35106

(f) Normal Superphosphate Manufacturing Facilities:

1. Unit emissions of fluoride for normal superphosphate manufacturing facilities, expressed as pounds of fluoride ion per ton of P_2O_5 or equivalent, shall not exceed 0.40 pounds. The allowable emission of fluorides shall be calculated by multiplying the unit emission specified above times the expressed design capacity of the source in question.

THIS IS THE FEDERALLY APPROVED REGULATION AS OF SEPTEMBER 18, 1979

	Date Submitted to EPA	Date Approved by EPA	Federal Register
Original Reg:	JAN 27, 1972	MAY 31, 1972	37 FR 10842
1st Revision:	JAN 17, 1979	SEP 18, 1979	44 FR 54047

(g) Sulfur Dioxide:

1. New fuel-burning sources capable of firing fossil fuel(s) at a rate exceeding 250 million BTU's per hour heat input, constructed or extensively modified after January 1, 1972, excluding kraft pulp mill recovery furnaces, may not emit sulfur dioxide equal to or exceeding:

   (i) 0.8 pounds of sulfur dioxide per million BTU's of heat input derived from liquid fossil fuel or derived from liquid fossil fuel and wood residue,

   (ii) 1.2 pounds of sulfur dioxide per million BTU's of heat input derived from solid fossil fuel or derived from solid fossil fuel and wood residue,

   (iii) When different fossil fuels are burned simultaneously in any combination, the applicable standard expressed as pounds of sulfur dioxide per million BTU's of heat input shall be determined by proration using the following formula:

$$a = \frac{y\,(0.80) = z\,(1.2)}{y + z}$$

   where:

   y = percent of total heat input derived from liquid fossil fuel,

   z = percent of total heat input derived from solid fossil fuel,

   a = the allowable emission in pounds per million BTU's

2. In addition to the stipulations and limitations in paragraphs 1. and 2. of this subsection, all fuel burning sources below 100 million BTU's of heat input per hour shall not burn fuel containing more than 2.5 percent sulfur, by weight. All fuel burning sources having a heat input of 100 million BTU's per hour or greater shall not burn a fuel containing more than 3 percent sulfur, by weight.

3. Notwithstanding the limitations on sulfur content of fuels stated in paragraph 3, above, the Director may allow sulfur content greater than that allowed in paragraph 3. above, provided that the source utilizes sulfur dioxide removal and the sulfur dioxide emission does not exceed that allowed by paragraph 3. above, utilizing no sulfur dioxide removal.

THIS IS THE FEDERALLY APPROVED REGULATION AS OF JULY 9, 2003

Date Submitted to EPA	Date Approved by EPA	Federal Register

Original Reg:	JAN 27, 1972	MAY 31, 1972	37 FR 10842
1st Revision:	DEC 16, 1975	AUG 20, 1976	41 FR 35184
2nd Revision:	JAN 17, 1979	SEP 18, 1979	44 FR 54047
3rd Revision:	DEC 15, 1986	JAN 26, 1993	58 FR 6093
	JAN 03, 1991	JAN 26, 1993	58 FR 6093
4th Revision	JUL 1, 2002	JUL 9, 2003	68 FR 40786

(h) Portland Cement Plants:

1. See Section 391-3-1.02(8) for applicable New Source Performance Standards.

(i) Nitric Acid Plants:

1. No person shall cause or allow the emission of nitric oxides (NO_x), expressed as nitrogen dioxide, from Nitric Acid Plants equal to or exceeding:

   (i) for plants constructed before January 1, 1972: 25 pounds of NO_x expressed as nitrogen dioxide, per ton of 100% acid produced;

   (ii) for plants constructed after January 1, 1972. the applicable New Source Performance Standards of 391-3-1-.02 (8).

2. No person shall operate a nitric acid plant unless the plant is equipped with a continuous NO_x monitor and recorder or an alternate system approved by the Director.

THIS IS THE FEDERALLY APPROVED REGULATION AS OF SEPTEMBER 18, 1979

	Date Submitted to EPA	Date Approved by EPA	Federal Register
Original Reg:	JAN 27, 1972	MAY 31, 1972	37 FR 10842
1st Revision:	DEC 16, 1975	AUG 20, 1976	41 FR 35184
2nd Revision:	JAN 17, 1979	SEP 18, 1979	44 FR 54047

(j) Sulfuric Acid Plants:

1. No person shall cause or allow the emission of sulfur dioxide (SO_2) and acid mist from sulfuric acid plants equal to or exceeding:

   (i) For plants constructed before January 1, 1972, 27.0 pounds of SO_2, and 0.15 pounds of acid mist per ton of 100% acid produced:

   (ii) For plants constructed or extensively modified after January 1, 1972, the applicable New Source Performance Standards of 391-3-1-.02(8).

2. No person shall operate a sulfuric acid plant unless the plant is equipped with a continuous SO_2 monitor and recorder or an approved alternate system approved by the Director.

THIS IS THE FEDERALLY APPROVED REGULATION AS OF SEPTEMBER 18, 1979

	Date Submitted to EPA	Date Approved by EPA	Federal Register
Original Reg:	JAN 27, 1972	MAY 31, 1972	37 FR 10842
1st Revision:	JAN 31, 1978	MAY 27, 1982	47 FR 23162
2nd Revision:	DEC 16, 1975	AUG 20, 1976	41 FR 35184
3rd Revision:	JAN 17, 1979	SEP 18, 1979	44 FR 54047

(k) Particulate Emission from Asphaltic Concrete Hot Mix Plants:

1. No person shall cause, let, suffer, permit, or allow the emission of particulate matter from an Asphaltic Concrete Hot Mix Plant equal to or exceeding derived from the following formulas:

   (i) For existing plants below 45 tons per hour input--E = P, pounds per hour;

   (ii) For existing plants equal to or greater than 45 tons per hour input--$E = 10P^{0.4}$ pounds per hour;

   (iii) For new plants below 125 tons per hour input--$E = 2.1\ P^{0.6}$, pounds per hour;

   (iv) For new plants equal to or greater than 125 tons per hour input--$E = 14\ P^{0.2}$, pounds per hour;

   (v) E equals the allowable emission of particulate matter in pounds per hour. P equals the process input weight rate in tons per hour;

   (vi) Equipment in operation, or under construction contract, on or before January 1, 1972, shall be considered existing equipment. All equipment constructed or extensively altered after said date shall be considered new.

2. The New Source Performance Standards of 391-3-1-.02(8) for such asphaltic concrete plants apply to all such plants commencing construction on or after the effective date of such standards.

THIS IS THE FEDERALLY APPROVED REGULATION AS OF SEPTEMBER 18, 1979

	Date Submitted to EPA	Date Approved by EPA	Federal Register
Original Reg:	JAN 27, 1972	MAY 31, 1972	37 FR 10842
1st Revision:	JAN 17, 1979	SEP 18, 1979	44 FR 54047

(l) [Reserved]

THIS IS THE FEDERALLY APPROVED REGULATION AS OF JULY 28, 2017

	Date Submitted to EPA	Date Approved by EPA	Federal Register
Original Reg:	JAN 27, 1972	MAY 31, 1972	37 FR 10842
1st Revision:	DEC 16, 1975	AUG 20, 1976	41 FR 35184
2nd Revision:	JAN 17, 1979	SEP 18, 1979	44 FR 54047
3rd Revision	JUL 25, 2014	JUL 28, 2017	82 FR 35106

(n) Fugitive Dust:

1. All persons responsible for any operation, process, handling, transportation or storage facility which may result in fugitive dust shall take all reasonable precautions to prevent such dust from becoming airborne. Some reasonable precautions which could be taken to prevent dust from becoming airborne include, but are not limited to, the following:

   (i) Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land;

   (ii) Application of asphalt, oil, water, or suitable chemicals on dirt roads, materials, stockpiles, and other surfaces which can give rise to airborne dusts;

   (iii) Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials. Adequate containment methods can be employed during sandblasting or other similar operations;

   (iv) Covering, at all times when in motion, open bodied trucks, transporting materials likely to give rise to airborne dusts;

   (v) The prompt removal of earth or other material from paved streets onto which earth or other material has been deposited.

2. The percent opacity from any fugitive dust source listed in paragraph (2)(n)1. above shall not equal or exceed 20 percent.

THIS IS THE FEDERALLY APPROVED REGULATION AS OF SEPTEMBER 18, 1979

	Date Submitted to EPA	Date Approved by EPA	Federal Register
Original Reg:	JAN 27, 1972	MAY 31, 1972	37 FR 10842
1st Revision:	JAN 17, 1979	SEP 18, 1979	44 FR 54047

(o) [Reserved]

THIS IS THE FEDERALLY APPROVED REGULATION AS OF JULY 28, 2017

	Date Submitted to EPA	Date Approved by EPA	Federal Register
Original Reg:	JAN 27, 1972	MAY 31, 1972	37 FR 10842
1st Revision	JUL 25, 2014	JUL 28, 2017	82 FR 35106

(p) Particulate Emissions from Kaolin and Fuller's Earth Processes:

1. The following equations shall be used to calculate the allowable rates of emission from kaolin and fuller's earth process equipment constructed or extensively modified after January 1, 1972:

   (i) $E = 3.59P^{0.62}$; for process weight rate up to and including 30 tons per hour;

   (ii) $E = 17.31P^{0.16}$; for process input weight rate in excess of 30 tons per hour.

2. The following equation shall be used to calculate the allowable rates of emission from kaolin and fuller's earth process equipment constructed or put in operation on or before January 1, 1972:

   (i) $E = 4.1P^{0.67}$; for process weight input weight rate up to and including 30 tons per hour.

   (ii) $E = 55P^{0.11} - 40$; for process weight input rate above 30 tons per hour.

3. The combined particulate emissions from any kaolin or fuller's earth plant site shall not exceed 250 pounds per hour.

   E = allowable emission rate in pounds per hour;
   P = process input weight rate in tons per hour.

THIS IS THE FEDERALLY APPROVED REGULATION AS OF JULY 28, 2017

	Date Submitted to EPA	Date Approved by EPA	Federal Register
Original Reg:	JAN 27, 1972	MAY 31, 1972	37 FR 10842
1st Revision:	DEC 16, 1975	AUG 20, 1976	41 FR 35184
2nd Revision	JUL 25, 2014	JUL 28, 2017	82 FR 35106

(q) Particulate Emissions from Cotton Gins:

1. The emission of particulate matter from any cotton ginning operation shall not exceed the amounts specified below.

   (i) The following equation shall be used to calculate the allowable rates of emission:

   $E = 7 B^{0.5}$

   E = allowable emission rate in pounds per hour

   B = number of standard bales per hour -- A standard bale is defined as a finished bale weighing 500 pounds.

THIS IS THE FEDERALLY APPROVED REGULATION AS OF JULY 28, 2017

	Date Submitted to EPA	Date Approved by EPA	Federal Register
Original Reg:	JAN 27, 1972	MAY 31, 1972	37 FR 10842
1st Revision	JUL 25, 2014	JUL 28, 2017	82 FR 35106

(r) Particulate Emissions from Granular and Mixed Fertilizer Manufacturing Units:

1. For the purpose of this regulation of the ammoniator, dryer, cooler and associated equipment will be considered one unit.

2. The following equations shall be used to calculate the allowable rates of emission from granular and mixed fertilizer manufacturing units:

   (i) $E = 3.59\ P^{0.62}$; for production rates up to and including 30 tons per hour;

   (ii) $E = 17.31\ P^{-.16}$; for production rates above 30 tons per hour;

   E = allowable emission rate in pounds per hour;

   P = production rate of finished product in tons per hours. Recycle will not be included.

THIS IS THE FEDERALLY APPROVED REGULATION AS OF MAY 31, 1972

	Date Submitted to EPA	Date Approved by EPA	Federal Register
Original Reg:	JAN 27, 1972	MAY 31, 1972	37 FR 10842

(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:

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

$= (8.34\text{lb / gal})(0.084)(350^{\circ 160-R_T})$

where RT= 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 o 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.

3. The emission limits stated in paragraph 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.

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.

5. No person shall cause, let permit, suffer or allow the emission of VOCs from solvents used to purge, 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.

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.

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.

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) "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.

(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.

(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.

(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.

(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.

	to EPA	by EPA	Register
Original Reg:	JAN 17, 1979	SEP 18, 1979	44 FR 54047
1st Revision:	MAR 09, 1979	SEP 18, 1979	44 FR 54047
2nd Revision:	JAN 03, 1991	OCT 13, 1992	57 FR 46780
	APR 03, 1991	OCT 13, 1992	57 FR 46780
3rd Revision:	NOV 15, 1994	FEB 02, 1996	61 FR 3817
4th Revision	MAR 19, 2012	SEP 28, 2012	77 FR 59554

(u) VOC Emissions from Can Coating:

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

   (i) 2.8 pounds per gallon of coating, excluding water, delivered to the coating applicator from sheet basecoat (exterior and interior) and overvarnish or two-piece can exterior (basecoat and overvarnish) 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) 4.2 pounds per gallon of coating excluding water, delivered to the coating applicator from two and three-piece can interior body spray and two-piece can exterior end (spray and roll coat) operations. If any coating delivered to the coating applicator contains more than 4.2 pounds VOC per gallon, the solids equivalent limit shall be 9.78 pounds VOC per gallon of coating solids delivered to the coating applicator.

   (iii) 5.5 pounds per gallon of coating, excluding water, delivered to the coating applicator from three piece can side-seam spray operations. If any coating delivered to the coating applicator contains more than 5.5 pounds VOC per gallon, the solids equivalent limit shall be 21.8 pounds VOC per gallon of coating solids delivered to the coating applicator.

   (iv) 3.7 pounds per gallon of coating, excluding water, delivered to the coating applicator from end seal compound operations. If any coating delivered to the coating applicator contains more than 3.7 pounds VOC per gallon, the solids equivalent limit shall be 7.44 pounds VOC per gallon of coating solids delivered to the coating applicator.

2. 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 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, expressed in pounds VOC per gallon of coating solids, stated in paragraph 1. Of this subsection; averaging across lines is not allowed; or 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 paragraph 1. of this subsection ..

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

(i) "End Sealing Compound" means a synthetic rubber compound which is coated onto can ends and which functions as a gasket when the end is assembled on the can;

(ii) "Exterior Base Coating" means a coating applied to the exterior of a two-piece can body to provide protection to the metal and to provide background for the lithographic or printing operation;

(iii)"Sheet Base Coating" means a coating applied to metal in sheet form to serve as either the exterior or interior of two-piece or three-piece can bodies or can ends;

(iv) "Interior Body Spray" means a coating sprayed on the interior of the interior of the can body to provide a protective film between the product and the can;

(v) "Overvarnish" means a coating applied directly over ink to reduce the coefficient of friction, to provide gloss and to protect the finish against abrasion and corrosion;

(vi) "Three-piece Can Side-seam Spray" means a coating sprayed on the exterior and interior of a welded, cemented or solder seam to protect the exposed metal;

(vii) "Two-piece Can Exterior End Coating" means a coating applied by rolling coating or spraying to the exterior end of a can to provide protection to the metal.

THIS IS THE FEDERALLY APPROVED REGULATION AS OF SEPTEMBER 28, 2012

	Date Submitted to EPA	Date Approved by EPA	Federal Register
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2nd Revision:	JAN 03, 1991	OCT 13, 1992	57 FR 46780
	APR 03, 1991	OCT 13, 1992	57 FR 46780
3rd Revision	NOV 13, 1992	SEP 28, 2012	77 FR 59554

(v) VOC Emissions from Coil Coating:

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

   (i) 2.6 pounds per gallon of coating, excluding water, delivered to the coating applicator from prime and topcoat or singlecoat operations. If any coating delivered to the coating applicator contains more than 2.6 pounds VOC per gallon, the solids equivalent limit shall be 4.02 pounds VOC per gallon of coating solids delivered to the coating applicator.

   (ii) The emission limits in this subsection shall apply to the coating applicator(s), oven(s) and quench area(s) of coil coating lines involved in prime and topcoat or single coat operations.

2. 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 of 2.6 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 4.02 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 4.02 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) "Coil coating" means the coating of any flat metal sheet or strip that comes in rolls or coils;

   (ii) "Quench Area" means a chamber where the hot metal exiting the oven is cooled by either a spray of water or a blast of air followed by water cooling.

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1st Revision:	MAR 09, 1979	SEP 18, 1979	44 FR 54047
2nd Revision:	JAN 03, 1991	OCT 13, 1992	57 FR 46780
	APR 03, 1991	OCT 13, 1992	57 FR 46780
3rd Revision	NOV 13, 1992	SEP 28, 2012	77 FR 59554

(w) VOC Emissions from Paper Coating:

1. No person shall cause, let, permit, suffer, or allow the emissions of VOC from paper coating operations 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 or rotogravure 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 emissions limits in this 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; 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; 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 4.79 pounds VOC per gallon of coating solids.

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

   (iii) 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.

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

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Original Reg:	JAN 17, 1979	SEP 18, 1979	44 FR 54047
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(x) VOC Emissions from Fabric and Vinyl Coating:

1. No person shall cause, let, permit, suffer, or allow the emission of VOC from fabric or vinyl coating operations to exceed:

   (i) 2.9 pounds per gallon of coating, excluding water, delivered to the coating applicator from fabric coating line. 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.

   (ii) 3.8 pounds per gallon of coating, excluding water, delivered to the coating applicator from a vinyl coating line. If any coating delivered to the coating applicator contains more than 3.8 pounds VOC per gallon, the solids equivalent limit shall be 7.86 pounds VOC per gallon of coating solids delivered to the coating applicator.

   (iii) The emission limits in this section shall apply to roll, knife, or rotogravure coater(s) and drying oven(s) of fabric and vinyl coating lines.

2. The emission limits in this section 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 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, expressed in 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, expressed in pounds VOC per gallon of coating solids stated in paragraph 1. of this subsection.

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

   (i) "Fabric Coating" means the coating of a textile substrate with a knife, roll, or rotogravure coater to impart properties that are not initially present, such as strength, stability, water or acid repellence, or appearance;

(ii) "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;

(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 a coating roll. The coating material is picked up in these recessed areas and is transferred to the substrate;

(v) "Vinyl Coating" means applying a decorative or protective topcoat, or printing on vinyl coated fabric or vinyl sheets, but shall not mean applying plastisol coating.

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(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 of 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 subsection 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 limit in this 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; 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; 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.

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.

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3rd Revision	NOV 13, 1992	SEP 28, 2012	77 FR 59554
4th Revision	SEP 15, 2008	SEP 28, 2012	77 FR 59554
5th Revision	MAR 19, 2012	SEP 28, 2012	77 FR 59554

(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 limit in this subparagraph shall apply to the application area(s), flashoff area(s) and oven(s) of large appliance coating operations;

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

2. The emission limit in this 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; 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; 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 voe emissions do not exceed the solids equivalent limit of 4.52 pounds VOC per gallon of coating solids.

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

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 with the provisions of subparagraphs 3., 4., 5., 6., 7., 8., 9., and 10.

(ii) Any physical or operational changes that are necessary to com ply 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.

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(aa) VOC Emissions from Wire Coating:

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

   (i) 1.7 pounds per gallon of coating, excluding water, delivered to the coating applicator from wire coating operations. If any coating delivered to the coating applicator contains more than 1.7 pounds VOC per gallon, the solids equivalent limit shall be 2.21 pounds VOC per gallon of coating solids delivered to the coating applicator.

   (ii) The emission limit in this subsection shall apply to the oven(s) of wire coating operations.

2. 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 of 1.7 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 2.21 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 2.21 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) "Wire Coating" means the process of applying a coating of electrically insulating varnish or enamel to aluminum or copper wire for use in electrical machinery.

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2nd Revision:	JAN 03, 1991	OCT 13, 1992	57 FR 46780
	APR 03, 1991	OCT 13, 1992	57 FR 46780
3rd Revision	NOV 13, 1992	SEP 28, 2012	77 FR 59554

(bb) Petroleum Liquid Storage:

1. No person shall cause, let, permit, suffer, or allow the use of a fixed roof storage vessel with capacities of 40,000 gallons or greater containing a volatile petroleum liquid where true vapor pressure is greater than 1.52 psia unless:

   (i) the vessel has been fitted with a floating roof; or

   (ii) the vessel has been fitted with control equipment demonstrated to have control efficiency equivalent to or greater than required in (i) of this paragraph, and approved by the Director.

2. The requirements of this subsection shall not apply to vessels:

   (i) underground, if the total volume of petroleum liquids added to and taken from the tank annually does not exceed twice the volume of the tank; or

   (ii) having capacities less than 425,000 gallons used to store crude oil prior to lease custody transfer.

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

   (i) "Crude Oil" means a naturally occurring mixture which consists of hydrocarbons and/or sulfur, nitrogen and/or oxygen derivatives of hydrocarbons and which is a liquid at standard conditions;

   (ii) "Floating Roof" means a storage vessel cover consisting of a double deck, pontoon single deck, internal floating cover or covered floating roof, which rests upon and is supported by the petroleum liquid being contained, and is equipped with a closure seal or seals to close the space between the roof edge and tank wall;

   (iii) "Petroleum Liquids" means crude oil, condensate, and any finished or intermediate products manufactured in a petroleum refinery;

   (iv) "Petroleum Refinery" means any facility engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants, or other products through distillation of crude oils, or through redistillation, cracking, extraction, or reforming of unfinished petroleum derivatives;

   (v) "True Vapor Pressure" means the equilibrium partial pressure exerted by a petroleum liquid as determined in accordance with methods described in American Petroleum Institute Bulletin 2517, "Evaporation Loss from Floating Roof Tanks," 1962.

THIS IS THE FEDERALLY APPROVED REGULATION AS OF OCTOBER 13, 1992

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2nd Revision:	JAN 03, 1991	OCT 13, 1992	57 FR 46780
	APR 03, 1991	OCT 13, 1992	57 FR 46780

(cc) Bulk Gasoline Terminals:

1. No person may load gasoline into any tank trucks or trailers from any bulk gasoline terminal unless:

   (i) The bulk gasoline terminal is equipped with vapor control equipment capable of complying with subparagraph 1.(v) of this paragraph 1., properly installed, in good working order, in operation, and consisting of one of the following:

      (I) An absorber or condensation equipment which processes and recovers at least 90 percent of all vapors and gases from the equipment being controlled; or

      (II) Vapor collection equipment which directs all vapors to a fuel gas system; or

      (III) Control equipment demonstrated to have control efficiency equivalent to or greater than required in (I) or (II) of this paragraph, and approved by the Director; and

   (ii) All displaced vapors and gases are vented only to the vapor control equipment; and

   (iii) Complete drainage of any loading arm will be accomplished before it is removed from the tank; and

   (iv) All loading and vapor lines are equipped with fittings which make vapor-tight connections and which close automatically when disconnected, or a loading arm with vapor return line and hatch seal designed to prevent the escape of gases and vapors while loading;

   (v) Sources and persons affected under this subsection may not allow mass emissions of volatile organic compounds from control equipment to exceed 4.7 grains per gallon of gasoline loaded.

2. Sources and persons affected under this subsection shall comply with the vapor collection and control system requirements of Rule 391-3-1-.02(2)(ss).

3. The requirements of this subsection shall not apply to loading of gasoline into tank trucks or trailers of less than 3000 gallons capacity outside those counties of Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Fulton, Gwinnett, Henry, Paulding, and Rockdale.

4. The requirements of this subsection shall apply to loading of gasoline into tank trucks or trailers of less than 3000 gallons capacity inside those counties of Clayton,

Cobb, Coweta, DeKalb, Douglas, Fayette, Fulton, Gwinnett, Henry, Paulding, and rockdale after July 1, 1991.

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

   (i) "Bulk Gasoline Terminal" means a gasoline storage facility which receives gasoline from refineries primarily by pipeline, ship, or barge, and delivers gasoline to bulk gasoline plants or to commercial or retail accounts primarily by tank truck and has an average daily throughput of more than 20,000 gallons of gasoline.

   (ii) "Gasoline" means a petroleum distillate having a Reid vapor pressure of 4 psia or greater.

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	APR 03, 1991	OCT 13, 1992	57 FR 46780

(dd)Cutback Asphalt:

1. After January 1, 1981, no person may cause, allow or permit the use of cutback asphalts for paving purposes except as necessary for:

   (i) long-life stockpile storage; or

   (ii) the use or application at ambient temperatures less than 50 degrees F; or

   (iii) solely as a penetrating prime coat; or

   (iv) base stabilization.

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

   (i) "Asphalt" means a dark-brown to black cementitious material (solid, semisolid, or liquid in consistency) in which the predominating constituents are bitumens which occur in nature as such or which are obtained as residue in refining petroleum;

   (ii) "Cutback Asphalt" means asphalt cement which has been liquefied by blending with petroleum solvents (diluents). Upon exposure to atmospheric conditions the diluents evaporate, leaving the asphalt cement to perform its function;

   (iii) "Penetrating Prime Coat" means an application of low viscosity liquid asphalt to an absorbent surface. It is used to prepare as untreated base for an asphalt surface. The prime penetrates the base and plugs the voids, hardens the top, and helps bind it to the overlying asphalt course. It also reduces the necessity of maintaining an untreated base course prior to placing the asphalt pavement.

THIS IS THE FEDERALLY APPROVED REGULATION AS OF SEPTEMBER 18, 1979

	Date Submitted to EPA	Date Approved by EPA	Federal Register
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(ee) Petroleum Refinery:

1. Persons responsible for any vacuum producing system at a petroleum refinery shall control the emissions of any noncondensable volatile organic compound from the condensers, hot wells or accumulators by:

   (i) Piping the noncondensable vapors to a firebox or incinerator; or

   (ii) Compressing the vapors and adding them to the refinery fuel gas; or

   (iii) Controlling the vapors by using control equipment demonstrated to have control efficiency equivalent to or greater than required in (i) or (ii) of this paragraph, and approved by the Director.

2. Persons responsible for any wastewater (oil/water) separator at a petroleum refinery shall:

   (i) Provide covers and seals approved by the Director, on all separators and forebays; and

   (ii) Equip all openings in covers, separators, and forebays with lids or seals such that the lids or seals are in the closed position at all times except when in actual use.

3. Before January 1, 1980 the owner or operator of any affected petroleum refinery located in this State shall develop and submit to the Director for approval a detailed procedure for minimization of volatile organic compound emissions during process unit turnaround. As a minimum, the procedure shall provide for:

   (i) Depressurization venting of the process unit or vessel to a vapor recovery system, flare or firebox; and

   (ii) No emission of volatile organic compounds from a process unit or vessel unless its internal pressure is 19.7 psi or less.

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

   (i) "Accumulator" means the reservoir of a condensing unit receiving the condensate from the condenser;

   (ii) "Condenser" means any heat transfer device used to liquefy vapors by removing their latent heats of vaporization. Such devices include, but are not limited to, shell and tube, coil, surface, or contact condensers;

(iii) "Firebox" means the chamber or compartment of a boiler or furnace in which materials are burned but does not mean the combustion chamber of an incinerator;

(iv) "Forebays" means the primary sections of a wastewater separator;

(v) "Hot Well" means the reservoir of a condensing unit receiving the warm condensate from the condenser;

(vi) "Petroleum Refinery" means any facility engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants, or other products through distillation, cracking, extraction, or refining of unfinished petroleum derivatives;

(vii) "Refinery Fuel Gas" means any gas which is generated by a petroleum refinery process unit and which is combusted, including any gaseous mixture of natural gas and fuel gas;

(viii) "Turnaround" means the procedure of shutting a refinery unit down after a run to do necessary maintenance and repair work and putting the unit back on stream;

(ix) "Vacuum Producing System" means any reciprocating, rotary, or centrifugal blower or compressor, or any jet ejector or device that takes suction from a pressure below atmospheric and discharges against atmospheric pressure;

(x) "Vapor Recovery System" means a system that prevents releases to the atmospheric of no less than 90 percent by weight of organic compounds emitted during the operation of any transfer, storage, or process equipment;

(xi) "Wastewater (oil/water) Separator" means any device or piece of equipment which utilizes the difference in density between oil and water to remove oil and associated chemicals from water or any device, such as a flocculation tank, clarifier, etc., which removes petroleum derived compounds from wastewater.

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	APR 03, 1991	OCT 13, 1992	57 FR 46780

(ff) Solvent Metal Cleaning:

1. No person shall cause, suffer, allow or permit the operation of a cold cleaner degreaser unless the following requirements for control of emissions of the volatile organic compounds are satisfied:

   (i) The degreaser shall be equipped with a cover to prevent the escape of volatile organic compounds during periods of non-use;

   (ii) The degreaser shall be equipped with a facility for draining cleaned parts before removal;

   (iii) If used, the solvent spray must be a solid, fluid stream (not a fine, atomized or shower type spray) and at a pressure which does not cause excessive splashing;

   (iv) If the solvent volatility is 0.60 psi or greater measured at 100 degrees F, or if the solvent is heated above 120 degrees F, then one of the following control devices must be used:

      (I) Freeboard that gives a freeboard ratio of 0.7 or greater;

      (II) Water cover (solvent must be insoluble in and heavier than water);

      (III) Other systems of equivalent control, such as a refrigerated chiller or carbon adsorption.

   (v) Waste solvent shall be stored only in covered containers and shall not be disposed of by such a method as to allow excessive evaporation into the atmosphere.

2. No person shall cause, suffer, allow, or permit the operation of an open top vapor greaser unless the following requirements for control of emissions of volatile organic compounds are satisfied:

   (i) The degreaser shall be equipped with a cover to prevent the escape of volatile organic compounds during periods of non-use;

   (ii) The degreaser shall be equipped with one of the following control devices:

      (I) Freeboard ratio greater than or equal to 0.75;

      (II) Refrigerated chiller;

      (III) Enclosed design (cover for door opens only when the dry part is actually entering or exiting the degreaser);

(IV) Carbon adsorption system, with ventilation greater than 50 cfm/ft2 of air/vapor area (when cover is open), and exhausting less than 25 ppm solvent averaged over one complete adsorption cycle; or

(V) Control equipment demonstrated to have control efficiency equivalent to or better than any of the above.

(iii) The degreaser shall be operated in accordance with the following procedures. Operating instructions summarizing these procedures shall be displayed on the degreaser.

(I) Keep cover closed at all times except when processing work loads through degreaser;

(II) Minimize solvent carry-out by the following measures:

I. Rack parts to allow full drainage;

II. Degrease the work load in the vapor zone at least 30 seconds or until condensation ceases;

III. Tip out any pools of solvent on the cleaned parts before removal;

IV. Allow parts to dry within the degreaser for at least 15 seconds or until visually dry.

(III) Do not degrease porous or adsorbent materials, such as cloth, leather, wood or rope;

(IV) Work loads should not occupy more than half of the greaser's open top area;

(V) The vapor level should not drop more than 4 inches when the work load enters the vapor zone;

(VI) Never spray the vapor level;

(VII) Repair solvent leaks immediately, or shutdown the degreaser.

(VIII) Ventilation fans should not be used near the degreaser opening;

(IX) Water should not be visually detectable in solvent exiting the water separator.

(iv) Waste solvent shall be stored only in covered containers and shall not be disposed of or transferred to another party by such a method as to allow excessive evaporation into the atmosphere.

3. No person shall cause, suffer, allow, or permit the operation of a conveyorized degreaser unless the following requirements for control of emissions of the volatile organic compounds are satisfied.

(i) The degreaser shall be equipped with a cover to prevent the escape of volatile organic compounds during periods of non-use;

(ii) The degreaser shall be equipped with either a drying tunnel, or other means such as rotating (tumbling) basket, sufficient to prevent cleaned parts from carrying out solvent liquid or vapor;

(iii) The degreaser shall be equipped with one of the following:

(I) Refrigerated chiller;

(II) Carbon adsorption system, with ventilation greater than 50 cfm ft^2 of air/vapor area (when down-time covers are open), and exhausting less than 25 ppm of solvent by volume averaged over a complete adsorption cycle; or

(III) Control equipment demonstrated to have control efficiency equivalent to or better than any of the above.

(iv) The degreaser shall be operated in accordance with the following procedure. Operating instructions summarizing these procedures shall be displayed on the degreaser.

(I) Exhaust ventilation should not exceed 65 cfm per ft^2 of degreaser opening, unless necessary to meet OSHA requirements. Work place and should not be used near the degreaser opening;

(II) Minimize carry-out emissions by:

I. Racking parts for best drainage;

II. Maintaining vertical conveyer speed at less than 11 ft/min.

(III) Repair solvent leaks immediately, or shutdown the degreaser;

(IV) Water should not visibly be detectable in the solvent exiting the water separator;

(V) Down-time cover must be placed over entrances and exits of conveyorized degreasers immediately after the conveyer and exhaust are shutdown and removed just before they are started up.

(v) Waste solvent shall be stored only in covered containers and shall not be disposed of or transferred to another party by such a method as to allow excessive evaporation into the atmosphere.

4. The following requirements apply to degreasers using trichloroethylene, carbon tetrachloride, and/or chloroform in a total concentration greater than 5 percent by weight:

(i) Degreasers constructed or reconstructed after November 29, 1993 shall comply with paragraph 391-3-1-.02(9)(b)34. "Emission Standard for Hologenated Solvent Cleaning, 40 CFR 63, Subpart T, as amended" (NESHAP) and not paragraphs 1. through 3. of this subsection (ff) (Georgia Rule).

(ii) Existing degreasers (constructed or reconstructed on or before November 29, 1993) shall comply with paragraphs 1. through 3. of this subsection (ff) (Georgia Rule) until December 2, 1997; after which they must comply with paragraph 391-3-1-.02(b)34 (NESHAP).

(iii) An existing degreaser (as defined above) may elect to comply with paragraph 391-3-1-.02(9)(b)34 prior to December 2, 1997. In such case, they are not required to comply with Paragraphs 1.through 3. of this subsection (ff) (Georgia Rule) once they are in compliance with paragraph 391-3-1-.02(9)(b)34 (NESHAP).

(iv) Any facility which currently complies with paragraphs 391-3-1-.02(ff)1 through 3 (Georgia Rule) which will be changing to comply with paragraph 391-3-1-.02(9)(b)34 (NESHAP) should submit a schedule of construction/modification for changes necessary to comply with 391-3-1-.02(9)(b)34 (NESHAP) as soon as practically possible but no later than 60 days prior to any construction/modification.

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

(i) "Cold Cleaning" means the batch process of cleaning and removing soils from metal surfaces by spraying, brushing, flushing or immersion while maintaining the solvent below its boiling point. Wipe cleaning is not included in this definition;

(ii) "Conveyorized Degreasing" means the continuous process of cleaning and removing soils from metal surfaces by operating with either cold or vaporized solvents;

(iii) "Freeboard Height" means the distance from the top of vapor zone to the top of the degreaser tank;

(iv) "Freeboard Ratio" means the freeboard height divided by the width (smallest dimension) of the degreaser;

(v) "Open Top Vapor Degreasing" means the batch process of cleaning and removing soils from metal surfaces by condensing hot solvent vapor on the colder metal parts;

(vi) "Solvent Metal Cleaning" means the process of cleaning soils from metal surfaces by cold cleaning or open top vapor degreasing or conveyorized degreasing.

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	APR 03, 1991	OCT 13, 1992	57 FR 46780
3rd Revision:	JUN 17 1996	APR 26, 1999	64 FR 20186

(gg) Kraft Pulp Mills:

1. Except as provided for in paragraph 2. of this subsection, no person shall cause, let, suffer, permit or allow the emissions of TRS from any kraft pulp mill in operation, or under construction contract, on or before September 24, 1976, in amounts equal to or exceeding the following:

   (i) Recovery Furnaces:

      (I) Old Recovery Furnaces: 20 parts per million of TRS on a dry basis and as a 24-hour average, corrected to 8 volume percent oxygen; or

      (II) New Recovery Furnaces: 5 parts per million of TRS on a dry basis and as a 24-hour average, corrected to 8 volume percent oxygen; or

      (III) Cross Recovery Furnaces: 25 parts per million of TRS on a dry basis and as a 24-hour average, corrected to 8 volume percent oxygen.

   (ii) Digester System or Multiple-Effect Evaporator System" 5 parts per million of TRS on a dry basis and a 24-hour average, corrected to 10 volume percent oxygen unless the following conditions are met:

      (I) The gases are combusted in a lime kiln subject to the provisions of paragraph (iv) of this subsection; or

      (II) The gases are combusted in a recovery furnace subject to the provisions of paragraph (i) of this subsection; or

      (III) The gases are combusted with other gases in an incinerator or other device, or combusted in a lime kiln or recovery boiler not subject to the provisions of this subsection, and are subjected to a minimum temperature of 1200 degrees F for at least 0.5 second; or

      (IV) The gases are controlled by a means other than combustion. In this case, the gases discharged shall not contain TRS in excess of 5 parts per million on a dry basis and as a 24-hour average, corrected to the actual oxygen content of the untreated gas stream.

   (iii) Smelt Dissolving Tanks: 0.0168 pounds of TRS per ton of black liquor solids (dry weight).

   (iv) Lime Kilns: 40 parts per million of TRS on a dry basis and as a 24-hour average, corrected to 10 volume percent oxygen.

2. Nothing in paragraph 1. shall prevent the owner or operator of a kraft pulp mill subject to the provisions of this subsection (gg) from applying to the Director for

permission to control TRS emissions from the kraft pulp mill under the provisions of this subparagraph provided that:

(i) General Provisions:

(I) The owner or operator of such kraft pulp mill make such application in writing no later than six months following the notification date; and

(II) In the event that the kraft pulp mill contains TRS emitting process equipment which is subject to the New Source Performance Standard for Kraft Pulp Mills, 391-3-1-.02(2)(b)23., then that TRS emitting process equipment must also comply with the applicable New Source Performance Standard TRS emission limitation(s);

(III) The owner or operator of such kraft pulp mill may not elect to control TRS emissions from process equipment not subject to the provisions of this subsection (gg) in lieu of controlling TRS emissions from those sources subject to this subsection (gg); and

(IV) For the purpose of this paragraph 2.; the maximum allowable emissions of TRS shall be calculated using the production rate (annual average or most recent 12 months of record) for the kraft pulp mill expressed as tons of air dried pulp per day, and the allowable emission rate of TRS from the kraft pulp mill shall be expressed as pounds of TRS per ton of air dried pulp.

(V) For the purpose of this paragraph, "notification date" means September 12, 1988.

(ii) Emission Limitation: No person shall cause, let, suffer, permit, or allow the total emissions of TRS from the following processes: recovery furnace(s), lime kiln(s), smelt dissolving tank(s), digester system, multiple-effect evaporator system, equal to or exceeding the amount determined by the following formula:

A = RB + LK + 0.065 pounds of TRS per ton of air dried pulp;

The values for the terms RB and LK shall be determined using the following formula:

$$LK = (0.20U + 0.04V)/U + V$$

$$RB = (0.15W + 0.15X + 0.60Y + 0.75Z)/W + X + Y + Z$$

Where:

A = the total amount of allowable TRS emissions from the kraft pulp mill expressed as pounds as TRS per ton of air dried pulp.

LK = the fraction of the total allowable emission of TRS in

RB = the fraction of the total allowable emission of TRS in pounds per ton of air dried pulp for recovery furnaces;

U = tons per hour of lime mud solids calcined in lime kiln(s) not subject to the New Source Performance Standard for Kraft Pulp Mills;

V = tons per hour of lime solids calcined in lime kiln(s) not subject to the New Source Performance Standard for Kraft Pulp Mills;

W = pounds per hour of black liquor solids burned in recovery furnace(s) subject to the New Source Performance Standard for Kraft Pulp Mills;

X = pounds per hour of black liquor solids burned in new recovery furnace(s);

Y = pounds per hour of black liquor solids burned in old recovery furnace(s);

Z = pounds per hour of black liquor solids burned in cross recovery furnace(s);

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

   (i) "New Recovery Furnace" means a recovery furnace which had stated in the purchase contract a TRS performance guarantee or which included in the purchase contract a statement that the control of air pollutants was a design objective and which has incorporated into its design: membrane wall or welded wall construction; and emission--control air systems.

   (ii) "Old Recovery Furnace" means a recovery furnace which is not classified as a new recovery furnace.

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2nd Revision:	JUN 03, 1988	SEP 30, 1988	53 FR 38290
3rd Revision	JUL 25, 2014	JUL 28, 2017	82 FR 35106

(hh)Petroleum Refinery Equipment Leaks:

1. No person shall cause, let, suffer, or allow the use of petroleum refinery equipment unless:

   (i) A plan is submitted to the Director by no later than July 1, 1981 for monitoring VOC leaks. Such a program must contain:

      (I) A list of refinery units and the quarter in which they will be monitored;

      (II) A copy of the log book format;

      (III) The make and model of the monitoring equipment to be used.

   (ii) Monitoring for potential VOC leaks is carried out no less frequently than:

      (I) Yearly using detection equipment for pump seals, pipeline valves in liquid service, and process drains;

      (II) Quarterly using detection equipment for compressor seals, pipeline valves in gaseous service, and pressure relief valves in gaseous service;

      (III) Weekly by visible inspection for all pump seals;

      (IV) Immediately using detection equipment for any pump seals from which liquids are observed dripping and immediately after repair of any component previously found to be leaking;

      (V) Within 24 hours for a relief valve after it has vented to the atmosphere.

   (iii) All components which have emissions with a VOC concentration exceeding 10,000 ppm, as determined by Method 21 of the reference in Section 391-3-1-.02(3)(a) of these Rules, shall be affixed with a weatherproof and readily visible tag, bearing an identification number and the date on which the leak is located. This tag shall remain in place until the leaking component is repaired.

   (iv) Leaking components as defined by (iii) above which can be repaired without a unit shutdown shall be repaired and retested as soon as practicable but no later than 15 days after the leak is identified.

   (v) Leaking components as defined by (iii) above which require unit shutdown for repair may be corrected at the regularly scheduled turnaround unless the Director at his discretion requires early unit turnaround based on the number and severity of tagged leaks awaiting turnaround.

(vi) Except for safety pressure relief valves, no owner or operator of a petroleum refinery shall install or operate a valve at the end of a pipe or line containing volatile organic compounds unless the pipe or line is sealed with a second valve, a blind flange, a plug, or a cap. The sealing device may be removed only when a sample is being taken or during maintenance operations.

(vii) Pipeline valves and pressure relief valves in gaseous volatile organic compound service shall be marked in some manner that will be readily obvious to both refinery personnel performing monitoring and the Director.

(viii) Pressure relief devices which are connected to an operation flare header, vapor recovery device, inaccessible valves, storage tank valves, and valves that are not externally regulated are exempt from the monitoring requirements of this rule.

2. The owner or operator of a petroleum refinery shall maintain a leaking components monitoring log. Copies of the monitoring log shall be retained by the owner or operator for a minimum of two years after the date on which the record was made or the report repaired and shall immediately be made available to the Director, upon verbal or written request, at any reasonable time. The monitoring log shall contain the following data:

   (i) The name and the process unit where the component is located.

   (ii) The type of component (e.g., valve, seal).

   (iii) The tag number of the component.

   (iv) The date on which a leaking component is discovered.

   (v) The date on which a leaking component is repaired.

   (vi) The date and instrument reading of the recheck procedure after a leaking component is repaired.

   (vii) A record of the calibration of the monitoring instrument.

   (viii) Those leaks that cannot be repaired until turnaround.

   (ix) The total number of components checked and the total number of components found leaking.

3. The owner or operator of a petroleum refinery shall:

   (i) Submit a report to the Director by the fifteenth day of January, April, July, and October that lists all leaking components that were located during the previous three calendar months but not repaired within fifteen days, all leaking

components awaiting unit turnaround, the total number of components inspected, and the total number of components found leaking.

(ii) Submit a signed statement with the report attesting to the fact that all monitoring and repairs were performed as stipulated in the monitoring program.

(iii) The first quarterly report shall be submitted to the Director no later than January 1, 1982.

4. The Director, upon written notice, may modify the monitoring, record keeping and reporting requirements.

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

(i) "Petroleum refinery" means any facility engaged in producing gasoline, aromatics, kerosene, distillate fuel oils, residual fuel oils, lubricants, asphalt, or other products through distillation of petroleum or through redistillation, cracking, rearrangement or reforming of unfinished petroleum derivatives.

(ii) "Component" means any piece of equipment which has the potential to leak volatile organic compounds when tested in the manner described in subparagraph 1.(iii). These sources include, but are not limited to, pumping seals, compressor seals, seal oil degassing vents, pipeline valves, pressure relief devices, process drains, and open ended pipes. Excluded from these sources are valves which are not externally regulated.

(iii) "Liquid service" means equipment which processes, transfers or contains a volatile organic compound or mixture of volatile organic compounds in the liquid phase.

(iv) "Gas service" means equipment which processes, transfers or contains a volatile organic compound or mixture of volatile organic compounds in the gaseous phase.

(v) "Valves not externally regulated" means valves that have no external controls, such as in-line check valves.

(vi) "Refinery unit" means a set of compounds which are a part of a basic process operation, such as, distillation, hydrotreating, cracking or reforming of hydrocarbons.

Original Reg:	DEC 18, 1980	NOV 24, 1981	46 FR 57486
1st Revision:	JUN 24, 1994	FEB 02, 1996	61 FR 3817

(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 parts and products to exceed:

(i) 4.3 pounds per gallon of coating, excluding water, delivered to a coating applicator that applies clear coatings;

(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 degrees F;

(iii)3.5 pounds per gallon of coating, excluding water, delivered to a coating applicator for all other coatings and coating application systems.

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-metalizinq; 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.

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

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.

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

NOTE: Changes from the March 19, 2012, were not applied to 7.(i)-(iv) because they are different than what was submitted, also (iv) was not in the compilation.

(i) The application of low solvent content coating technology (compliance may be demonstrated by averaging on a 24-hour weighted basis all VOC emissions from a single surface coating of miscellaneous metal parts and products line or operation not complying under (ii) or (iii) of this paragraph; averaging across lines is not allowed); or

(ii) Incineration, with a capture system approved by the Director, provided that 90 percent of the nonmethane volatile organic compounds (VOC measured as total combustible carbon) which enter the incinerator are oxidized to carbon dioxide and water; or

(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 paragraph, and approved by the Director.

(iv)

(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.

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

(i) "Air dried coating" means coating which are dried by the use of air or forced warm air at temperatures up to 194 degrees 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 systems" 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; and

(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.

(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.

(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.

(xvi) "Extreme environmental conditions" means exposure to any of: the weather all of the time, temperatures consistently above 200 degrees 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).

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

(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.

(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.

(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.

(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.

(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.

(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.

9. Applicability. Prior to January 1. 2015, the requirements of this subparagraph (ii) shall apply o 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.

THIS IS THE FEDERALLY APPROVED REGULATION AS OF SEPTEMBER 28, 2012

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2nd Revision	JUN 17, 1996	APR 26, 1999	64 FR 20186

3rd Revision	OCT 28, 1999	JUL 10, 2001	66 FR 35906
4th Revision	SEP 15, 2008	SEP 28, 2012	77 FR 59554
5th Revision	MAR 19, 2012	SEP 28, 2012	77 FR 59554

(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 subparagraph shall be achieved by;

   (i) 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 limits stated in subparagraph 1. of this 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 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. No person shall cause, let, permit, suffer, or allow the emissions of VOC from the inks, minimize spills of VOC-containing materials: and

   (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 (ji) 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 (ji) 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 (jj) 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 (jj) 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 ontrol 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.

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2nd Revision	NOV 13, 1992	SEP 28, 2012	77 FR 59554
3rd Revision	MAR 19, 2012	SEP 28, 2012	77 FR 59554

(kk) VOC Emissions from Synthesized Pharmaceutical Manufacturing:

1. The owner or operator of a synthesized pharmaceutical manufacturing facility shall:

   (i) Control the volatile organic compound emissions from all reactors, distillation operations, crystallizers, centrifuges and vacuum dryers that emit 15 pounds per day or more of VOC. Surface condensers or equivalent controls shall be used, provided that:

      (I) If surface condensers are used, the condenser outlet gas temperature must not exceed:

         I. -13 degrees F when condensing VOC of vapor pressure greater than 5.8 psi, measured at 68 degrees F;

         II. 5 degrees F when condensing VOC of vapor pressure greater than 2.9 psi, measured at 68 degrees F;

         III. 32 degrees F when condensing VOC of vapor pressure greater than 1.5 psi, measured at 68 degrees F;

         IV. 50 degrees F when condensing VOC of vapor pressure greater than 1.0 psi, measured at 68 degrees F;

         V. 77 degrees F when condensing VOC of vapor pressure greater than 0.5 psi, measured at 68 degrees F.

      (II) If equivalent controls are used, the VOC emissions must be reduced by at least as much as they would be using a surface condenser which meets the requirements of part (I) of this subparagraph.

   (ii) The owner or operator of a synthesized pharmaceutical manufacturing facility subject to this regulation shall reduce the VOC emissions from all air dryers and production equipment exhaust systems;

      (I) By at least 90 percent if emissions are 330 pounds per day or more of VOC: or

      (II) 33 pounds per day or less if emissions are less than 330 pounds per day of VOC:

      (III) The owner or operator of a synthesized pharmaceutical manufacturing facility subject to this regulation shall:

         I. Provide a vapor balance system or equivalent control that is at least 90.0 percent effective in reducing emissions from truck or railcar

deliveries to storage tanks with capacities greater than 2,000 gallons that store VOC with vapor pressure greater than 4.1 psi at 68 degrees F; and

II. Install pressure/vacuum conservative vents set on all storage tanks that store VOC with vapor pressures greater than 1.5 psi at 68 degrees F unless a more effective control system is used.

(iii) The owner or operator of a synthesized pharmaceutical facility subject to this regulation shall include all centrifuges, rotary vacuum filters, and other filters having an exposed liquid surface, where the liquid contains VOC and exerts a total VOC vapor pressure of 0.5 psi or more at 68 degrees F.

(iv) The owner or operator of a synthesized pharmaceutical facility subject to this regulation shall install covers on all in-process tanks containing a volatile organic compound at any time. These covers must remain closed, unless production, sampling, maintenance, or inspection procedures require operator access.

(v) The owner or operator of a synthesized pharmaceutical manufacturing facility subject to this regulation shall repair all leaks from which liquid, containing VOC, can be observed running or dripping. The repair shall be completed the first time the equipment is off-line for a period of time long enough to complete the repair.

2. For the purpose of this regulation, the following definitions also apply:

(i) "Condenser" means a device which cools a gas stream to a temperature which removes specific organic compounds by condensation;

(ii) "Control system" means any number of control devices, including condensers, which are designed and operated to reduce the quantity of VOC emitted to the atmosphere;

(iii) "Reactor" means a vat or vessel, which may be jacketed to permit temperature control, designed to contain chemical reactions;

(iv) "Separation operation" means a process that separates a mixture of compounds and solvents into two or more components. Specific mechanisms include extraction, centrifugation, filtration, and crystallization;

(v) "Synthesized pharmaceutical manufacturing" means manufacture of pharmaceutical products by chemical synthesis.

(vi) "Production equipment exhaust system" means a device for collecting and directing out of the work area VOC fugitive emissions from reactor openings,

centrifuge openings, and other vessel openings for the purpose of protecting workers from excessive VOC exposure.

THIS IS THE FEDERALLY APPROVED REGULATION AS OF NOVEMBER 24, 1981

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(ll) VOC Emissions from the Manufacture of Pneumatic Rubber Tires:

1. The owner or operator of an undertread cementing, tread end cementing, or bead dipping operation subject to this regulation shall:

   (i) Install and operate a capture system, designed to achieve maximum reasonable capture from all undertread cementing, tread end cementing and bead dipping operation; and install and operate a control device that effects at least a 90.0 percent reduction efficiency, measured across the control system, and has been approved by the Director;

   (ii) The owner or operator of an undertread cementing operation, tread and cementing operation or bead dipping operation may, in lieu of a vapor capture and control system for those operations, make process changes which reduces emissions to a level equal to or below that which would be achieved with emission controls as specified in subparagraph (i) above.

2. The owner or operator of a green tire spraying operation subject to this regulation shall:

   (i) Substitute water-based sprays for the normal solvent based mold release compound; or

   (ii) Comply with paragraph 1. of this regulation.

3. If the total volatile organic compound emissions from all undertreading cementing, tread end cementing, bead dipping and green tire spraying operations at a pneumatic rubber tire manufacturing facility do not exceed 57 grams per tire, paragraphs 1. and 2. above shall not apply.

4. For the purpose of this subsection the following definitions also apply:

   (i) "Pneumatic rubber tire manufacturer" means the undertread cementing, tread end cementing, bead dipping, and green tire spraying associated with the production of pneumatic rubber, passenger type tires on a mass production basis.

   (ii) "Passenger type tire" means agricultural, airplane, industrial, mobile home, light and medium duty truck, and passenger vehicle tires with a bead diameter up to but excluding 20.0 inches and cross section dimension up to 12.8 inches.

   (iii) "Undertread cementing" means the application of a solvent based cement to the underside of a tire tread.

   (iv) "Bead dipping" means the dipping of an assembled tire bead into a solvent based cement.

(v) "Tread end cementing" means the application of a solvent based cement to the tire tread ends.

(vi) "Green tires" means assembled tires before molding and curing have occurred.

(vii) "Green tire spraying" means the spraying of green tires, both inside and outside, with release compounds which help remove air from the tire during molding and prevent the tire from sticking to the mold after curing.

(viii) "Water based spray" means release compounds, sprayed on the inside and outside of green tires, in which solids, water, and emulsifiers have been substituted for organic solvents.

THIS IS THE FEDERALLY APPROVED REGULATION AS OF NOVEMBER 24, 1981

	Date Submitted to EPA	Date Approved by EPA	Federal Register
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(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 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 l.; averaging across lines is not allowed; or

(ii) Installing and organic compound emission having at least 90.0 efficiency, and a capture the Director.

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:

(iv) 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. 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. 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.

THIS IS THE FEDERALLY APPROVED REGULATION AS OF SEPTEMBER 28, 2012

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	APR 03, 1991	OCT 13, 1992	57 FR 46780
2nd Revision	NOV 13, 1992	SEP 28, 2012	77 FR 59554
3rd Revision	MAR 19, 2012	SEP 28, 2012	77 FR 59554

(nn)VOC Emissions from External Floating Roof Tanks:

1. No person shall cause, let, permit, suffer, or allow the storage of petroleum liquids in external floating roof tanks having capacities greater than 40,000 gallons unless:

   (i) The vessel has been fitted with:

      (I) A continuous secondary seal extending from the floating roof to the tank wall (rim-mounted secondary seal); or

      (II) A closure or other device which controls VOC emissions wi an effectiveness equal to or greater than a seal required under part (a)1.(i) of this section and approved by the Director.

   (ii) All seal closure devices meet the following requirements:

      (I) There are no visible holes, tears, or other openings in the seal(s) or seal fabric;

      (II) The seal(s) are intact and uniformly in place around the circumference of the floating roof between the floating roof and the tank wall; and

      (III) For vapor mounted primary seals, the accumulated area of gaps exceeding 1/8 inch in width between the secondary seal and the tank wall shall not exceed 1.0 inch 2 per foot of tank diameter.

   (iii) All openings in the external floating roof, except for automatic bleeder vents, rim space vents, and leg sleeves are:

      (I) Equipped with covers, seals, or lids in the closed position except when the openings are in actual use; and

      (II) Equipped with projections into the tank which remain below the liquid surface at all times.

   (iv) Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports;

   (v) Rim vents are set to open when the roof is being floated off leg supports or at the manufacturer's recommended setting; and

   (vi) Emergency roof drains are provided with slotted membrane fabric covers or equivalent covers which cover at least 90 percent of the opening.

2. The owner or operator of a petroleum liquid storage vessel with an external floating roof subject to this regulation shall:

(i) Perform routine inspections semi-annually in order to insure compliance with paragraph 1. of this subsection and the inspections shall include a visual inspection of the secondary seal gap;

(ii) Measure the secondary seal gap annually when the floating roof is equipped with a vapor-mounted primary seal; and

(iii) Maintain records of the types of volatile petroleum liquids stored, the maximum true vapor pressure of the liquid as stored, and the results of the inspections performed in subparagraphs 2.(i) and (ii).

3. Copies of all records under paragraph 2. of this subsection shall be retained by the owner or operator for a minimum of two years after the date on which the record was made.

4. Copies of all records under this section shall immediately be made available to the Director, upon verbal or written request, at any reasonable time.

5. The Director may, upon written notice, require more frequent inspections or modify the monitoring and record keeping requirements, when necessary to accomplish the purposes of this regulation.

6. The regulation does not apply to petroleum liquid storage vessels which:

(i) Are used to store waxy, heavy pour crude oil;

(ii) Have capacities less than 420,000 gallons and are used to store produced crude oil and condensate prior to lease custody transfer;

(iii) Contain a petroleum liquid with a true vapor pressure of less than 1.5 psia;

(iv) Contain a petroleum liquid with a true vapor pressure of less than 4.0 psia; and

(I) Are of welded construction; and

(II) Presently possess a metallic-type shoe seal, a liquid mounted foam seal, a liquid-mounted liquid filled type seal, or other closure device of demonstrated equivalence approved by the Director; or

(III) Are of welded construction, equipped with a metallic-type shoe primary seal and has a secondary seal from the top of the shoe to the tank wall (shoe-mounted secondary seal).

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

(i) "Condensate" means hydrocarbon liquid separated from natural gas which condenses due to changes in the temperature and/or pressure and remains liquid at standard conditions.

(ii) "Crude oil" means a naturally occurring mixture which consists of hydrocarbon and sulfur, nitrogen and/or oxygen derivatives of hydrocarbons which is a liquid at standard conditions.

(iii) "Lease custody transfer" means the transfer of produced crude oil and/or condensate, after processing and/or treating in the producing operations, from storage tanks or automatic transfer facilities to pipelines or any other forms of transportation.

(iv) "External floating roof" means a storage vessel cover in an open top tank consisting of a double deck or pontoon single deck which rests upon and is supported by the petroleum liquid being contained and is equipped with a closure seal or seals to close the space between the roof edge and tank wall.

(v) "Liquid-mounted seal" means a primary seal mounted in continuous contact with the liquid between the tank wall and the floating roof around the circumference of the tank.

(vi) "Petroleum liquids" means crude oil, condensate, and any finished or intermediate products manufactured or extracted in a petroleum refinery.

(vii) "Vapor-mounted seal" means a primary seal mounted so there is an annular vapor space underneath the seal. The annular vapor space is bounded by the bottom of the primary seal, the tank wall, the liquid surface, and the floating roof.

(viii) "Waxy, heavy pour crude oil" means a crude oil with a pour point of 50 degrees F or higher as determined by the American Society for Testing and Materials Standards D97-66, "Test for Pour Point of Petroleum Oils."

THIS IS THE FEDERALLY APPROVED REGULATION AS OF NOVEMBER 24, 1981

	Date Submitted to EPA	Date Approved by EPA	Federal Register
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(oo)Fiberglass Insulation Manufacturing Plants:

1. No person shall cause, let, suffer, permit, or allow the emission of particulate matter from any fiberglass insulation production line to exceed a concentration of 0.04 grains per standard dry cubic foot.

2. For the purpose of this subsection, "Fiberglass insulation production line" means any combination of equipment, devices or contrivances for the manufacture of fiberglass insulation. This does not include glass melting furnaces, equipment associated with the process which is defined herein a "Fuel-burning Equipment," equipment the primary purpose of which involves the handling, storing or packaging of the fiberglass insulation or equipment the primary purpose of which involves the handling, storing or conveying of raw products for input into the glass melting furnace.

THIS IS THE FEDERALLY APPROVED REGULATION AS OF NOVEMBER 24, 1981

	Date Submitted to EPA	Date Approved by EPA	Federal Register
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(pp)Bulk Gasoline Plants:

1. After July 1, 1991, no owner or operator of a bulk gasoline plant may permit the receiving or dispensing of gasoline by its stationary storage tanks unless:

   (i) Each tank is equipped with a submerged fill pipe, approved by the Director; or

   (ii) Each tank is equipped with a fill line whose discharge opening is at the tank bottom;

   (iii) Each tank has a vapor balance system consisting of the following major components:

      (I) A vapor space connection on the stationary storage tank equipped with fittings which are vapor tight and will automatically and immediately close upon disconnection so as to prevent release of gasoline or gasoline vapors; and

      (II) A connecting pipe or hose equipped with fittings which are vapor tight and will automatically and immediately close upon disconnection so as to prevent release of gasoline or gasoline vapors.

2. After July 1, 1991, no owner or operator of a bulk gasoline plant, or the owner or operator of a tank truck or trailer may permit the transfer of gasoline between the tank truck or trailer and stationary storage tank unless:

   (i) The vapor balance system is in good working order and is connected and operating; and

   (ii) The gasoline transport vehicle is maintained to prevent the escape of fugitive vapors and gases during loading operations; and

   (iii) A means is provided to prevent liquid drainage from the loading device when it is not in use or to accomplish complete drainage before the loading device is disconnected; and

   (iv) The pressure relief valves on storage vessels and tank trucks or trailers are set to release at 0.7 psia or greater unless restricted by state or local fire codes or the National Fire Prevention Association guidelines in which case the pressure relief valve must be set to release at the highest possible pressure allowed by these codes or guidelines.

3. The requirements of this subsection shall not apply to stationary storage tanks of less than 2,000 gallons:

4. Sources and persons affected under this subsection shall comply with the vapor collection and control system requirements of Rule 391-3-1-.02(2)(ss).

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

   (i) "Bottom filling" means the filling of a tank truck or stationary storage tank through an opening that is located at the tank bottom.

   (ii) "Bulk gasoline plant" means a gasoline storage and distribution facility with an average daily throughput of more than 4,000 gallons but less than 20,000 gallons which receives gasoline from bulk terminals by rail and/or trailer transport, stores it in tanks, and subsequently dispenses it via account trucks to local farms, businesses, and service stations;

   (iii) "Bulk gasoline terminal" means a gasoline storage facility which receives gasoline from refineries primarily by pipeline, ship, or barge, and delivers gasoline to bulk gasoline plants or to commercial or retail accounts primarily by tank truck and has an average daily throughput of more than 20,000 gallons of gasoline.

   (iv) "Gasoline" means any petroleum distillate having a Reid vapor pressure of 4.0 psia or greater.

   (v) “Stationary Storage Tank” means all underground vessels and any aboveground vessels never intended for mobile use.

   (vi) "Submerged filling" means the filling of a tank truck or stationary tank through a pipe or hose whose discharge opening is not more than six inches from the tank bottom.

   (vii) "Vapor balance system" means a combination of pipes or hoses which create a closed system between the vapor spaces of an unloading tank and a receiving tank such that vapor spaces displaced from the receiving tank are transferred to the tank being unloaded.

6. Compliance Dates.

   (i) All bulk gasoline plants located in Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglass,
   Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding and Rockdale counties shall be in compliance.

   (ii) All bulk gasoline plants located in Catoosa, Richmond and Walker counties shall be in compliance with this subsection by May 1, 2006.

   (iii) All bulk gasoline plants located in Barrow, Bartow, Carroll, Hall, Newton, Spalding, and Walton counties shall be in compliance with this subsection by June 1, 2008.

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2nd Revision	DEC 31, 2004	AUG 26, 2005	70 FR 50199
3rd Revision	OCT 21, 2009	SEP 28, 2012	77 FR 59554

(qq)VOC Emissions from Large Petroleum Dry Cleaners:

1. No person shall cause, let, permit, suffer, or allow the emissions of VOC from a large petroleum dry cleaner facility to exceed 3.5 pounds per 100 pounds dry weight of articles dry cleaned.

2. The VOC content in all filtration waste shall be reduced to one pound or less per hundred pounds dry weight of articles dry cleaned before disposal and exposure to the atmosphere from a petroleum solvent filtration system; or

3. Install and operate a cartridge filtration system and drain the filter cartridges in the sealed housing for eight hours or more before their removal.

4. Each owner or operator of a large petroleum dry cleaner shall inspect all equipment for leaks every 15 days and repair all petroleum solvent vapor and liquid leaks within three working days after identifying the source of the leaks.

5. Each owner or operator of a large petroleum dry cleaner shall maintain sufficient records to demonstrate compliance and provide them to the Division upon request, for a period of two years.

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

   (i) "Cartridge filter" means perforated canisters containing filtration paper and activated carbon that are used in the pressurized system to remove solid particles and fugitive dyes from soil-laden solvents.

   (ii) "Large petroleum dry cleaner" means any facility engaged in the process of the cleaning of textile and fabric products in which articles are washed in a nonaqua solution (solvent), then dried by exposure to a heated air stream and consumes 25 tons or more of petroleum solvent annually.

   (iii) "Solvent recovery dryer" means a class of dry cleaning dryers that employs a condenser to liquefy and recover solvent vapors evaporated in a closed loop recirculating stream of heated air.

THIS IS THE FEDERALLY APPROVED REGULATION AS OF OCTOBER 13, 1992

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	APR 03, 1991	OCT 13, 1992	57 FR 46780

(rr) Gasoline Dispensing Facility - Stage I.

1. Requirements: After the compliance date specified in subparagraph 16. of his subparagraph, no person may transfer or cause or allow the transfer of gasoline from any delivery vessel into any stationary storage tank subject to subparagraph (rr). unless:

(i) The stationary storage tank is equipped with all of the following:

(l) A submerged fill pipe; and

(ll) A Division approved Gasoline Vapor Recovery System as noted below:

A. An Enhanced Stage I Gasoline Vapor Recovery System as defined in subparagraph 15.(iv) that shall remain in good working condition, such as keeping the vapor return opening free of liquid or solid obstructions. and that also shall be leak tight as determined by tests conducted in accordance with test procedures as approved by the Division; or

B. For existing gasoline dispensing facilities in Catoosa; Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett. Henry, Paulding, Richmond, Rockdale, and Walker counties. a Stage I Gasoline Vapor Recovery System as defined in subparagraph 15.(x) that shall remain in good working condition; and

(lll) Vents that shall be vertical and at least 12 feet in height from the ground and shall have a Pressure/Vacuum vent valve with settings as specified by applicable Stage I or II vapor recovery CARB executive order. In systems where vents have manifolds, the manifold may be less than 12 feet.

(ii)The vapors displaced from the gasoline stationary storage tank during filling are controlled by one of the following:

(l) A vapor-tight vapor return line from the gasoline stationary storage tank(s) to the delivery vessel for each product delivery line that is connected from the delivery vessel to the gasoline stationary storage tank(s} and a method or procedure that will ensure the vapor line(s) is connected before gasoline can be transferred into the gasoline stationary storage tank(s); or

(ll) If a manifold connects all gasoline stationary storage tanks vent lines, a vapor-tight vapor return line connected from a gasoline stationary storage tank being filled to the delivery vessel with sufficient return capacity to control vapors from all gasoline stationary storage tanks being filled at the time and to prevent release of said vapors from the vent line(s) or other gasoline stationary storage tank openings, however, no more than two tanks shall be filled at the same time per connected vapor-tight return line; or

(lll) A refrigeration-condensation system or a carbon adsorption system is utilized and recovers at least 90 percent by weight of the organic compounds.

2. Applicability: The requirements contained in this subparagraph shall apply to all stationary storage tanks with capacities of 2,000 gallons or more which were in place before January 1, 1979, and stationary storage tanks with capacities of 250 gallons or more which were in place after December 31. 1978, located at gasoline dispensing facilities located in those counties of Barrow, Bartow. Carroll, Catoosa. Cherokee. Clayton. Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Hall, Henry, Paulding, Richmond, Rockdale, Spalding, Newton, Walker and Walton.

3. Applicability: Once a gasoline dispensing facility becomes subject to this rule, it will continue to be subject even if the gasoline average throughput rate falls below the applicability threshold.

4. Exemptions: The requirements of this subparagraph shall not apply to stationary storage tanks of less than 550 gallons capacity used exclusively for the fueling of implements of husbandry or to gasoline dispensing facilities that dispense no more than 10,000 gallons average monthly throughput rate of gasoline , provided the tanks are equipped with submerged fill

5. Stage I Gasoline Vapor Recovery Systems installed prior to January 1, 1993 that currently utilize a co-axial Stage I vapor recovery system in which the gasoline stationary storage tanks are not manifolded in any manner and that are utilized at a facility that is not required to have a Stage II vapor recovery system shall be exempted from installing a co-axial poppetted drop tube. All co-axial Stage I Gasoline Vapor Recovery Systems must be upgraded to Enhanced Stage I Gasoline Vapor Recovery Systems before May 1, 2012.

6. Certification and Recertification Testing Requirements: All Stage I Gasoline Vapor Recovery Systems and Enhanced Stage I Gasoline Vapor Recovery Systems at gasoline dispensing facilities shall be certified by the equipment owner as being properly installed and properly functioning in accordance with the applicable CARS Executive Order. Certification and recertification testing shall be conducted by a qualified technician who has a thorough knowledge of the system. Tests shall be conducted in accordance with test procedures as approved by the Division. The fill cap and vapor cap must be removed when performing certification testing.

7. Certification and Recertification Testing Requirements: Testing may be conducted by the Division or by an installation or testing company that meets the minimum criteria established by the Division for conducting such tests. In the case where a party other than the Division will be conducting the testing, the owner or operator shall notify the Division at least five business days in advance

as to when and where the testing will occur, what party will conduct the testing, and the CARS Executive Order number associated with the system to be tested. For Enhanced Stage I Gasoline Vapor Recovery Systems, a certified and trained individual is required to install and test the System in accordance with the applicable CARS Executive Order.

8. Certification, recertification, and testing and compliance reporting for all Stage I gasoline vapor recovery systems shall be required according to the following schedule:

   (i) Certification testing is required within 30 days of system installation for any Stage I gasoline vapor recovery systems approved by the Division after December 31, 2002.

   (ii) After June 1. 2008. recertification testing will be required within 12 months following the initial certification or recertification for any Stage I Gasoline Vapor Recovery Systems approved by the Division.

9. Reporting Requirements: Compliance reporting shall be required within 30 days of the certification or recertification test(s) required by subparagraph 8. This report shall be submitted to the Division and shall include results of all tests conducted for certification or recertification, including failed test results.

10. Maintenance Requirements: The owner or operator of the gasoline dispensing facility shall maintain the Enhanced Stage I Gasoline Vapor Recovery System or Stage I Gasoline Vapor Recovery System in proper operating condition as specified by the manufacturer and free of defects that could impair the effectiveness of the system. For the purposes of this subparagraph, the following is a list of equipment defects that substantially impair the effectiveness of the systems in reducing gasoline bulk transfer and fugitive vapor emissions:

    (i) Absence or disconnection of any component that is a part of the approved system:

    (ii) Pressure/vacuum relief valves or dry breaks and drain valves in the pill bucket that are inoperative: and

    (iii) Any visible product leaks.

11. Upon identification of any of the defects as described above, the owner or operator of the gasoline dispensing facility shall immediately schedule and implement repair, replacement or adjustment by the company's repair representative as necessary.

12. Recordkeeping Requirements: The following records shall be maintained on-site for two years:

    (i) Maintenance records including any repaired or replaced parts and a description of the problems:

    (ii) Compliance records including warnings or notices of violation issued by the Division: and

    (iii) Gasoline throughput records that will allow the average monthly gasoline throughput rate to be continuously determined.

13. Record disposal may be approved by the Division upon a written request by the owner or operator of the gasoline dispensing facility. Approval may be granted on a case-by-case basis considering volume of records, number of times the records have been inspected by the Division: and the value of maintaining the records.

14. Compliance Inspections: Gasoline dispensing facilities equipped with Enhanced Stage I Gasoline Vapor Recovery Systems and Stage I Gasoline Vapor Recovery Systems shall be subject to annual compliance inspections and functional testing which include but are not limited to the following:

    (i) Verification that all equipment is present and maintains a certified system configuration as defined in subparagraphs 15.(iv). Or 15.(x), whichever is applicable.

    (ii) Inspection of all Stage I vapor recovery related files to ensure that the gasoline dispensing facility has complied with maintenance requirements and other record keeping requirements such as inspection, compliance and volume reports as required by subparagraphs 10., 11., 12., and 13.

    (iii) Observation of the use of equipment by facility operators and product suppliers.

    (iv) Verification that the facility has complied with the certification and/or recertification testing requirements as specified by subparagraphs 6., 7., and 8., whichever is applicable.

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

    (i) "Average monthly throughput rate" means the average of the gallons pumped monthly for the most recent two year period of operation excluding any inactive period. If a facility has not been in operation for

two years or does not have access to records for the most recent two years of operation, the Division shall determine the length of time to determine the average of the gallons pumped monthly.

(ii) "CARB" means the California Air Resources Board.

(iii) "Delivery vessel" means tank trucks or trailers equipped with a storage tank and used for the transport of gasoline from sources of supply to stationary storage tanks of gasoline dispensing facilities.

(iv) Enhanced Stage I Gasoline Vapor Recovery System" means:

(l) any Stage I gasoline vapor recovery system properly certified under current version of the CARB vapor recovery certification procedures and applicable executive order effective on or after April 1, 2001, and demonstrated efficiency of 98% collection of vapor; or

(ll) any Stage I gasoline vapor recovery system whose design has been submitted to the Division, has passed any required certification tests, demonstrated an efficiency of 98% collection of vapors, and whose owner/operator has received a written approval from the Division. The submitted design shall include but may not be limited to drawings detailing all components of the system and a written narrative describing the components and their use.

(v) "Existing gasoline dispensing facility" means any applicable gasoline dispensing facility with an approved Stage I Gasoline Vapor Recovery System that was in operation on or before April 30, 2008.

(vi) "Gasoline" means a petroleum distillate having a Reid vapor pressure of 4.0 psia or greater.

(vii) "Gasoline dispensing facility" means any site where gasoline is dispensed to motor vehicle gasoline tanks from stationary storage tanks.

(viii) "Major Modification" means the addition, replacement or removal of a gasoline storage tank or a modification that causes the tank top of an underground storage tank to be unburied.

(ix) "Reconstruction" means the replacement of any stationary gasoline storage tank.

(x) "Stage I Gasoline Vapor Recovery System" means:

(l) any Stage I Gasoline Vapor Recovery System properly certified under the CARS vapor recovery certification procedures effective before

April 1, 2001, excluding the coaxial poppetted drop tube requirement exempted by subparagraph 5: or

(ll) any Stage I Gasoline Vapor Recovery System whose has been submitted to the Division, has passed any required certification tests, demonstrated an efficiency of 95% collection of vapor and whose owner/operator has received a written approval from the Division. The submitted design shall include but may not be limited to drawings detailing all components of the system and a written narrative describing the components and their use. Mixing of equipment components certified under separate certification procedures may be allowed when supported by manufacturer or independent third-party certification that the configuration meets or exceeds the applicable performance standards and has received prior written approval from the Division.

(xi) "Stationary storage tank" means all underground vessels and any aboveground vessels never intended for mobile use.

(xii) "Submerged fill pipe" means any fill pipe with a discharge opening which is within a nominal distance of six inches from the tank bottom.

16. Compliance Dates

(i) All gasoline dispensing facilities located in Cherokee, Clayton, Cobb Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding and Rockdale counties shall be in compliance.

(ii) All gasoline dispensing facilities located in Catoosa, Richmond and Walker counties that dispense more than 50,000 gallons of gasoline per month shall be in compliance with this subparagraph by May 1, 2006.

(iii) All gasoline dispensing facilities located in Catoosa, Richmond and Walker counties that dispense 50,000 gallons or less of gasoline per month shall be in compliance with this subparagraph by May 1, 2007.

(iv) All gasoline dispensing facilities that dispense 100,000 gallons average monthly throughput of gasoline or more per month located in Barrow, Bartow, Carroll, Hall, Spalding, Newton and Walton counties shall be in compliance with this subparagraph by June 1, 2008.

(v) All gasoline dispensing facilities that dispense greater than or equal o 50,000 gallons and less than 100,000 gallons average monthly throughput of gasoline per month located in Barrow, Bartow, Carroll, Hall, Spalding, Newton and Walton counties shall be in compliance with this subparagraph by November 1, 2008.

(vi) All gasoline dispensing facilities that dispense greater than 10,000 gallons and less than 50,000 gallons average monthly throughput of gasoline per month located in Barrow, Bartow, Carroll, Hall, Spalding, Newton and Walton counties shall be in compliance with this subparagraph by May 1, 2009.

(vii) Upon the effective date of this rule, all newly constructed or reconstructed gasoline dispensing facilities located in Barrow, Bartow, Carroll, Catoosa, Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Hall, Henry, Paulding, Richmond, Rockdale, Spalding, Newton, Walker and Walton shall be in compliance with this subparagraph upon startup of gasoline dispensing operations.

(viii) Upon the effective date of this rule, all existing gasoline dispensing facilities located in Catoosa, Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding, Richmond, Rockdale, and Walker counties that undergo major modification shall be in compliance with the requirements of an approved Enhanced Stage I Gasoline Vapor Recovery System as defined in subparagraph 15.{iv) upon completion of the modification.

(ix) All existing gasoline dispensing facilities located in Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding and Rockdale counties shall be in compliance with the requirements of an approved Enhanced Stage I Gasoline Vapor Recovery System as defined in subparagraph 15.(iv) before May 1, 2012.

(x) All existing gasoline dispensing facilities located in Catoosa, Richmond, and Walker counties shall be in compliance with the requirements of an approved Enhanced Stage I Gasoline Vapor Recovery System as defined in subparagraph 15.(iv) before May 1, 2023.

THIS IS THE FEDERALLY APPROVED REGULATION AS OF SEPTEMBER 28, 2012

	Date Submitted to EPA	Date Approved by EPA	Federal Register
Original Reg:	JAN 03, 1991	OCT 13, 1992	57 FR 46780
	APR 03, 1991	OCT 13, 1992	57 FR 46780
1st Revision	JUN 17, 1996	APR 26, 1999	64 FR 20186
2nd Revision	DEC 28, 2001	JUL 11, 2002	67 FR 45909
3rd Revision	DEC 31, 2004	AUG 26, 2005	70 FR 50199
4th Revision	OCT 21, 2009	SEP 28, 2012	77 FR 59554

5th Revision	NOV 4, 2021	AUG 2, 2023	88 FR 50770

(ss) Gasoline Transport Vehicles and Vapor Collection Systems.

1. After the compliance date specified in paragraph 3. of this subparagraph, no person shall cause, let, permit, suffer, or allow the loading or unloading of gasoline from a gasoline transport vehicle of any size capacity unless:

   (i) The tank sustains a pressure change of not more than 3 inches of water in 5 minutes when pressurized to 18 inches of water and evacuated to 6 inches of water as tested at least once per year in accordance with test procedures specified by the Division; and

   (ii) Displays a marking on the right front (passenger) side of the tank, in characters at least 2 inches high, which reads either P/V TEST DATE or EPA27 and the date on which the gasoline transport tank was last tested; and

   (iii) The tank has no visible liquid leaks and no gasoline vapor leaks as measured by a combustible gas detector; and

   (iv) The owner or operator of the gasoline transport vehicle has submitted to the Division within 30 days of the test date a data sheet in the format specified by the Division containing at a minimum the following information: name of person(s) or company that conducted the test, date of test, test results including a list of any repairs made to the transport vehicle to bring it into compliance and the manufacturer's vehicle identification number (VIN) of the tank truck or frame number of a trailer-mounted tank; and

   (v) The transport vehicle has been equipped with fittings which are vapor tight and will automatically and immediately close upon disconnection so as to prevent release of gasoline or gasoline vapors, with a vapor return line and hatch seal designed to prevent the escape of gasoline or gasoline vapors while loading.

2. The owner or operator of a vapor collection or control system shall:

   (i) Design and operate the vapor collection and control system and the gasoline loading equipment in a manner that prevents:

      (I) Gauge pressure from exceeding 18 inches of water and vacuum from exceeding 6 inches of water in the gasoline tank truck;

      (II) A reading equal to or greater than 100 percent of the lower explosive limit (LEL, measured as propane) at 1 inch from all points on the perimeter of a potential leak source when

measured (in accordance with test procedures specified by the Division) during loading or unloading operations at gasoline dispensing facilities, bulk gasoline plants and bulk gasoline terminals;

(III) Avoidable visible liquid leaks during loading and unloading operations at gasoline dispensing facilities, bulk gasoline plants and bulk gasoline terminals; and

(ii) Within 15 days, repair and retest a vapor collection or control system that exceeds the limits in (i) above.

3. Applicability: The requirements of this subparagraph shall apply only to those gasoline transport vehicles which load or unload gasoline at bulk gasoline terminals, bulk gasoline plants. and gasoline dispensing facilities subject to VOC vapor control requirements contained under section 391-3-1-.02(2).

4. The Division may require a pressure/vacuum retest or leak check for any gasoline transport vehicle, vapor collection system. vapor control system. and/or gasoline loading equipment subject to this subparagraph. A gasoline transport vehicle, vapor collection system, vapor control system. and/or gasoline loading equipment for which the Division has required a pressure/vacuum retest or leak check shall:

(i) Cease loading and unloading operations within fourteen (14) days of the date of the initial retest or leak check request unless the retest or leak check has been completed to the satisfaction of the Division:

(ii) Provide written advance notification to the Division of the scheduled time and place of the test in order to provide the Division an opportunity to have an observer present: and

(iii) Supply a copy of the results of all such tests to the Division within 30 days of the test date.

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

(i) “Combustible Gas Detector” means a portable VOC gas analyzer with a minimum range of 0-100 percent of the LEL as propane.

(ii) "Gasoline" means a petroleum distillate having a Reid vapor pressure of 4.0 psia or greater.

(iii) “Gasoline Transport Vehicle” means any mobile storage vessel including tank trucks and trailers used for the transport of gasoline

from sources of supply to stationary storage tanks of gasoline dispensing facilities, bulk gasoline plants or bulk gasoline terminals.

(iv) "Gasoline Vapor Leak" means a reading of 100 percent or greater of the Lower Explosive Limit (LEL) of gasoline when measured as propane at a distance of one inch.

(v) "Vapor Collection System" means a vapor transport system, including any piping, hoses and devices, which uses direct displacement by the gasoline being transferred to force vapors from the vessel being loaded into either a vessel being unloaded or vapor control system or vapor holding tank.

(vi) "Vapor Control System" means a system, including any piping, hoses, equipment and devices, that is designed to control the release of volatile organic compounds displaced from a vessel during transfer of gasoline.

6. Compliance Dates.

(i) All gasoline transport vehicles and vapor collection systems operating in Cherokee. Clayton. Cobb, Coweta. DeKalb, Douglas. Fayette. Forsyth, Fulton. Gwinnett, Henry. Paulding and Rockdale counties shall be in compliance.

(ii) All gasoline transport vehicles and vapor collection systems operating in Catoosa. Richmond and Walker counties shall be in compliance with this subparagraph by May 1, 2006.

(iii) All gasoline transport vehicles and vapor collection systems operating in Barrow, Bartow. Carroll, Hall, Newton. Spalding, and Walton counties shall be in compliance with this subparagraph by June 1. 2008.

THIS IS THE FEDERALLY APPROVED REGULATION AS OF JULY 28, 2017

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1st Revision	DEC 28, 2001	JUL 11, 2002	67 FR 45909
2nd Revision	DEC 31, 2004	AUG 26, 2005	70 FR 50199
3rd Revision	OCT 21, 2009	SEP 28, 2012	77 FR 59554
4th Revision	JUL 25, 2014	JUL 28, 2017	82 FR 35106

(tt) VOC Emissions from Major Sources

1. No person shall cause, let, permit, suffer or allow the emissions of VOC from any source to exceed the levels specified in paragraph 3. below unless such source has been approved by the Director as utilizing all reasonably available control technology in controlling those VOC emissions.

2. For the purpose of this subsection, "Reasonably Available Control Technology" means the utilization and/or implementation of water based or low solvent coatings, VOC control equipment such as incineration, carbon adsorption, refrigeration or other like means as determined by the Director to represent reasonably available control technology for the source category in question.

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

4. Compliance Dates.

   (i) All sources of VOC emissions 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 of VOC emissions 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 comply with the following compliance schedule:

      (I) A demonstration of appropriate reasonably available control technology for controlling VOC emissions from the source must be submitted to the Division no later than October 1, 2000. Each demonstration is subject to approval, denial, or modification by the Division.

      (II) A final control plan and application for a permit to construct for the installation of VOC emission control systems and/or modification of coatings, solvents,

processes, or equipment must be submitted to the Division no later than April 1, 2001.

(III) On-site construction of emission control systems and/or modification of coatings, solvents, processes, or equipment must be completed by March 1, 2003.

(IV) Full compliance with the applicable requirements of this subsection must be demonstrated through methods and procedures approved by Division on or before May 1, 2003.

(iii) All sources of VOC emissions 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 upon startup.

(iv) All sources of VOC emissions subject to this subsection and located in Barrow County shall be in compliance by May 1, 2009.

5. For the purpose of determining applicability of this subsection, the emissions of VOC from any source shall exclude all VOC emissions subject to any other more specific VOC requirements contained in other subsections of this Rule.

6. For all Reasonably Available Control Technology demonstrations approved or determined pursuant to this subsection, the Division shall issue a public notice which provides for an opportunity for public comment and an opportunity for a hearing on the determination.

7. All Reasonably Available Control Technology demonstration, and any modifications or changes to those determinations, approved or determined by the Division pursuant to this subsection shall be submitted by the Division to the U.S. EPA as a revision to the state implementation plan. No Reasonably Available Control Technology demonstration, nor any modification or change to a demonstration, approved or determined by the Division pursuant to this subsection shall revise the state implementation plan or be used as a state implementation plan credit, until it is approved by the U.S. EPA as a state implementation plan revision.

	Date Submitted to EPA	Date Approved by EPA	Federal Register
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1st Revision	JAN 31, 2000	JUL 10, 2001	66 FR 35906
2nd Revision	NOV 6, 2006	FEB 9, 2010	75 FR 6309
3rd Revision	OCT 21, 2009	SEP 28, 2012	77 FR 59554

(uu) Visibility Protection:

1. The Director shall provide written notice of any permit application or written advance notice of a permit application for a proposed major stationary source or major modification to an existing major stationary source of emissions from which may have an impact on visibility in a Class I area to the federal land manager and the federal official charged with direct responsibility for management of any land within any such area.

2. The Director shall provide such notice within 30 days after receiving an application or written advance notice from a source as described in paragraph 1. above. The notification of a permit application shall include an analysis of the proposed source's anticipated impact on visibility in any federal Class I area and all materials in the application. In addition, the Director shall provide the Federal Land Manager a 60-day notice of any public hearing on that permit application.

3. The Director shall consider any analysis performed and/or written comments made by the federal land manager in any final determination regarding the issuance of the permit provided that such analysis and/or comments are received within 30 days of having been notified by the Division. Where such analysis does not demonstrate to the satisfaction of the Director that an adverse impact will occur, the Director shall explain his decision and give notice of where the explanation can be obtained.

4. The provisions of this paragraph shall apply regardless of whether the proposed facility is to be located in an attainment, unclassified or nonattainment area.

5. The Director may require the source to monitor visibility in any Class I federal area near the proposed new stationary source or major modification for such purposes and by such means as the Director deems necessary and appropriate.

6. For the purpose of this paragraph, major stationary source or major modification to an existing source shall be defined as in 40 CFR 51.24, but only for the pollutants of particulate matter, sulfur dioxide and nitrogen oxides.

7. Prior to the issuance of any permit, the Director shall ensure that the source's emissions will be consistent with making reasonable progress towards the national visibility goal of preventing any future, and remedying any existing, impairment of visibility in mandatory Class I

areas which impairment results from manmade air pollution. The Director may take into account the cost of compliance, the time necessary for compliance, the energy and non-air quality environmental impacts of compliance, and the useful life of the source.

8. For the purpose of this paragraph, "impact on visibility" means visibility impairment (reductions in visual range and atmospheric discoloration) which interferes with the management, protection, preservation or enjoyment of the visitor's visual experience of the federal Class I area. This determination must be made on a case-by-case basis taking into account the geographic extent, intensity, duration, frequency and time of visibility impairment, and must have these factors correlate with:

   (i) Times of visitor use of the federal Class I area; and

   (ii) The frequency and timing of natural conditions that reduce visibility.

THIS IS THE FEDERALLY APPROVED REGULATION AS OF JANUARY 28, 1986

	Date Submitted to EPA	Date Approved by EPA	Federal Register
Original Reg:	JAN 27, 1972	MAY 31, 1972	37 FR 10842
1st Revision:	DEC 16, 1975	AUG 20, 1976	41 FR 35184
2nd Revision:	MAY 22, 1985	JAN 28, 1986	51 FR 3466
	OCT 31, 1985	JAN 28, 1986	51 FR 3466

(vv) Volatile Organic Liquid Handling and Storage

1. After the compliance date specified in section 3. of this subsection, no person subject to other VOC requirements contained in other subsections of this Rule may transfer or cause or allow the transfer of any volatile organic liquid other than gasoline from any delivery vessel into a stationary storage tank of greater than 4,000 gallons, unless the tank is equipped with submerged fill pipes.

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

   (i) "Delivery Vessel" means any tank truck or trailer equipped with a storage tank in use for the transport of volatile organic liquids from sources of supply to stationary storage tanks; and

   (ii) "Submerged Fill Pipe" means any fill pipe with a discharge opening which is within six inches of the tank bottom.

3. Compliance Dates.

   (i) All volatile organic liquid handling and storage facilities 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 volatile organic liquid handling and storage facilities 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 by May 1, 2003.

   (iii) All volatile organic liquid handling and storage facilities 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 upon startup.

   (iv) All volatile organic liquid handling and storage facilities subject to his subsection and located in Barrow County shall be in compliance by March 1, 2009.

	to EPA	by EPA	Register
Original Reg:	OCT 28, 1999	JUL 10, 2001	66 FR 35906
1st Revision	JAN 31, 2000	JUL 10, 2001	66 FR 35906
2nd Revision	OCT 21, 2009	SEP 28, 2012	77 FR 59554
3rd Revision	OCT 21, 2009	SEP 28, 2012	77 FR 59554

(yy) Emissions of Nitrogen Oxides from Major Sources

1. No person shall cause, let, permit, suffer or allow the emissions of nitrogen oxides from any source to exceed the levels specified in paragraph 2 below unless such source has been approved by the Director as meeting the appropriate requirement for all reasonably available control technology in controlling those emissions of nitrogen oxides.

2. The requirements contained in this subsection shall apply to all such sources located in the counties of Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding, and Rockdale which have potential emissions of nitrogen oxides, expressed as nitrogen dioxide, exceeding 25 tons per year and to all such sources in the counties of Barrow, Bartow, Carroll, Hall, Newton, Spalding, and Walton which have potential emissions of nitrogen oxides, expressed as nitrogen dioxide, exceeding 100 tons per year.

3. Compliance Dates.

(i) All sources of nitrogen oxides emissions subject to this subsection which have potential emissions of nitrogen oxides, expressed as nitrogen dioxide, exceeding 50 tons per year; were in operation on or before April 1, 2004; and are 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 of nitrogen oxides emissions 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 comply with the following compliance schedule:

(I) A demonstration of appropriate reasonably available control technology for controlling emissions of nitrogen oxides from the source must be submitted to the Division no later than October 1, 2000. Each demonstration is subject to approval, denial, or modification by the Division.

(II) A final control plan and application for a permit to construct for the installation of nitrogen oxides emission control systems and/or modifications of process or fuel-burning equipment must be submitted to the Division no later than April 1, 2001.

(III) On-site construction of emission control systems and/or modification of process or fuel-burning equipment must be completed by March 1, 2003.

(IV) Full compliance with the applicable requirements of this subsection must be demonstrated through methods and procedures approved by Division on or before May 1, 2003.

(iii) All sources of nitrogen oxides emissions 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.

(iv) All sources of nitrogen oxides emissions subject to this subsection which have potential emissions, expressed as nitrogen dioxide, not exceeding 50 tons per year; were in operation on or before April 1, 2004; and are located in the counties of Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding and Rockdale shall comply with the following compliance schedule:

(I) A demonstration of appropriate reasonably available control technology for controlling emissions of nitrogen oxides from the source must be submitted to the Division no later than October 1, 2004. Each demonstration is subject to approval, denial, or modification by the Division.

(II) A final control plan and application for a permit to construct for the installation of nitrogen oxides emission control systems and/or modifications of process or fuel-burning equipment must be submitted to the Division no later than April 1, 2005.

(III) On-site construction of emission control systems and/or modification of process or fuel-burning equipment must be completed by March 1, 2007.

(IV) Full compliance with the applicable requirements of this subsection must be demonstrated through methods and procedures approved by Division on or before May 1, 2007.

(v) All sources of nitrogen oxides emissions subject to this subsection located in the counties of Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding and Rockdale and which begin initial operation after April 1, 2004, shall be in compliance upon startup.

(vi) All sources of nitrogen oxide emissions subject to this subsection and located in Barrow County shall be in compliance by May 1, 2009.

4. The requirements contained in this subsection shall not apply to individual equipment at the source which have potential emissions of nitrogen oxides, expressed as nitrogen dioxide, in quantities less than a de minimis level of one ton per year or to air pollution control devices which are installed to effect compliance with any requirement of this Chapter.

5. The requirements contained in this subsection shall not apply to individual equipment at the source which are subject to subsections (jjj), (lll), (mmm), or (nnn) of this section 391-3-1-.02(2).

6. For the purpose of determining applicability of this subsection, the emissions of nitrogen oxides from any source shall exclude all nitrogen oxides emissions subject to subsections (jjj), (lll), (mmm), or (nnn) of this section 391-3-1-.02(2).

7. For all Reasonably Available Control Technology demonstrations approved or determined pursuant to this subsection, the Division shall issue a public notice which provides for an opportunity for public comment and an opportunity for a hearing on the determination.

8. All Reasonably Available Control Technology demonstrations, and any modifications or changes to those determinations, approved or determined by the Division pursuant to this subsection shall be submitted by the Division to the U.S. EPA as a revision to the state implementation plan. No Reasonably Available Control Technology demonstration, nor any modification or change to a demonstration, approved or determined by the Division pursuant to this subsection shall revise the state implementation plan or be used as a state implementation plan credit, until it is approved by the U.S. EPA as a state implementation plan revision.

THIS IS THE FEDERALLY APPROVED REGULATION AS OF SEPTEMBER 28, 2012

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2nd Revision	MAR 15, 2005	MAY 9, 2005	70 FR 24310
3rd Revision	NOV 6, 2006	FEB 9, 2010	75 FR 6309
4th Revision	OCT 21, 2009	SEP 28, 2012	77 FR 59554

(ccc) VOC Emissions from Bulk Mixing Tanks:

1. After the compliance date specified in section 4. of this subsection, no person shall let, permit, suffer, or allow the operation of a mixing tank unless the following requirements for control of emissions of volatile organic compounds are satisfied:

   (i) All portable and stationary mixing tanks used for the manufacture of any VOC containing material shall be equipped with covers which completely cover the tank except for an opening no larger than necessary to allow for safe clearance of the mixer shaft. The tank opening shall be covered at all times except when operator access is necessary.

   (ii) Free fall of VOC containing material into product containers shall be accomplished by utilization of drop tubes, fill pipes or low-clearance equipment design on filling equipment unless demonstrated to the Division impractical for a specific operation.

   (iii) Detergents or non-VOC containing cleaners shall be utilized for both general and routine cleaning operations of floors, equipment, and containers unless the cleanup cannot be accomplished without the use of VOC containing cleaners.

   (iv) All waste solvents shall be stored in closed containers or vessels, unless demonstrated to be a safety hazard, and shall be disposed or reclaimed such solvents in a manner approved by the Division.

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

   (i) “Mixing Tanks” means any vessel in which resin, coating or other materials, or any combination thereof, are added to produce product blend.

3. The requirements of this subsection shall apply to facilities with potential 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 Bartow, Carroll, Hall, Newton, Spalding, and Walton.

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 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 Bartow County shall be in compliance by March 1, 2009.

THIS IS THE FEDERALLY APPROVED REGULATION AS OF SEPTEMBER 28, 2012

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2nd Revision	JAN 31, 2000	JUL 10, 2001	66 FR 35906
3rd Revision	OCT 21, 2009	SEP 28, 2012	77 FR 59554
4th Revision	OCT 21, 2009	SEP 28, 2012	77 FR 59554

(ddd) VOC Emissions from Offset Lithography and Letterpress.

1. After the compliance date specified in section 4. of this subsection, 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 (15.5º C); or

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

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.

   .

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.

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:

(ll) sheet-fed or coldset web-fed varnishes: and

(Ill) 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 Jess 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).

(iii) 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.

5. 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.

THIS IS THE FEDERALLY APPROVED REGULATION AS OF SEPTEMBER 28, 2012

	Date Submitted to EPA	Date Approved by EPA	Federal Register
Origianal Reg.	OCT 28, 1999	JUL 10, 2001	66 FR 35906
1st Revision	JAN 31, 2000	JUL 10, 2001	66 FR 35906
2nd Revision	OCT 21, 2009	SEP 28, 2012	77 FR 59554
3rd Revision	OCT 21, 2009	SEP 28, 2012	77 FR 59554
4th Revision	MAR 19, 2012	SEP 28, 2012	77 FR 59554

(eee) VOC Emissions from Expanded Polystyrene Products Manufacturing:

1. Except as provided in sections 2., 3., and 4. of this section, after the compliance date specified in section 8. of this subsection, no person shall cause, let, permit, suffer, or allow the VOC emissions from an expandable polystyrene product manufacturing facility to exceed 0.015 lbs VOC/lb bead utilized.

2. No person shall cause, let, permit, suffer, or allow the operation of an expandable polystyrene cup manufacturing facility existing before November 1, 1987 unless the facility has installed and operates volatile organic compound emission reduction equipment on the pre-expanders having at least a 90.0 percent reduction efficiency and a capture system approved by the Director.

3. No person shall cause, let, permit, suffer, or allow the operation of an expandable polystyrene board insulation manufacturing facility existing before January 1, 1990 unless the facility has installed and operates volatile organic compound emission reduction equipment on the pre-expanders so as to achieve at least a 90.0 percent reduction efficiency and a capture system approved by the Director; or limits VOC emissions from the entire facility to no greater than 0.0175 lb VOC/lb bead utilized.

4. No person shall cause, let, permit, suffer, or allow the operation of an expandable polystyrene custom shape manufacturing facility existing before January 1, 1990 unless the facility utilizes a batch expander and reduced volatile expandable polystyrene bead containing no more than 4.5 percent initial VOC content. The monthly weighted average of all beads used shall not exceed 4.5 percent.

5. For the purposes of this subsection, VOC emitted after the average curing time shall not be considered to be emitted from the facility.

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

   (i) "Expandable Polystyrene Products Manufacturing" means the manufacturing of products utilizing expandable polystyrene bead impregnated with a VOC blowing agent.

   (ii) "Board Insulation Manufacturers" means producers of thermal insulation, display foam, or floatation products. Thermal insulation production usually requires densities as specified in ASTM C-578, the industry standard for both EPS and XPS insulation applications.

(iii) "Custom Shape Manufacturers" means producers of a variety of different products ranging in density and size and based primarily on customer specifications.

(iv) "Pre-expander" means the system where initial expansion of the bead occurs.

(v) "Process" means the point from the opening of the gaylord to the end of the average curing time.

7. The requirements of this subsection shall apply to facilities with potential 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.

8. 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.

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3rd Revision	OCT 21, 2009	SEP 28, 2012	77 FR 59554
4th Revision	OCT 21, 2009	SEP 28, 2012	77 FR 59554

(fff) Particulate Matter Emissions from Yarn Spinning Operations.

1. No person shall cause, let, permit, suffer or allow the rate of particulate matter emissions from a yarn spinning operation with process input rates up to and including 30 tons per hour to equal or exceed the allowable rate of emissions calculated from the following equation.

$$E = 4.1P^{0.67}$$

where:

E = allowable emission rate in pounds per hour;
P = process input weight of raw or partially processed fiber in tons per hour.

2. For the purpose of this subparagraph, the term process, as it applies to the yarn spinning operation, shall include all of the activities from bale delivery, bale stripping, carding, drawing, spinning, twisting, to and including winding, conducted at the facility.

THIS IS THE FEDERALLY APPROVED REGULATION AS OF DECEMBER 2, 1999

	Date Submitted to EPA	Date Approved by EPA	Federal Register
Original Reg:	JUL 10, 1998	DEC 02, 1999	64 FR 67491

(hhh) Wood Furniture Finishing and Cleaning Operations.

1. Each owner or operator of a wood furniture finishing and cleaning operation shall limit VOC emissions from finishing operations by:

   (i) Using topcoats that contain no more than 0.8 pounds of VOC per pound of solids, as applied; or

   (ii) In lieu of complying with subsection (i), wood furniture finishing operations may comply by:

      (I) Using a finishing system of sealers that contain no more than 1.9 pounds of VOC per pound of solids, as applied; and

      (II) Using topcoats that contain no more than 1.8 pounds of VOC per pound of solids, as applied; or

   (iii) For wood furniture finishing operations that use acid-cured alkyd amino vinyl sealers and that use acid-cured alkyd amino conversion varnish topcoats:

      (I) Using sealers that contain no more than 2.3 pounds of VOC per pound of solids, as applied; and

      (II) Using topcoats that contain no more than 2.0 pounds of VOC per pound of solids, as applied; or

   (iv) For wood furniture finishing operations that do not use acid-cured alkyd amino vinyl sealers and that use acid-cured alkyd amino conversion varnish topcoats:

      (I) Using sealers that contain no more than 1.9 pounds of VOC per pound of solids, as applied; and

      (II) Using topcoats that contain no more than 2.0 pounds of VOC per pound of solids, as applied; or

   (v) For wood furniture finishing operations that use acid-cured alkyd amino vinyl sealers and that do not use acid-cured alkyd amino conversion varnish topcoats:

      (I) Using sealers that contain no more than 2.3 pounds of VOC per pound of solids, as applied; and

      (II) Using topcoats that contain no more than 1.8 pounds of VOC per pound of solids, as applied; or

(vi) Using an averaging approach that demonstrates the wood furniture finishing operation meets the emission limits defined in subsections (i), (ii), (iii), (iv) or (v), averaged on a daily basis throughout the facility; or

(vii) Using a control system that will achieve an equivalent reduction in emissions and meet the requirements of subsections (i), (ii), (iii), (iv) or (v) of this section; or

(viii) Using a combination of the methods presented in subsections (i), (ii), (iii), (iv), (v), (vi), and (vii).

2. Each owner or operator of a wood furniture finishing and cleaning operation shall limit VOC emissions by using strippable booth coating materials that contain no more than 0.8 pounds of VOC per pound of solids, as applied.
3. Each owner or operator of a wood furniture finishing and cleaning operation shall prepare and maintain a written work practice implementation plan that defines work practices for each wood furniture manufacturing operation and addresses each of the topics specified. The work practice implementation plan shall be submitted to the Division for approval by the compliance dates contained in section 7. This plan shall include: an operator training course; a leak inspection and maintenance plan; a cleaning and washoff solvent accounting system; a spray booth cleaning plan; a storage plan for finishing, cleaning and washoff materials; an application equipment requirement plan; a paint line and gun cleaning plan; and an outline of washoff operations.

4. Each owner or operator of a wood furniture finishing and cleaning operation shall maintain certified product data sheets for each sealer, topcoat, and strippable booth coating material that is used to meet the requirements of sections 1. and 2. of this rule. If solvent or other VOC is added to the finishing material before application, the affected source shall maintain documentation showing the VOC content of the finishing material in pounds of VOC per pound of solids, as applied.

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

(i) "As applied" means the VOC and solids content of the finishing material that is actually used for coating the substrate. It includes the contribution of materials used for in-house dilution of the finishing material.

(ii) "Certified product data sheet" means documentation furnished by a coating supplier or an outside laboratory that provides the VOC content by percent weight, the solids content by percent weight, and density of a finishing material, strippable booth coating, or solvent,

measured using the EPA Method 24, or an equivalent or alternative method. The VOC content should represent the maximum VOC emission potential of the finishing material, strippable booth coating, or solvent.

(iii) "Sealer" means a finishing material used to seal the pores of a wood substrate before additional coats of finishing material are applied. Washcoats, which are used in some finishing systems to optimize aesthetics, are not sealers.

(iv) "Stain" means any color coat having a solids content by weight of no more than 8.0 percent that is applied in single or multiple coats directly to the substrate. This includes, but is not limited to, nongrain raising stains, equalizer stains, sap stains, body stains, no-wipe stains, penetrating stains, and toners.

(v) "Strippable booth coating" means a coating that: (1) is applied to a booth wall to provide a protective film to receive overspray during finishing operations; (2) that is subsequently peeled off and disposed; and (3) by achieving (1) and (2), reduces or eliminates the need to use organic solvents to clean booth walls.

(vi) "Topcoat" means the last film-building finishing material applied in a finishing system. Non-permanent final finishes are not topcoats.

(vii) "Wood Furniture" means any product made of wood, a wood product such as rattan or wicker, or an engineered wood product such as particleboard that is manufactured under any of the following standard industrial classification codes: 2434, 2511,2512, 2517, 2519, 2521, 2531, 2541, 2599, or 5712.

6. The requirements of this subsection shall apply to facilities with potential 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.

7. 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.

THIS IS THE FEDERALLY APPROVED REGULATION AS OF SEPTEMBER 28, 2012

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3rd Revision	OCT 21, 2009	SEP 28, 2012	77 FR 59554
4th Revision	OCT 21, 2009	SEP 28, 2012	77 FR 59554

(jjj) NOx Emissions from Electric Utility Steam Generating Units.

1. Effective May 1, 1999, through September 30, 1999, no person shall cause, let, permit, suffer, or allow the emissions of NO_x from an affected unit under this subsection unless:

   (i) The NO_x emissions from each affected unit(s) do not exceed the alternative emission limit established by the Director for the unit(s). Said alternative emission limits shall be determined by the Division and established in the Title V Permit for the affected unit(s). In no case shall the alternative emission limits established pursuant to this section, averaged over all affected units on a maximum rated heat input capacity basis, be greater than the average allowable rate specified in subsection 1.(ii).

   (ii) If the person does not comply with all alternative emission limits established under subsection 1.(i) above, the person shall demonstrate that the NO_x emissions, averaged over all affected units, do not exceed 0.34 lb/mmbtu heat input.

2. Effective May 1, 2000, through September 30, 2002, no person shall cause, let, permit, suffer, or allow the emissions of NO_x from an affected unit under this subsection unless:

   (i) The NO_x emissions from each affected unit(s) do not exceed the alternative emission limit established by the Director for the unit(s). Said alternative emission limits shall be determined by the Division and established in the Title V Permit for the affected unit(s). In no case shall the alternative emission limits established pursuant to this section, averaged over all affected units on a maximum rated heat input capacity basis, be greater than the average allowable rate specified in subsection 2.(ii).

   (ii) If the person does not comply with all alternative emission limits established under subsection 2.(i) above, the person shall demonstrate that the NO_x emissions, averaged over all affected units, do not exceed 0.30 lb/mmbtu heat input.

3. Effective May 1, 2003, no person shall cause, let, permit, suffer, or allow the emissions of NO_x from an affected unit under this subsection unless:

   (i) The NO_x emissions from each affected unit(s) do not exceed the alternative emission limit established by the Director for the unit(s). Said alternative emission limits shall be determined by the Division and established in the Title V Permit for the affected unit(s). In no

case shall the alternative emission limits established pursuant to this section, averaged over all affected units using the highest 30 consecutive days of actual heat input for 1999, be greater than the average allowable rate specified in subsection 3.(ii).

(ii) If the person does not comply with all alternative emission limits established under subsection 3.(i) above, the person shall demonstrate that the NO_x emissions, averaged over all affected units, do not exceed 0.13 lb/mmbtu heat input.

4. Effective May 1, 2003 through September 30, 2006,, no person shall cause, let, permit, suffer, or allow the emissions of NO_x from an affected unit under this subsection unless:

(i) The NO_x emissions from each affected unit(s) do not exceed the alternative emission limit established by the Director for the unit(s). Said alternative emission limits shall be determined by the Division and established in the Title V Permit for the affected unit(s). In no case shall the alternative emission limits established pursuant to this section, averaged over all affected units using the highest 30 consecutive days of actual heat input for 1999, be greater than the average allowable rate specified in subsection 4.(ii).

(ii) If the person does not comply with all alternative emission limits established under subsection 4.(i) above, the person shall demonstrate that the NO_x emissions, averaged over all affected units, do not exceed 0.20 lb/mmbtu heat input.

5. Effective May 1, 2007, no. person shall cause, let, permit, suffer, or allow the emissions of NOx from an affected unit under this subsection unless:

(i) The NOx emissions from each affected unit(s) do not exceed the alternative emission limit established by the Director for the unit(s). Said alternative emission limits shall be determined by the Division and established in the Title V Permit for the affected unit(s). In no case shall the alternative emission limits established pursuant to this section, averaged over all affected units using the highest 30 consecutive days of actual heat input for 1999, be greater than the average allowable rate specified in subsection 5.(ii).

(ii) If the person does not comply with all alternative emission limits established under subsection 5.(i) above, the person shall demonstrate that the NOx emissions,·averaged over all .affected units, do not exceed 0.18 lb/MMBTU heat input.

6. Effective May 1, 2007; no person shall cause, let, permit, suffer, or allow the emissions of NOx from an affected unit under this subsection unless: ·

   (i) The NOx emissions from each affected unit(s) do not exceed the altematlve emission limit established by the Director for the unit(s). Said alternative emission limits shall be determined by the Division and established in the Title V Permit for the· affected unit(s). In no case shall the alternative emission limits established pursuant to this section, averaged over all affected units using the highest 30 consecutive days of actual heat input for 1999, be greater than the average allowable rate specified in subsection 6.(ii).

   (ii) If the person does not comply with all alternative em1ss1on limits established under subsection 6.(i) above, the person shall demonstrate that the NOx emissions, averaged over all affected units do not exceed 0.17 lb/MMBTU heat input.

7. The compliance period shall be based on a 30-day rolling average beginning May 1 and ending September 30 of each year.

   (i) The first 30 day averaging period shall begin on May 1.

   (ii) The last 30 day averaging period shall end on September 30.

   (iii) Affected units under this subsection shall be all coal-fired electric utility steam generating units with a maximum heat input greater than 250 mmbtu/hr.

8. The requirements contained in sections 1 and 2 of this subsection shall apply to all such sources located in the counties of Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding and Rockdale. The requirements contained in section 3 of this subsection shall apply to all such sources located in the counties of Bartow, Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Floyd, Forsyth, Fulton, Gwinnett, Heard, Henry, Paulding, and Rockdale. The requirements contained in sections 4 and 5 of this subsection shall apply to all such sources located in the counties of Bartow, Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Floyd, Forsyth, Fulton, Gwinnett, Heard, Henry, Monroe, Paulding, Putnam, and Rockdale. The requirements contained in section 6 of this subsection shall apply to sources located in Monroe. County.

THIS IS THE FEDERALLY APPROVED REGULATION AS OF NOVEMBER 27, 2009

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3rd Revision	JUL 1, 2002	JUL 9, 2003	68 FR 40786
4th Revision	MAR 5, 2007	NOV 27, 2009	74 FR 62249

(kkk) VOC Emissions from Aerospace Manufacturing and Rework Facilities

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

(i) 2.9 pounds per gallon of coating, excluding water and exempt solvents, delivered to a coating applicator that applies primers. For general aviation rework facilities, the VOC limitation shall be 4.5 pounds per gallon of coating, excluding water and exempt solvents, delivered to a coating applicator that applies primers.

(ii) 3.5 pounds per gallon of coating, excluding water and exempt solvents, delivered to a coating applicator that applies topcoats (including self-priming topcoats). For general aviation rework facilities, the VOC limitation shall be 4.5 pounds per gallon of coating, excluding water and exempt solvents, delivered to a coating applicator that applies topcoats (including self-priming topcoats).

(iii) The VOC content limits listed in Table (kkk)-1 below expressed in pounds per gallon of coating, excluding water and exempt solvents, delivered to a coating applicator that applies specialty coatings.

Table (kkk)-1: Specialty Coating VOC Limitations

Coating Type	VOC Content Limit (lb/gal)	VOC Content Limit (g/L)
Ablative Coating	5.0	600
Adhesion Promoter	7.4	890
Adhesive Bonding Primers:		
Cured at 250° F or below	7.1	850
Cured above 250° F	8.6	1030
Adhesives:		
Commercial Interior Adhesive	6.3	760
Cyanoacrylate Adhesive	8.5	1,020
Fuel Tank Adhesive	5.2	620
Nonstructural Adhesive	3.0	360
Rocket Motor Bonding Adhesive	7.4	890
Rubber-based Adhesive	7.1	850
Structural Autoclavable Adhesive	0.5	60
Structural Nonautoclavable Adhesive	7.1	850
Antichafe Coating	5.5	660
Bearing Coating	5.2	620
Caulking and Smoothing Compounds	7.1	850

Coating Type	VOC Content Limit (lb/gal)	VOC Content Limit (g/L)
Chemical Agent-Resistant Coating	4.6	550
Clear Coating	6.0	720
Commercial Exterior Aerodynamic Structure Primer	5.4	650
Compatible Substrate Primer	6.5	780
Corrosion Prevention Compound	5.9	710
Cryogenic Flexible Primer	5.4	645
Cryoprotective Coating	5.0	600
Dry Lubricative Material	7.3	880
Electric or Radiation-Effect Coating	6.7	800
Electrostatic Discharge and Electromagnetic Interference (EMI) Coating	6.7	800
Elevated Temperature Skydrol Resistant Commercial Primer	6.2	740
Epoxy Polyamide Topcoat	5.5	660
Fire-Resistant (interior) Coating	6.7	800
Flexible Primer	5.3	640
Flight-Test Coatings: Missile or Single Use Aircraft All Other	 3.5 7.0	 420 840
Fuel-Tank Coating	6.0	720
High-Temperature Coating	7.1	850
Insulation Covering	6.2	740
Intermediate Release Coating	6.3	750
Lacquer	6.9	830
Maskants: Bonding Maskant Critical Use and Line Sealer Maskant Seal Coat Maskant	 10.3 8.5 10.3	 1,230 1,020 1,230
Metallized Epoxy Coating	6.2	740
Mold Release	6.5	780
Optical Anti-Reflective Coating	6.3	750
Part Marking Coating	7.1	850
Pretreatment Coating	6.5	780

Coating Type	VOC Content Limit (lb/gal)	VOC Content Limit (g/L)
Rain Erosion-Resistant Coating	7.1	850
Rocket Motor Nozzle Coating	5.5	660
Scale Inhibitor	7.3	880
Screen Print Ink	7.0	840
Sealants: Extrudable/Rollable/Brushable Sealant Sprayable Sealant	 2.3 5.0	 280 600
Silicone Insulation Material	7.1	850
Solid Film Lubricant	7.3	880
Specialized Function Coating	7.4	890
Temporary Protective Coating	2.7	320
Thermal Control Coating	6.7	800
Wet Fastener Installation Coating	5.6	675
Wing Coating	7.1	850

(iv) 5.2 pounds per gallon of coating, excluding water and exempt solvents, delivered to a coating applicator that applies Type I chemical milling maskants.

(v) 1.3 pounds per gallon of coating, excluding water and exempt solvents, delivered to a coating applicator that applies Type II chemical milling maskants.

(vi) The following aerospace activities are exempt from the coating emission limits in subparagraphs 1.(i) through (v): touchup coating, aerosol coating, and the application of Department of Defense classified coatings; coatings used on space vehicles; and facilities that comply with the low volume usage exemption in subparagraph 10.

2. The emission limitations in subparagraph (kkk) shall be achieved by:

(i) The application of low solvent coating technology where each and every coating meets the specified applicable limitation expressed in pounds of VOC per gallon of coating, excluding water and exempt solvents, stated in subparagraph 1; or

(ii) The application of low solvent coating technology where the monthly volume-weighted average VOC content of each specified coating type meets the specified applicable limitation expressed in pounds of VOC per gallon of coating, excluding water and exempt solvents, stated in subparagraph 1;

averaging is not allowed between primers, topcoats (including self-priming topcoats), specialty coating types, Type I milling maskants, and Type II milling maskants or any combination of the above coating categories; or

(iii) Control equipment, including but not limited to incineration, carbon adsorption and condensation, with a capture system approved by the Director, provided that the control system has a VOC reduction efficiency of 81 percent or greater.

3. Each owner or operator of an aerospace manufacturing and/or rework operation shall apply all spray applied non-exempt primers, topcoats, and specialty coating utilizing one or more of the application techniques specified below:

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

(ii) Electrostatic spray application;

(iii) Airless spray application;

(iv) Air-assisted airless spray application; or

(v) Other coating application methods that achieve emission reductions equivalent to HVLP, electrostatic spray application, airless spray, or air-assisted airless spray application methods, as determined by the Director.

4. Each owner or operator of an aerospace manufacturing and/or rework operation shall ensure that all application devices used to apply primers, topcoats (including self-priming topcoats), and specialty coatings are operated according to company procedures, local specified operating procedures, and/or the manufacturer's specifications, whichever is most stringent, at all times. Equipment modified by the owner or operator shall maintain a transfer efficiency equivalent to HVLP, electrostatic spray application, airless spray, or air-assisted airless spray application techniques.

5. Each owner or operator of an aerospace manufacturing and/or rework operation shall comply with the following housekeeping requirements for any affected cleaning operation. Aqueous cleaning solvents and hydrocarbon-based solvents which have a maximum composite vapor pressure of 7 mm Hg at 20^{o}C are exempt from these requirements.

(i) Solvent-laden cloth, paper, or any other absorbent applicators used for cleaning shall be placed in bags or other closed containers upon completing their use. These bags and containers must be kept closed at all times except when depositing or removing these materials from the container. The bags and containers used must be of such a design so as to contain the vapors of the

cleaning solvent. Cotton-tipped swabs used for very small cleaning operations are exempt from this requirement.

(ii) All fresh and spent cleaning solvents, except semi-aqueous solvent cleaners, used in aerospace cleaning operations shall be stored in closed containers.

(iii) Conduct the handling and transfer of cleaning solvents to or from enclosed systems, vats, waste containers, and other cleaning operation equipment that hold or store fresh spent cleaning solvents in such a manner that spills are minimized.

6. Each owner or operator of an aerospace manufacturing and/or rework operation utilizing hand-wipe cleaning operations (excluding the cleaning of spray gun equipment performed in accordance with subparagraph 7.) shall comply with one of the following:

(i) Utilize cleaning solvent solutions that are classified as an aqueous cleaning solvent and/or a hydrocarbon-based cleaning solvent with a maximum composite vapor pressure of 7 mm Hg at 20°C.

(ii) Utilize cleaning solvent solutions that have a composite vapor pressure of 45 mm Hg or less at 20 °C.

7. Each owner or operator of an aerospace manufacturing and/or rework operation shall clean all spray guns used in the application of primers, topcoats (including self-priming topcoats), and specialty coatings utilizing one or more of the following techniques:

(i) Enclosed System: Spray guns shall be cleaned in an enclosed system that is closed at all times except when inserting or removing the spray gun. Cleaning shall consist of forcing cleaning solvent through the gun. If leaks are found, repairs shall be made as soon as practicable, but no later than 15 days after the leak was found. If the leak is not repaired by the 15th day after detection, the cleaning solvent shall be removed and the enclosed cleaner shall be shut down until the leak is repaired or its use is permanently discontinued.

(ii) Nonatomized Cleaning: Spray guns shall be cleaned by placing cleaning solvent in the pressure pot and forcing it through the gun with the atomizing cap in place. No atomizing air is to be used. The cleaning solvent from the spray gun shall be directed into a vat, drum, or other waste container that is closed when not in use.

(iii) Disassembled Spray Gun Cleaning: Spray guns shall be cleaned by disassembling and cleaning the components by hand in a vat, which shall remain closed at all times except in use. Alternatively, the components shall be soaked in a vat, which shall remain closed during the soaking period and when not inserting or removing components.

(iv) Atomizing cleaning: Spray guns shall be cleaned by forcing the cleaning solvent through the gun and directing the resulting atomized spray into a waste container that is fitted with a device designed to capture the atomized cleaning solvent emissions.

8. Each owner or operator of an aerospace manufacturing and/or rework operation that includes a flush cleaning operation shall empty the used cleaning solvents each time aerospace parts or assemblies, or components of a coating unit (with the exception of spray guns) are flush cleaned into an enclosed container or collection system that is kept closed when not in use or into a system with equivalent emission control approved by the Director. Hydrocarbon-based solvents which have a maximum composite vapor pressure of 7 mm Hg at 20 ºC and aqueous and semi-aqueous materials are exempt from the requirements of subparagraph (kkk).

9. The following activities are not regulated by this subparagraph (kkk):

(i) Research and development;

(ii) Quality control;

(iii) Laboratory testing activities;

(iv) Metal finishing;

(v) Electrodeposition (except for the electrodeposition of paints);

(vi) Composites processing (except for cleaning and coating of composite parts or components that become part of an aerospace vehicle or component as well as composite tooling that comes in contact with such composite parts or components prior to cure);

(vii) Electronic parts and assemblies (except for cleaning and topcoating of completed assemblies);

(viii) Manufacture of aircraft transparencies;

(ix) Wastewater treatment operations;

(x) Regulated activities associated with space vehicles designed to travel beyond the limit of the earth's atmosphere, including but not limited to satellites, space stations, and the space shuttle;

(xi) Maintenance and rework of antique aerospace vehicles and components;

(xii) Chemical milling;

(xiii) Rework of aircraft or aircraft components if the holder of the Federal Aviation Administration (FAA) design approval, or the holder's licensee, is not actively manufacturing the aircraft or aircraft components;

(xiv) Parts and assemblies not critical to the vehicle's structural integrity or flight performance;

(xv) Primers, topcoats, specialty coatings, chemical milling maskants, strippers, and cleaning solvents that meet the definition of non-VOC material, as determined from manufacturer's representations, such as in a material safety data sheet or product data sheet, or testing, except that if an owner or operator chooses to include one or more non-VOC primer, topcoat, specialty coating, or chemical milling maskant in averaging under subparagraph 2.(ii);

(xvi) Primers, topcoats, and specialty coatings that meet the definition of "classified national security information" in subparagraph 17.(xvii).

10. The requirements for primers, topcoats, specialty coatings, and chemical milling maskants specified in subparagraphs 1.(i), 1.(ii), 1.(iii), 1.(iv) and 1(v) do not apply to the use of low-volume coatings in these categories for which the rolling twelve month total of each separate formulation used at a facility does not exceed 50 gallons, and the combined rolling twelve month total of all such primers, topcoats, specialty coatings, and chemical milling maskants used at a facility does not exceed 200 gallons. Primers, topcoats, and specialty coatings exempted under subparagrapgs 9. and 11. are not included in the 50 and 200 gallon limits.

11. The following situations are exempt from the requirements of subparagraphs 3. and 4.:

(i) Any situation that normally requires the use of an airbrush or an extension on the spray gun to properly reach limited access spaces;

(ii) The application of coatings that contain fillers that adversely affect atomization with HVLP spray guns and that cannot be applied by any of the application methods specified in subparagraph 3.;

(iii) The application of coatings that normally have a dried film thickness of less than 0.0013 centimeter (0.0005 inches) and that cannot be applied by any of the application methods specified in subparagraph 3.;

(iv) The spray application of no more than 3.0 fluid ounces of coating in a single application (i.e., the total volume of a single coating formulation applied during any one day to any one aerospace vehicle or component) from a hand-held device with a paint cup capacity that is equal to or less than 3.0 fluid ounces (89 cubic centimeters). Using multiple small paint cups or refilling a

small paint cup to apply more than 3.0 fluid ounces under the requirements of subparagraph (kkk) is prohibited. If a paint cup liner is used in a reusable holder or cup, then the holder or cup must be designed to hold a liner with a capacity of no more than 3.0 fluid ounces. For example, a 3.0 ounce liner cannot be used in a holder that can also be used with a 6.0 ounce liner under the requirements of subparagraph (kkk);

(v) The use of airbrush application methods for stenciling, lettering, and other identification markings;

(vi) The use of hand-held non-refillable spray (aerosol) can application methods;

(vii) Touchup and repair operations.

(viii) Adhesive, sealants, maskants, caulking materials, and inks; and

(ix) The application of coatings that contain less than 0.17 pounds of VOC per gallon of coating.

12. The following cleaning operations are exempt from the requirements of subparagraph 6.:

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

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

(iii) Cleaning and surface activation prior to adhesive bonding;

(iv) Cleaning of electronic parts and assemblies containing electronic parts;

(v) Cleaning of aircraft and ground support equipment fluid systems that are exposed to the fluid including air-to-air heat exchangers and hydraulic fluid systems;

(vi) Cleaning of fuel cells, fuel tanks, and confined spaces;

(vii) Surface cleaning of solar cells, coating optics, and thermal control surfaces;

(viii) Cleaning during fabrication, assembly, installation, and maintenance of upholstery, curtains, carpet, and other textile materials used in the interior of the aircraft;

(ix) Cleaning of metallic and non-metallic materials used in honeycomb cores during the manufacture or maintenance of these cores, and cleaning of the completed cores used in the manufacture or maintenance of aerospace vehicles or components;

(x) Cleaning of aircraft transparencies, polycarbonate, or glass substrates;

(xi) Cleaning and solvent usage associated with research and development, quality control, and laboratory testing;

(xii) Cleaning operations, using nonflammable liquids, conducted within five feet of energized electrical systems. Energized electrical systems means any AC or DC electrical circuit on an assembled aircraft once electrical power is connected, including interior passenger and cargo areas, wheel wells, and tail sections; and

(xiii) Cleaning operations identified as essential uses under the Montreal Protocol for which the U.S. EPA has allocated essential use allowances or exemptions.

13. Each owner or operator of an aerospace manufacturing and/or rework operation shall submit a monitoring plan to the Division that specifies the applicable operating parameter value, or range of values, to ensure ongoing compliance with subparagraph 2.(iii). The monitoring device shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's specifications.

14. Each owner or operator of an aerospace manufacturing and/or rework operation utilizing an enclosed spray gun cleaner shall visually inspect the seals and all other potential sources of leaks at least once per month. Each inspection shall occur while the spray gun cleaner is in operation.

15. Each owner or operator of an aerospace manufacturing and/or rework operation utilizing coatings specified in subparagraph 1. shall maintain the following:

(i) If following the compliance option in subparagraph 2.(i), a current list of each coating formulation including the specific category, VOC content as applied, and the annual amount used for each coating.

(ii) If following the compliance option in subparagraph 2.(ii), a current list of each coating formulation including the specific category, VOC content as applied, the monthly amount used for each coating, and the calculated monthly volume-weighted average VOC content of each specified coating type

expressed in pounds of VOC per gallon of coating, excluding water and exempt solvents.

(iii) If following the compliance option in subparagraph 2.(iii), continuous records demonstrating the control device was operating at the required destruction efficiency at all times the coating process was in operation and records demonstrating the control device was achieving the required destruction efficiency while the coating process was in operation.

(iv) If using the low volume usage exemption in subparagraph 10., a list of each separate formulation and quantity applied each month and the twelve-consecutive month total of each formulation and the twelve-consecutive month total of all materials exempted.

16. Each owner or operator of an aerospace manufacturing and/or rework operation utilizing cleaning solvents shall maintain the following records:

(i) Maintain a current list of hand-wipe and flush cleaning solvents, with documentation that demonstrates that the cleaning solvent complies with one of the composition requirements in subparagraph 6.(i) and for semi aqueous cleaning solvent used for flush cleaning. This list shall include the annual amount of each applicable solvent used.

(ii) Maintain a current list of hand-wipe cleaning solvents with their respective vapor pressures or for blended solvents. VOC composite vapor pressures for all vapor pressure compliant hand-wipe cleaning solvents listed in subparagraph 6.(ii). This list shall include the monthly amount of each applicable solvent used.

(iii) Maintain a current list of all cleaning solvents with a vapor pressure greater than 45 mm Hg used in exempt hand-wipe cleaning operations. This list shall identify the applicable exemption(s) for each process and include the monthly amount of each applicable solvent used.

(iv) Maintain a record of all leaks from enclosed gun cleaners, as found during the monthly inspection required by subparagraph 14. The record shall include the identification of the leaking paint gun cleaner, the date the leak was discovered, and the date the leak was repaired.

17. For the purpose of subparagraph (kkk), the following definitions shall apply:

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

(ii) “Adhesion Promoter” means a very thin coating applied to a substrate to promote wetting and form a chemical bond with the subsequently applied material.

(iii) “Adhesive bonding primer” means a primer applied in a thin film to aerospace components for the purpose of corrosion inhibition and increased adhesive bond strength by attachment. There are two categories of adhesive bonding primers: primers with a design cure at 250ºF or below and primers with a design cure above 250ºF.

(iv) “Aerosol Coating” means a coating applied by means of a hand-held, pressurized container, which is non-refillable or which utilizes non-refillable propellant canisters, and which expels an adhesive or a coating in a finely divided spray when a valve on the container is depressed.

(v) “Aerospace facility” means any facility that produces, reworks, or repairs in any amount any commercial, civil, or military aerospace vehicle or component. Regulated activities include coating, chemical milling, solvent use, and depainting operations.

(vi) “Aerospace vehicle or component” means any fabricated part, processed part, assembly of parts, or completed unit, with the exception of electronic components, of any aircraft.

(vii) "Aircraft transparency" means the aircraft windshield, canopy, passenger windows, lenses and other components which are constructed of transparent materials.

(viii) “Airless and air-assisted airless spray” mean any coating spray application technology that relies solely on the fluid pressure of the coating to create an atomized coating spray pattern and does not apply any atomizing compressed air to the coating before it leaves the spray gun nozzle. Air-assisted airless spray uses compressed air to shape and distribute the fan of atomized coating, but still uses fluid pressure to create the atomized coating.

(ix) “Antichafe coating” means a coating applied to areas of moving aerospace components that may rub during normal operations or installation.

(x) “Antique aerospace vehicle or component” means an aircraft or component thereof that was built at least 30 years ago. An antique aerospace vehicle would not routinely be in commercial or military service in the capacity for which it was designed.

(xi) “Aqueous cleaning solvent” means a cleaning solvent in which water is the primary ingredient (greater than 80 percent by weight of cleaning solvent solution as applied must be water). Detergents, surfactants, and bioenzyme

mixtures and nutrients may be combined with the water along with a variety of additives such as organic solvents (e.g., high boiling point alcohols), builders, saponifiers, inhibitors, emulsifiers, pH buffers, and antifoaming agents. Aqueous solutions must have a flash point greater than 93ºC (200ºF) (as reported by the manufacturer) and the solution must be miscible with water.

(xii) "Bearing coating" means a coating applied to an antifriction bearing, a bearing housing, or the area adjacent to such a bearing in order to facilitate bearing function or to protect base material from excessive wear. A material shall not be classified as a bearing coating if it can also be classified as a dry lubricative material or a solid film lubricant.

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

(xiv) "Caulking and smoothing compounds" means semi-solid materials which are applied by hand application methods and are used to aerodynamically smooth exterior vehicle surfaces or fill cavities such as bolt hole accesses. A material shall not be classified as a caulking and smoothing compound if it can be classified as a sealant.

(xv) "Chemical agent-resistant coating (CARC)" means an exterior topcoat designed to withstand exposure to chemical warfare agents or the decontaminants used on these agents.

(xvi) "Chemical milling maskants" means a coating that is applied directly to aluminum components to protect surface areas when chemical milling the component with a Type I or Type II etchant. Type I chemical milling maskants are used with a Type I etchant and Type II chemical milling maskants are used with a Type II etchant. This definition does not include bonding maskants, critical use and line sealer maskants, and seal coat maskants. Additionally, maskants that must be used with a combination of Type I or Type II etchants and any of the above types of maskants are also not included in this definition. (See also Type I and Type II etchant definitions.)

(xvii) "Classified National Security Information" means information that has been determined pursuant to Executive Order 13526, 'Classified National Security Information,'' December 29, 2009 or any successor order to require protection against unauthorized disclosure and is marked to indicate its classified status when in documentary form. The term ''Classified Information'' is an alternative term that may be used instead of ''Classified National Security Information."

(xviii) "Cleaning operation" means collectively spray-gun, hand-wipe, and flush cleaning operations.

(xix) "Cleaning solvent" means a liquid material used for hand-wipe, spray gun, or flush cleaning. This definition does not include solutions that contain no VOCs (i.e., VOC content less than 1.0 weight percent).

(xx) "Clear coating" means a transparent coating applied over a colored opaque coating, metallic substrate, or placard to give improved gloss and protection to the color coat. In some cases, a clearcoat refers to any transparent coating without regard to substrate.

(xxi) "Coating" means a material that is applied to a substrate for decorative, protective, or functional purposes. Such materials include, but are not limited to, paints, sealants, liquid plastic coatings, caulks, inks, adhesives, and maskants. Decorative, protective, or functional materials that consist only of protective oils for metal, acids, bases, or any combination of these substances; paper film or plastic film which may be precoated with an adhesive by the film manufacturer; or pre-impregnated composite sheets are not considered coatings for the purposes of subparagraph (kkk). Materials in handheld non-refillable aerosol containers, touch-up markers, and marking pens are also not considered coatings for the purposes of subparagraph (kkk). A liquid plastic coating means a coating made from fine particle-size polyvinyl chloride (PVC) in solution (also referred to as a plastisol)..

(xxii) "Coating operation" means using a spray booth, tank, or other enclosure or any area, such as a hangar, for applying a single type of coating (e.g., primer); using the same spray booth for applying another type of coating (e.g., topcoat) constitutes a separate coating operation for which compliance determinations are performed separately.

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

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

(xxv) "Commercial interior adhesive" means materials used in the bonding of passenger cabin interior components. These components must meet FAA fireworthiness requirements.

(xxvi) “Compatible substrate primer” means either compatible epoxy primer or adhesive primer.

(xxvii) “Corrosion prevention compound” means a compound that provides corrosion protection by displacing water and penetrating mating surfaces, forming a protective barrier between the metal surface and moisture. Coatings containing oils or waxes are excluded from this category.

(xxviii) “Critical use and line sealer maskant” means a temporary coating, not covered under other maskant categories, used to protect selected area of aerospace parts from strong acid or alkaline solutions such as those used in anodizing, plating, chemical milling and processing of magnesium, titanium, or high-strength steel, high-precision aluminum chemical milling of deep cuts, and aluminum chemical milling of complex shapes. Materials used for repairs or to bridge gaps left by scrubbing operations are also included in this category.

(xxix) “Cryogenic flexible primer” means a primer designed to provide corrosion resistance, flexibility, and adhesion of subsequent coating systems when exposed to loads up to and surpassing the yield point of the substrate at cryogenic temperatures (-275^{o}F and below).

(xxx) “Cryoprotective coating” means a coating that insulates cryogenic or subcooled surfaces to limit propellant boil-off, maintain structural integrity of metallic structures during ascent or reentry, and prevent ice formation.

(xxxi) “Cyanoacrylate adhesive” means a fast-setting, single component adhesive that cures at room temperature. Also known as “super glue.”

(xxxii) "Depainting operation" means the use of a chemical agent, media blasting, or any other technique to remove permanent coatings from the outer surface of an aerospace vehicle or components. The depainting operation includes washing of the aerospace vehicle or component to remove residual stripper, media, or coating residue.

(xxxiii) “Dry lubricative material” means a coating consisting of lauric acid, cetyl alcohol, waxes, or other noncross linked resin-bond materials that act as a dry lubricant.

(xxxiv) “Electric or radiation-effect coating” means a coating or coating system engineered to interact, through absorption or reflection, with specific regions of the electromagnetic energy spectrum, such as the ultraviolet, visible, infrared, or microwave regions. Uses include, but are not limited to, lighting strike protection, electromagnetic pulse (EMP) protection, and radar avoidance.

Coatings that have been designated as “classified” by the Department of Defense are exempt.

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

(xxxvi) “Elevated-temperature Skydrol-resistant commercial primer” means a primer applied primarily to commercial-type aircraft that must withstand immersion in phosphate-ester (PE) hydraulic fluid (Skydrol 500b or equivalent) at the elevated temperature of 150ºF for 1,000 hours.

(xxxvii) “Epoxy polyamide topcoat” means a coating used where harder films are required or in some areas where engraving is accomplished in camouflage colors.

(xxxviii) "Exempt solvent" means a specified organic compound that has been determined by the EPA to have negligible photochemical reactivity and is listed in 40 CFR 51.100 and/or 391-3-1-.01 (llll).

(xxxix) “Fire-resistant (interior) coating” means for civilian aircraft, fire-resistant coatings are used on passenger cabin interior parts that are subject to the FAA fireworthiness requirements. For military aircraft, fire-resistant interior coatings are used on parts that are subject to the flammability requirements of MIL-STD-1630A and MIL-A-87721. For space applications, these coatings are used on parts that are subject to the flammability requirements of SE-R-0006 and SSP 30233.

(xl) “Flexible primer” means a primer that meets flexibility requirements such as those needed for adhesive bond primer fastener heads or on surfaces expected to contain fuel. The flexible coating is required because it provides a compatible, flexible substrate over bonded sheet rubber and rubber-type coatings as well as a flexible bridge between fasteners, skin, and skin-to-skin joints on outer aircraft skins.

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

(xlii) Flush cleaning” means the removal of contaminants such as dirt, grease, and coatings from an aerospace vehicle or component or coating equipment by passing solvent over, into, or through the item being cleaned. The solvent may simply be poured into the item cleaned and then drained, or be assisted by air or hydraulic pressure, or by pumping. Hand-wipe cleaning operations where

wiping, scrubbing, mopping, or other hand action are used are not included in this definition.

(xliii) "Fuel tank adhesive" means a non-rubber based adhesive used to bond components exposed to fuel and which must be compatible with fuel tank coatings.

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

(xlv) "General aviation" means that segment of civil aviation that encompasses all facets of aviation except air carriers, commuters, and military. General aviation includes charter and corporate-executive transportation, instruction, rental, aerial application, aerial observation, business, pleasure, and other special uses.

(xlvi) "General aviation rework facility" means any aerospace facility with the majority of its revenues resulting from the reconstruction, repair, maintenance, repainting, conversion, or alteration of general aviation aerospace vehicles or components.

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

(xlviii) "High temperature coating" means a coating designed to withstand temperatures of more than 350^{o}F.

(il) "High volume low pressure (HVLP) spray equipment" means spray equipment that is used to apply coating by means of a spray gun that operates at 10.0 psig of atomizing air pressure or less at the air cap.

(l) "Hydrocarbon-based cleaning solvent" means a cleaning solvent that is composed of a mixture of photochemically reactive hydrocarbons and oxygenated hydrocarbons and have a maximum vapor pressure of 7 mm Hg at 20^{o}C. These cleaners also contain no hazardous air pollutants.

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

(lii) "Intermediate release coating" means a thin coating applied beneath topcoats to assist in removing the topcoats in depainting operations and generally to allow the use of less hazardous depainting methods.

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

(liv) “Leak” mean any visible leakage, including misting and clouding.

(lv) “Metallized epoxy coating” means a coating that contains relatively large quantities of metallic pigmentation for appearance and/or added protection.

(lvi) “Mold release” means a coating applied to a mold surface to prevent the molded piece from sticking to the mold as it is removed.

(lvii) “Non-VOC material” means a primer, topcoat, specialty coating, chemical milling maskant, cleaning solvent, or stripper that contains more than 1.0 percent by mass VOC.

(lviii) “Nonstructural adhesive” means an adhesive that bonds nonload bearing aerospace components in noncritical applications and is not covered in any other specialty adhesive categories.

(lix) “Optical antireflection coating” means a coating with a low reflectance in the infrared and visible wavelength ranges that is used for antireflection on or near optical and laser hardware.

(lx) “Part marking coating” means coatings or inks used to make identifying markings on material, components, and/or assemblies. These markings may be either permanent or temporary.

(lxi) “Pretreatment coating” means an organic coating that contains at least 0.5 percent acids by weight and is applied directly to metal or composite surfaces provide surface etching, corrosion resistance, adhesion, and ease of stripping.

(lxii) “Primer” means the first layer and any subsequent layers of identically formulated coating applied to the surface of an aerospace vehicle or component. Primers are typically used for corrosion prevention, protection from the environment, functional fluid resistance, and adhesion of subsequent coatings. Primers that are defined as specialty coatings are not included under this definition.

(lxiii) “Rain erosion-resistant coating” means a coating or coating system used to protect leading edges of parts such as flaps, stabilizers, radomes, engine inlet nacelles, etc. against erosion caused by rain impact during flight.

(lxiv) "Research and development" means an operation whose primary purpose is for research and development of new processes and products and that is conducted under the close supervision of technically trained personnel and is

not involved in the manufacture of final or intermediate products for commercial purposes, except in a de minimis manner.

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

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

(lxvii) "Rubber-based adhesive" means a quick setting contact cement that provide a strong, yet flexible bond between two mating surfaces that may be of dissimilar materials.

(lxviii) "Scale Inhibitor" means a coating that is applied to the surface of a part prior to thermal processing to inhibit the formation of scale.

(lxvix) "Screen print ink" means an ink used in screen printing processes during fabrication of decorative laminates and decals.

(lxx) "Sealant" means a material used to prevent the intrusion of water, fuel, air, or other liquids or solids from certain areas of aerospace vehicles or components.

(lxxi) "Seal coat maskant" means an overcoat applied over a maskant to improve abrasion and chemical resistance during production operations.

(lxxii) "Self-priming topcoat" means a topcoat that is applied directly to an uncoated aerospace vehicle or component for purposes of corrosion prevention, environmental protection, and functional fluid resistance. More than one layer of identical coating formulation may be applied to the vehicle or component.

(lxxiii) "Semi-aqueous cleaning solvent" means a solution in which water is a primary ingredient (greater than 60 percent by weight of the solvent solution as applied must be water).

(lxxiv) "Silicone insulation material" means an insulating material applied to exterior metal surfaces for protection from high temperatures caused by atmospheric friction or engine exhaust. These materials differ from ablative coatings in that they are not "sacrificial."

(lxxv) "Solid film lubricant" means a very thin coating consisting of a binder system containing as its main pigment material one or more of the following: molybdenum, graphite, polytetrafluoroethylene (PTFE), or other solids that act as a dry lubricant between faying surfaces.

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

(lxxvii) “Specialized function coating” means a coating that fulfills extremely specific engineering requirements that are limited in application and are characterized by low volume usage. This category excludes coatings covered in other Specialty coating categories.

(lxxviii) “Spray-applied coating operation” means coatings that are applied using a device that creates an atomized mist of coating and deposits the coating on a substrate. For the purposes of subparagraph (kkk), spray-applied coatings do not include the following materials or activities:

(I) Coatings applied from a hand-held device with a paint cup capacity that is equal to or less than 3.0 fluid ounces (89 cubic centimeters) in which no more than 3.0 fluid ounces of coating is applied in a single application (i.e., the total volume of a single coating formulation applied during any one day to any one aerospace vehicle or component). Under this definition, the use of multiple small paint cups and the refilling of a small paint cup to spray apply more than 3.0 fluid ounces of a coating is a spray-applied coating operation. Under this definition, the use of a paint cup liner in a reusable holder or cup that is designed to hold a liner with a capacity of more than 3.0 fluid ounces is a spray-applied coating operation.

(II) Application of coating using powder coating, hand-held non-refillable aerosol containers, or non-atomizing application technology, including but not limited to paint brushes, rollers, flow coating, dip coating, electrodeposition coating, web coating, coil coating, touch-up markers, marking pens, trowels, spatulas, daubers, rags, sponges, mechanically and/or pneumatic-driven syringes, and inkjet machines.

(III) Application of adhesives, sealants, maskants, caulking materials, and inks.

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

(lxxx) “Stripper” means a liquid that is applied to an aerospace vehicle or component to remove permanent coatings such as primers, topcoats, and specialty coatings.

(lxxxi) “Structural autoclavable adhesive” means an adhesive used to bond load-carrying aerospace components that is cured by heat and pressure in an autoclave.

(lxxxii) “Structural nonautoclavable adhesive” means an adhesive used to bond load-carrying aerospace components that is cured under ambient conditions.

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

(lxxxiv) “Temporary protective coating” means a coating applied to provide scratch or corrosion protection during manufacturing, storage, or transportation. Two types include peelable protective coatings and alkaline removable coatings. These materials are not intended to protect against strong acid or alkaline solutions.

(lxxxv) “Thermal control coating” means a coating formulated with specific thermal conductive or radiative properties to permit temperature control of the substrate.

(lxxxvi) “Topcoat” means a coating that is applied over a primer on a aerospace vehicle or component for appearance, identification, camouflage, or protection. Topcoats that are defined as specialty coatings are not included under this definition.

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

(lxxxviii) “Touch-up and repair operation” means that portion of the coating operation that is the incidental application of coating used to cover minor imperfections in the coating finish or to achieve complete coverage. This definition includes out-of-sequence or out-of-cycle coating.

(lxxxix) “Type I etchant” means a chemical milling etchant that contains varying amounts of dissolved sulfur and does not contain amines.

(xc) “Type II etchant” means a chemical milling etchant that is a strong sodium hydroxide solution containing amines.

(xci) “Wet fastener installation coating” means a primer or sealant applied by dipping, brushing, or daubing to fasteners that are installed before the coating is cured.

(xcii) "Wing coating" means a corrosion-resistant topcoat that is resilient enough to withstand the flexing of the wings.

18. Applicability

(i) The requirements of subparagraph (kkk) shall apply to all aerospace facilities with potential emissions of volatile organic compounds exceeding 100 tons per year, except in the counties of Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding, and Rockdale, where facilities with potential emissions of volatile organic compounds exceeding 25 tons per year are subject to subparagraph (kkk).

(ii) Effective January 1. 2015, the requirements of subparagraph (kkk) shall apply to all aerospace facilities with potential emissions of volatile organic compounds exceeding 25 tons per year in Barrow, Bartow, Carroll, Hall, Newton, Spalding, or Walton County. The requirements of this subparagraph (ii) will no longer be applicable if the counties specified in this subparagraph (ii) 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 these counties or the counties specified in subparagraph (i) above, the requirements of this subparagraph (ii) will only be reinstated if the Director determines that the measure is necessary to meet the requirements of the contingency plan.

19. Compliance Dates.

(i) All aerospace facilities subject to subparagraph (kkk) 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 aerospace facilities subject to subparagraph (kkk); located outside Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding and Rockdale counties; and in operation on or before October 1, 1999, shall be in compliance by January 1, 2001.

(iii) All aerospace facilities subject to subparagraph (kkk); located outside Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding and Rockdale counties; and which begin initial operation after October 1, 1999, shall be in compliance upon startup.

(iv) All aerospace facilities subject to subparagraph (kkk) and utilizing specialty coatings that begin operation after the effective date of this rule shall be in compliance upon startup. All aerospace facilities subject to subparagraph (kkk) and utilizing specialty coatings that are in operation on or before the effective fate of this rule shall be in compliance on or before March 31, 2019.

THIS IS THE FEDERALLY APPROVED REGULATION AS OF OCTOBER 1, 2020.

	Date Submitted to EPA	Date Approved by EPA	Federal Register
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2nd Revision	SEP 15, 2008	SEP 28, 2012	77 FR 59554
3rd Revision	SEP 15, 2008	SEP 28, 2012	77 FR 59554
4th Revision	OCT 21, 2009	SEP 28, 2012	77 FR 59554
5th Revision	SEP 7, 2012	SEP 28, 2012	77 FR 59554
6th Revision	JUN 6, 2019	MAR 11, 2020	85 FR 14145

(lll) NOx Emissions from Fuel-burning Equipment

1. No person shall cause, let, suffer, permit, or allow the emission of nitrogen oxides (NOx}, from an affected unit under this subparagraph that is installed or modified on or after May 1, 1999 to exceed 30 ppm @ 3% oxygen on a dry basis.

2. The requirements of this subparagraph shall apply during the period May 1 through September 30 of each year.

3. All affected units subject to this subparagraph shall be in compliance on or before May 1, 2000.

4. The requirements contained in subparagraph 1. shall apply to all such affected units as defined in subparagraph 5.(i) that are located in the counties of Banks, Barrow, Bartow, Butts, Carroll, Chattooga, Cherokee, Clarke, Clayton, Cobb, Coweta, Dawson, DeKalb, Douglas, Fayette, Floyd, Forsyth, Fulton, Gordon, Gwinnett, Hall, Haralson, Heard, Henry, Jackson, Jasper, Jones, Lamar, Lumpkin, Madison, Meriwether, Monroe, Morgan, Newton, Oconee, Paulding, Pickens, Pike, Polk, Putnam, Rockdale, Spalding, Troup, Upson, and Walton.

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

   (i) "Affected Unit" be fuel-burning equipment with a maximum design heat input capacity equal to or greater than 10 MM BTU/hr and less than or equal to 250 MMBTU/hr.

   (ii) "Annual Capacity Factor" as used in this subparagraph means the ratio between the actual heat input to the fuel-burning equipment from fuels other than wood during a period of 12 consecutive calendar months and the potential heat input to the fuel-burning equipment from all fuels had the fuel-burning equipment been operated 8, 760 hours during that 12-month period at the maximum design heat input capacity.

   (iii) "Modified" as used in subparagraph 1. shall be as defined in 40 CFR 60.14.

   (iv) "Wood" means wood, wood residue, bark, or any derivative fuel or residue thereof, in any form, including, but not limited to, sawdust, sanderdust, wood chips, scraps, slabs, millings, shavings, and processed pellets made from wood or other forest residues.

6. The requirements of this subparagraph do not apply to the following:

   (i) Fuel-burning equipment which was permitted under 391-3-1-.03(1) on or before May 1, 1999, or which was brought onto the facility on or before May 1, 1999.

(ii) Duct burners associated with combined cycle gas turbines.

(iii) Fuel-burning equipment located in any of the following counties: Banks. Butts. Chattooga. Clarke. Dawson, Floyd, Gordon, Haralson. Heard, Jackson. Jasper. Jones. Lamar. Lumpkin, Madison. Meriwether. Monroe, Morgan, Oconee, Pickens. Pike, Polk, Putnam, Troup, and Upson that combusts either:

(l) wood alone or

(ll) wood in combination with any other fuel and has annual capacity factor for the other fuels of 10 percent (0.10) or less and is subject to an enforceable requirement limiting operation of the equipment to an annual capacity factor for the other fuels of 10 percent (0.10) or less.

THIS IS THE FEDERALLY APPROVED REGULATION AS OF SEPTEMBER 28, 2012

	Date Submitted to EPA	Date Approved by EPA	Federal Register
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2nd Revision	JUL 31, 2000	JUL 10, 2001	66 FR 35906
3rd Revision	OCT 21, 2009	SEP 28, 2012	77 FR 59554
4th Revision	OCT 21, 2009	SEP 28, 2012	77 FR 59554

(mmm) NOx Emissions from Stationary Gas Turbines and Stationary Engines used to Generate Electricity

1. No person shall cause, let, suffer, permit, or allow the emission of nitrogen oxides (NO_x), from any stationary gas turbine or any stationary engine used to generate electricity whose nameplate capacity is greater than or equal to 100 kilowatts (KWe) and is less than or equal to 25 megawatts (MWe), to exceed the following:

   (i) For stationary engines in operation before April 1, 2000:

   160 ppm @ 15% O2, dry basis

   (ii) For stationary engines installed or modified on or after April 1, 2000:

   80 ppm @ 15% O2, dry basis

   (iii) For stationary gas turbines in operation on or after January 1, 1999 and before October 1, 1999:

   42 ppm @ 15% O2, dry basis

   (iv) For stationary gas turbines installed or modified on or after October 1, 1999:

   30 ppm @ 15% O2, dry basis

2. The requirements of this subsection shall apply during the period May 1 through September 30 of each year.

3. Compliance Dates.

   (i) For stationary engines in operation before April 1, 2000, the affected unit shall comply with the applicable standard under paragraph 1 above by May 1, 2003.

   (ii) For stationary engines installed or modified on or after April 1, 2000, the affected unit shall comply with the applicable standard under paragraph 1 upon startup of the affected unit.

   (iii) For stationary gas turbines in operation on or after January 1, 1999 and before October 1, 1999, the affected unit shall comply with the applicable standard under paragraph 1 above by May 1, 2000.

(iv) For stationary gas turbines in installed or modified on or after October 1, 1999, the affected unit shall comply with the applicable standard under paragraph 1 upon startup of the affected unit.

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

(i) "Emergency standby stationary gas turbines and stationary engines" means any stationary gas turbine or stationary engine that operates only when electric power from the local utility is not available and which operates less than 200 hours per year.

(ii) "Modified" shall be as defined in 40 CFR 60.14.

(iii) "Stationary engine" means any spark or compression ignited internal combustion engine which is either attached to a foundation at a facility or is portable equipment located at a specific facility.

(iv) "Stationary gas turbine" means any gas turbine that is gas and/or liquid fueled with or without power augmentation. It is either attached to a foundation at a facility or is portable equipment located at a specific facility.

5. Exemptions.

The following units are exempt from the provisions of this subsection:

(i) Stationary engines used to power portable rock crushing plants.

(ii) Stationary engines used directly and exclusively for agricultural operation necessary for the growing of crops or the raising of fowl or animals.

(iii) Stationary gas turbines and stationary engines not connected to an electrical generator.

(iv) Laboratory engines or gas turbines used for research and testing purposes.

(v) Engines or gas turbines operated by the manufacturer or distributor of such equipment for purposes of performance verification and testing at the production facility.

(vi) Portable, temporary generators used for special events (i.e. county fair, circus) provided the event does not last more than 14 days.

(vii) Nonroad engines as defined in 40 CFR 89.2.

6. The requirements contained in this subsection shall apply to all such sources located in the counties of Banks, Barrow, Bartow, Butts, Carroll, Chattooga, Cherokee, Clarke, Clayton, Cobb, Coweta, Dawson, DeKalb, Douglas, Fayette, Floyd, Forsyth, Fulton, Gordon, Gwinnett, Hall, Haralson, Heard, Henry, Jackson, Jasper, Jones, Lamar, Lumpkin, Madison, Meriwether, Monroe, Morgan, Newton, Oconee, Paulding, Pickens, Pike, Polk, Putnam, Rockdale, Spalding, Troup, Upson, and Walton.

7. Emergency standby stationary gas turbines and stationary engines which meet the definition stated in paragraph 4(i) are not subject to the emission limitations of paragraph 1.

8. Stationary engines at data centers that meet all of the following criteria are not subject to the emission limitations in subparagraph 1:

(i) Operate only for routine testing and maintenance, when electric power from the local utility is not available, or during internal system failures;

(ii) Total annual operation for the engine is less than 500 hours per year;

(iii) Operation for routine testing and maintenance during the months of May through September occurs only between 10 p.m. to 4 a.m. Operation for routine testing and maintenance during the months of January through April and October through December may be done during any time of day; and

(iv) The facility maintains records of all operation, including the reason for the operation.

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2nd Revision	SEP 26, 2006	SEP 1, 2015	80 FR 52627
3rd Revision	FEB 5, 2015	SEP 1, 2015	80 FR 52627

(nnn) NO_x Emissions from Large Stationary Gas Turbines.

1. No person shall cause, let, suffer, permit, or allow the emission of nitrogen oxides (NO_x), from any stationary gas turbine whose nameplate capacity is greater than 25 megawatts (MWe), to exceed the following:

   (i) For stationary gas turbines permitted under 391-3-1-.03(1) before April 1, 2000:

   30 ppm @ 15% O2, dry basis

   (ii) For stationary gas turbines permitted under 391-3-1-.03(1) before April 1, 2000 located at a stationary source with no natural gas:

   50 ppm @ 15% O2, dry basis

   (iii) For stationary gas turbines permitted under 391-3-1-.03(1) on or after April 1, 2000:

   6 ppm @ 15% O2, dry basis

2. The requirements of this subsection shall apply during the period May 1 through September 30 of each year.

3. Compliance Dates.

   (i) Stationary gas turbines subject to paragraph 1.(i) or 1.(ii) above shall comply by May 1, 2003.

   (ii) Stationary gas turbines subject to paragraph 1.(iii) above shall be in compliance upon startup.

4. The requirements contained in subparagraph 1.(iii) of this subsection shall not apply to individual units which are subject to 391-3-1-.03(8)(c)14 or 391-3-1-.03(8)(c)15.

5. By no later than May 1, 2003, the owner/operator of an affected unit may submit actual operating performance data on the affected unit, with the emission reduction technologies, as approved by the Director, in place and optimized on the affected unit, sufficient to allow the Director to determine if the NOx emission limits in subparagraphs 1.(i) or 1.(ii) are technically achievable taking into account the cost and feasibility of available control options. Based on the Director's review of the data provided, this rule may be modified.

6. The requirements contained in this subsection shall apply to all such sources located in the counties of Banks, Barrow, Bartow, Butts, Carroll, Chattooga,

Cherokee, Clarke, Clayton, Cobb, Coweta, Dawson, DeKalb, Douglas, Fayette, Floyd, Forsyth, Fulton, Gordon, Gwinnett, Hall, Haralson, Heard, Henry, Jackson, Jasper, Jones, Lamar, Lumpkin, Madison, Meriwether, Monroe, Morgan, Newton, Oconee, Paulding, Pickens, Pike, Polk, Putnam, Rockdale, Spalding, Troup, Upson, and Walton.

7. Exemptions.

The following units are exempt from the provisions of this subsection provided that they only operate under the following conditions:

(i) Units operating for purposes of routine testing, to maintain operability, not exceed three (3) hours per month,

(ii) Units operating under one of the following emergency conditions. For the purpose of restarting the steam-electric generating units when all steam-electric generating units at a facility are down and off-site power is not available (also known as 'Black Start'). Or, when power problems on the grid would necessitate implementing manual load shedding procedures for retail costumers (Note: This does not apply to special rate structure conditions).

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2nd Revision	APR 11, 2003	MAY 28, 2019	84 FR 24393

(ooo) [Reserved]

THIS IS THE FEDERALLY APPROVED REGULATION AS OF MAY 12, 2017

	Date Submitted to EPA	Date Approved by EPA	Federal Register
Original Reg.	DEC 28, 2001	JUL 11, 2002	67 FR 45909
1st Revision	JAN 25, 2016	MAY 12, 2017	82 FR 22079

(rrr) NOx Emissions from Small Fuel-burning Equipment.

1. The owner or operator of an affected unit as defined in subparagraph 4 shall:

   (i) Perform an annual tune-up of each affected unit, no earlier than February 1 and no later than May 1 of each calendar year. The annual tune-up shall be performed using the manufacturer's recommended settings for reduced NOx emissions, or using a NOx analyzer so that NOx emissions are minimized in a manner consistent with good combustion practices and safe fuel-burning equipment operation.

   (ii) Fire only natural gas, LPG or propane in an affected unit during the calendar months of May through September of each year. If an affected unit is not equipped to fire LPG or propane, the owner or operator shall be excused from this requirement only during periods of natural gas curtailment as defined in subparagraph 5.

   (iii) Maintain records of all tune-ups required to be performed in accordance with subparagraph 1(i). These records shall indicate the date and time the tune-up was performed, state what burner settings were implemented to minimize NOx emissions, and explain how those settings were determined. All documents and calculations used to determine reduced NOx fuel-burning equipment settings shall be kept as part of the tune-up, maintenance and adjustments records. All records required by this subparagraph shall be retained available for inspection or submittal either in written or electronic form for at least five years from the date of record.

2. The owner or operator shall cause all affected units in Cherokee, Clayton, Cobb. Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding, or Rockdale County to be in compliance with the requirements of this paragraph on or before May 15. 2005 and the owner or operator shall cause all affected units in Barrow, Bartow. Carroll. Hall, Newton, Spalding or Walton County to be in compliance with the requirements of this paragraph on or before March 1, 2009.

3. As an alternative to complying with the requirements of this paragraph, the owner or operator of any affected emissions unit(s) may elect to comply with the requirements of paragraph 391-3-1-.02(2)(yy).

4. For the purposes of this paragraph, the term "affected unit" means individual fuel burning equipment that:

   (i) is not subject to the requirements of paragraphs 391-3-1-.02(2)(jjj) or 391-3-1-.02(2)(lll); and

   (ii) is located at a facility having (from all emission sources combined) potential emissions of nitrogen oxides, expressed as nitrogen dioxide,

exceeding 25 tons per year in Cherokee, Clayton, Cobb, Coweta. DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding, or Rockdale County or any facility having (from all emission sources combined) potential emissions of nitrogen oxides. expressed as nitrogen dioxide, exceeding 100 tons per year in Barrow, Bartow, Carroll, Hall, Newton, Spalding or Walton County: and

(iii) has potential emissions (from the individual fuel burning equipment) of nitrogen oxides, expressed as nitrogen dioxide, equal to or exceeding one ton per year: and either

(iv) was installed before May 1. 1999 and has a maximum design heat input capacity of less than 100 million Btu per hour, or

(v) was installed on or after May 1, 1999 and has a maximum design heat input capacity of less than 10 million Btu per hour.

5. For the purposes of this paragraph, the term "natural gas curtailment" means any period during which the supply of natural gas is not available for firing in an affected unit, for reasons beyond the control of and not related to any action or decision of the owner or operator.

6. An affected unit shall be exempt from the requirements of subparagraph 1, provided the owner or operator submits such documentation as specified in the facility's air quality permit confirming that the affected unit will not be operated during the months of May through September.

THIS IS THE FEDERALLY APPROVED REGULATION AS OF SEPTEMBER 28, 2012

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1st Revision	NOV 6, 2006	FEB 9, 2010	75 FR 9309
2nd Revision	OCT 21, 2009	SEP 28, 2012	77 FR 59554
3rd Revision	OCT 21, 2009	SEP 28, 2012	77 FR 59554

(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 voe per gallon. the solids equivalent limit shall be 8. 76 pounds voe 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 touch up 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 coal, 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 voe-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 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, 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) "Bed liner" 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 A2 + B2• 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: (al 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 s 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:

(I) automobiles and light-duty trucks:

(ll) metal cans:

(lll) flat metal sheets and strips in the form of rolls or coils: {IV) magnet wire for use in electrical machinery:

(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.

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

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

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(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 electrode position 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.

(xiv)"'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.

THIS IS THE FEDERALLY APPROVED REGULATION AS OF JULY 11, 2002.

	Date Submitted to EPA	Date Approved by EPA	Federal Register
Original Reg.	MAR 19, 2012	SEP 28, 2012	77 FR 59554

(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 f r 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 or use in the installation or repair of various construction materials, including but not limited to drywall, Subfloor, panel, fiberglass reinforced plastic (FRP), ceiling tile an 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.

(xliii) "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 or 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.

(I) '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.

(Ii) "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.

THIS IS THE FEDERALLY APPROVED REGULATION AS OF JULY 11, 2002.

	Date Submitted to EPA	Date Approved by EPA	Federal Register
Original Reg.	MAR 19, 2012	SEP 28, 2012	77 FR 59554

(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:

Monomer VOC Limit =46(M_R)+l59(M_{PG})+29l(M_{CG})+54(M_{TR})+2l4(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 voe 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 =

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

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_{TG} = 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:

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

where:

PV_{OP} = Weighted-average monomer VOC emission rate for each open molding operation (PV_R, 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 or monomer VOC per megagram of material applied.

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

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

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

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

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

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

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

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

(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:

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

(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:

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

(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:

$$[(0.445(\text{Gel Coat VOC}\%^{1.615})]$$

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).

(lll) 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).

(IV) 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)(Vll) 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)(l) through 4.(i)(VII). then:

(l) 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.liv) for that operation.

(iv)If compliance as specified in subparagraph 4.liiil 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; = 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:

$$(PV_F)=(PV_U)\left[\frac{(100-\%Filler)}{100}\right]$$

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.

(ll) The value of PVF 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.

(Ill) The value of PVF 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 PVF 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 manufacturers 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.

THIS IS THE FEDERALLY APPROVED REGULATION AS OF JULY 11, 2002.

	Date Submitted to EPA	Date Approved by EPA	Federal Register
Original Reg.	OCT 21, 2009	SEP 28, 2012	77 FR 59554

(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.

THIS IS THE FEDERALLY APPROVED REGULATION AS OF JULY 11, 2002.

	Date Submitted to EPA	Date Approved by EPA	Federal Register
Original Reg.	MAR 19, 2012	SEP 28, 2012	77 FR 59554

(3) SAMPLING:

(a) Any sampling, computation, and analysis to determine the compliance with any of the emission limitations set forth herein shall be in accordance with applicable procedures and methods specified in the Georgia Department of Natural Resources **Procedures for Testing and Monitoring Sources of Air Pollutants**. When no applicable test method or procedure is published therein, the Director shall specify or approve an applicable method or procedure prior to its use.

(b) The owner or operator of any equipment which is being sampled for the purpose of determining compliance with the Regulations shall operate such equipment at the maximum expected operating capacity during the sampling period.

(c) The owner or operator of any source shall provide performance testing facilities as follows:

1. Sampling ports adequate for test methods applicable to such source;

2. Safe sampling platforms;

3. Safe access to sampling platforms;

4. Electric power for sampling and testing equipment.

THIS IS THE FEDERALLY APPROVED REGULATION AS OF DECEMBER 2, 1999.

	Date Submitted to EPA	Date Approved by EPA	Federal Register
Original Reg:	JAN 27, 1972	MAY 31, 1972	37 FR 10842
1st Revision:	JAN 03, 1991	OCT 13, 1992	57 FR 46780
	APR 03, 1991	OCT 13, 1992	57 FR 46780
2nd Revision:	NOV 15, 1994	FEB 2, 1996	61 FR 3817
3rd Revision	JUL 10, 1998	DEC 2, 1999	64 FR 67491

(4) AMBIENT AIR STANDARDS:

(a) No person shall cause, suffer, permit, or allow the emission from any source the quantities of compounds listed below which would cause the ambient air standards listed to be exceeded. This does not exempt such sources from controlling their emissions to a point equal to or lower than the levels required to comply with a specific emission standard enumerated in other sections of these Rules.

(b) Sulfur Dioxide:

1. The level of the 1971 annual ambient air quality standard for oxides of sulfur is 0.030 part per million (ppm), measured in the ambient air as sulfur dioxide (SO_2).

(i) The annual primary standard is attained when the annual arithmetic mean, as determined in accordance with 40 CFR 50.4(d), is less than or equal to 0.030 ppm. The standard shall not be exceeded in a calendar year.

(ii) The level of the 1971 annual ambient air quality primary standard shall be measured in the ambient air as sulfur dioxide by the reference method described in Appendix A of 40 CFR Part 50, or by a Federal Equivalent Method (FEM) designated in accordance with 40 CFR Part 53.

2. The level of the 1971 24-hour ambient air quality primary standard for oxides of sulfur for any successive nonoverlapping 24-hour blocks starting at midnight each calendar day is 0.14 ppm, measured in the ambient air as sulfur dioxide (SO2).

(i) The 24-hour primary standard is attained when the second-highest 24-hour average, as determined in accordance with 40 CFR 50.4(d), is less than or equal to 0.14 ppm. The standard shall not be exceeded more than once per calendar year.

(ii) The level of the 1971 24-hour ambient air quality primary standard shall be measured in the ambient air as sulfur dioxide by the reference method described in Appendix A of 40 CFR Part 50, or by a FEM designated in accordance with 40 CFR Part 53.

3. The level of the 2010 1-hour ambient air quality primary standard for oxides of sulfur is 75 parts per billion (ppb), measured in the ambient air as sulfur dioxide (SO_2).

(i) The 1-hour primary standard is attained when the three-year average of the annual (99th percentile) of the daily maximum 1-hour average concentrations is less than or equal to 75 ppb, as determined in accordance with Appendix T of 40 CFR Part 50.

(ii) The level of the 2010 1-hour ambient air quality primary standard shall be measured by a reference method based on Appendix A or A–1 of 40 CFR 50 Part 50, or by a Federal Equivalent Method (FEM) designated in accordance with 40 CFR Part 53.

4. The level of the 1971 3-hour ambient air quality secondary standard for oxides of sulfur for any successive nonoverlapping calendar day three-hour period starting at midnight each calendar day is 0.5 ppm, measured in the ambient air as sulfur dioxide (SO_2).

(i) The 3-hour secondary standard is attained when the second-highest 3-hour average, as determined in accordance with 40 CFR 50.5(c) is less than or equal to 0.5 ppm. The standard shall not be exceeded more than once per calendar year.

(ii) The level of the 1971 3-hour ambient air quality secondary standard shall be measured in the ambient air as sulfur dioxide by the reference method described in Appendix A of 40 CFR Part 50, or by a FEM designated in accordance with 40 CFR Part 53.

(c) PM_{10} Particulate Matter:

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1. PM_{10}

(i) The level of the 24-hour ambient air quality standard for PM_{10} is 150 micrograms per cubic meter, 24-hour average concentration.

(I) The standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 micrograms per cubic meter, as determined in accordance with Appendix K of 40 CFR Part 50 is equal to or less than 1.

(II) PM_{10} shall be measured in the ambient air as PM_{10} (particles with an aerodynamic diameter less than or equal to a nominal ten micrometers) by a reference method based upon 40 CFR Part 50, Appendix J.

2. $PM_{2.5}$

(i) The level of annual ambient air quality standard of $PM_{2.5}$ (particles with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers) in the ambient air is 12.0 micrograms per cubic meter, annual arithmetic mean.

(I) The annual standard is attained when the expected annual arithmetic mean concentration, as determined in accordance with Appendix N of 40 CFR part 50 is less than or equal to 12.0 micrograms per cubic meter.

(II) $PM_{2.5}$ shall be measured in the ambient air as $PM_{2.5}$ by reference method based upon 40 CFR Part 50. Appendix L.

(ii) The level of the 24-hour ambient air quality standard of $PM_{2.5}$ in the ambient air is 35 micrograms per cubic meter, 24-hour average condition.

(I) The 24-hour standard is attained when the 98^{th} percentile 24-hour concentration, as determined in accordance with Appendix N of 40 CFR 50, is less than or equal to 35 micrograms per cubic meter.

(II) $PM_{2.5}$ shall be measured in the ambient air as $PM_{2.5}$ by reference method based upon 40 CFR 50, Appendix L.

(d) Carbon Monoxide:

1. The level of the ambient air quality standard for carbon monoxide is 35 ppm (40 milligrams per cubic meter) for a one-hour average or 9 ppm (10 milligrams per cubic meter) for an eight-hour average.

(i) These standards are not to be exceeded more than once per year.

(ii) Carbon monoxide shall be measured in the ambient air as CO by reference method based upon 40 CFR 50, Appendix C.

(e) Ozone:

1. The level of the 2008 8-hour ambien air standard for ozone is 0.075 ppm, daily maximum 8-hour average.

(i) The standard is attained when the 3-year average of the annual fourth-highest daily maximum 8-hour average ozone concentration is less than or equal to 0.075 ppm, as determined in accordance with appendix P of 40 CFR Part 50.

(ii) Ozone shall be measured in the ambient air by a reference method based upon 40 CFR 50, Appendix D or an equivalent method designated in accordance with 40 CFR 53.

(f) Lead:

1. The level of ambient air quality standard of lead and its compounds at ground level shall not exceed 0.15 micrograms per cubic meter, arithmetic mean concentration over a 3-month period.

(i) The Standard is attained when the maximum arithmetic 3-month mean concentration for a 3-year period, as determined in accordance with Appendix R of this 40 CFR 50, is less than or equal to 0.15 micrograms per cubic meter.

(ii) The specified standard procedure for measuring ambient air concentrations of lead shall be a reference method based upon 40 CFR 50, Appendix G or an equivalent method designated in accordance with 40 CFR 53.

(g) Nitrogen Dioxide:

1. The level of the annual air quality standard for oxides of nitrogen at ground level is 53 ppb, annual average concentration, measured in the ambient air as nitrogen dioxide.

(i) The annual standard is met when the annual average concentration in a calendar year is less than or equal to 53 ppb, as determined in accordance with Appendix S of 40 CFR 50.

(ii) The level of the standard shall be measured by a reference method based on Appendix F or by a FEM designated in accordance with 40 CFR 53.

2. The level of the 1-hour ambient air quality standard for oxides of nitrogen is 100 ppb, 1-hour averaged concentration, measured in the ambient air as nitrogen dioxide.

(i) The 1-hour standard is met when the three-year average of the annual 98^{th} percentile of the daily maximum 1-hour average concentration is less than or equal to 100 ppb, as determined in accordance with Appendix S of 40 CFR 50.

(ii) The level of the standard shall be measured by a reference method based on Appendix F or by a FEM designated in accordance with 40 CFR 53.

(h) Standard Conditions for Temperature and Pressure:

1. All measurements of air quality that are expressed as mass per unit volume (e.g., micrograms per cubic meter) other than for particulate matter (PM2.5) standards contained in 391-3-1-.02(4)(c)2., and lead standards contained in 391-3-1-.02(4)(f) shall be corrected to a reference temperature of 25 (deg) C and a reference pressure of 760 millimeters of mercury (1,013.2 millibars).

2. Measurements of PM2.5 for purposes of comparison to the standards contained in 391-3-1-.02(4)(c)2., and of lead for purposes of comparison to the standards contained in 391-3-1-.02(4)(f) shall be reported based on actual ambient air volume measured at the actual ambient temperature and pressure at the monitoring site during the measurement period.

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2nd Revision:	JAN 17, 1979	SEP 18, 1979	44 FR 54047
3rd Revision:	APR 15, 1988	DEC 14, 1992	57 FR 58989
	JAN 03, 1991	DEC 14, 1992	57 FR 58989
	APR 03, 1991	DEC 14, 1992	57 FR 58989
4th Revision	NOV 6, 2006	FEB 9, 2010	75 FR 6309
5th Revision	AUG 30, 2010	MAY 16, 2013	78 FR 28744
	DEC 15, 2011	MAY 16, 2013	78 FR 28744
6th Revision	SEP 15, 2008	JUN 26, 2014	79 FR 36218
	AUG 30, 2010	JUN 26, 2014	79 FR 36218
7th Revision	NOV 12, 2014	JUL 31, 2015	80 FR 45609
8th Revision	JUL 25, 2014	JUN 29, 2017	82 FR 29414
9th Revision	NOV 13, 2017	DEC 4, 2018	83 FR 62466
10th Revision	AUG 2, 2018	OCT 29, 2019	84 FR 57824

(5) OPEN BURNING:

(a) No person shall cause, suffer, allow, or permit open burning in any area of the State except as follows:

1. Reduction of leaves on the premises on which they fall by the person in control of the premises, unless prohibited by local ordinance and/or regulation;

2. Carrying out recognized agricultural procedures necessary for production or harvesting of crops.

3. The "prescribed burning" of any land by the owners or the owner's designee;

4. [Reserved]

5. For recreational purposes or cooking food for immediate human consumption.

6. Fires set for purposes of training fire-fighting personnel when authorized by the appropriate governmental entity.

7. Acquired structure burns provided that an Authorization to Burn certificate has been issued by the Division.

8. Disposal of vegetative debris from storm damage.

9. For weed abatement, disease, and pest prevention.

10. Operation of devices using open flames such as tar kettles, blow torches, welding torches, portable heaters and other flame-making equipment.

11. Open burning for the purpose of land clearing or construction or right-of-way maintenance provided the following conditions are met:

(i) Prevailing winds at the time of the burning are away from the major portion of the area's population;

(ii) The location of the burning is at least 1,000 feet from any occupied structure, or lesser distance if approved by the Division;

(iii) The amount of dirt on or in the material being burned is minimized;

(iv) Heavy oils, asphaltic materials, items containing natural or synthetic rubber, or any materials other than plant growth are not being burned; and

(v) No more than one pile 60 feet by 60 feet, or equivalent, is being burned within a 9-acre area at one time.

12. Disposal of all packaging materials previously containing explosives, in accordance with U.S. Department of Labor Safety Regulations;

13. Open burning of vegetative material for the purpose of land clearing using an air curtain destructor provided the following conditions are met:

(i) Authorization for such open burning is received from the fire department, if required, having local jurisdiction over the open burning location prior to initiation of any open burning at such location;

(ii) The location of the air curtain destructor is at least 300 feet from any occupied structure or public road. Air curtain destructors used solely for utility line clearing or road clearing may be located at a lesser distance upon approval by the Division;

(iii) No more than one air curtain destructor is operated within a ten (10) acre area at one time or there must be at least 1000 feet between any two air curtain destructors;

(iv) Only wood waste consisting of trees, logs, large brush and stumps which are relatively free of soil are burned in the air curtain destructor;

(v) Tires or other rubber products, plastics, heavy oils or asphaltic-based or impregnated materials are not used to start or maintain the operation of the air curtain destructor;

(vi) The air curtain destructor is constructed, installed and operated in a manner consistent with good air pollution control practice for minimizing emissions of fly ash and smoke;

(vii) The cleaning out of the air curtain destructor pit is performed in a manner to prevent fugitive dust; and

(viii) The air curtain destructor cannot be fired before 10:00 a.m. and the fire must be completely extinguished, using water or by covering with dirt, at least one hour before sunset.

(b) Specific County Restrictions.

1. In the counties of Bartow, Carrol, Cherokee Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Hall, Henry, Newton, Paulding, Rockdale, Spalding and Walton, the only legal exceptions to the general prohibition against open burning during the months of May, June, July, August

and September shall be exceptions numbers 2, 5, 6, 10, and 12 under subsection (a) above provided, however, that such burning, whenever feasible, be conducted between 10:00 a.m. and one hour before sunset.

2. In the counties of Banks, Barrow, Bibb, Butts, Catoosa, Chattooga, Clarke, Columbia, Crawford, Dawson, Floyd, Gordon, Haralson, Heard, Houston, Jackson, Jasper, Jones, Lamar, Lumpkin, Madison, Meriwether, Monroe, Morgan, Oconee, Peach, Pickens, Pike, Polk, Putnam, Richmond, Troup, Twiggs, Upson, and Walker the only legal exceptions to the general prohibition against open burning during the months of May, June, July, August and September shall be exceptions numbers 2, 3, 5, 6, , 10, and 12 under subsection (a) above provided, however, that such burning, whenever feasible, be conducted between 10:00 a.m. and one hour before sunset.

3. [Reserved]

3. Except as noted in subsections 1, 2 and 3 above, in the counties whose total population, as listed in the latest census, exceeds 65,000, the only legal exceptions to the general prohibition against open burning shall be exceptions numbers 1, 2, 3, 4, 5, 6, 7, 10, 12 and 13 under subsection (a) above, provided, however, that such burning, whenever feasible, be conducted between 10:00 a.m. and one hour before sunset and does not cause air pollution in quantities or characteristics or of a duration which is injurious or which unreasonably interferes with the enjoyment of life or use of property in such area of the state as is affected thereby.

(c) Except for a reasonable period to get a fire started, no smoke the opacity of which is equal to or greater than 40 percent shall be emitted from any source of open burning listed in subsections (a) and (b) above.

(d) The Director may allow open burning prohibited under paragraphs (a) and (b), upon a determination that such open burning is necessary to protect the public health, safety or welfare of the people of the state of Georgia, or there are no reasonable alternatives to the open burning.

(e) Prescribed burning of land conducted under subparagraph (b)2. is subject to authorization by the Georgia Forestry Commission to include burning restrictions periods that are conducive to the formation of ozone. Federal facilities which conduct prescribed burning in accordance with subparagraphs (b)2. that are not required to obtain authorization from the Georgia Forestry Commission for such burning shall institute measures to ensure that prescribed burning is not conducted during periods conducive to the formation of ozone.

(f) Definitions.

1. "Prescribed burning" means the controlled application of fire to existing vegetative fuels under specified environmental conditions and following appropriate precautionary measures, which causes the fire to be confined to a predetermined area and accomplishes one or more planned land management objectives as specified in paragraphs 12-6-146(3), (4), and (7) of the Georgia Prescribed Burning Act or to mitigate catastrophic wildfires. Burning to facilitate land use changes (such as a change from forest land to residential, commercial, or industrial development or a different agricultural use) is not considered prescribed burning, and should therefore be considered a land clearing operation subject to the provisions of subparagraph 391-3-1-.02(5)(a)11. (Note: This definition includes what was previously defined as prescribed burning and as slash burning.)

2. [Reserved]

3. "Acquire structure burn" is the burning od a house, building, or structure for the exclusive purpose of providing training to fire fighting personnel or arson investigators.

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2nd Revision:	JAN 17, 1979	SEP 18, 1979	44 FR 54047
3rd Revision:	MAY 22, 1985	AUG 09, 1988	53 FR 29890
4th Revision	JUN 17, 1996	APR 26, 1999	64 FR 20186
5th Revision	JUL 31, 2000	JUL 10, 2001	66 FR 35906
6th Revision	DEC 31, 2004	AUG 26, 2005	70 FR 50199
7th Revision	NOV 6, 2006	FEB 9, 2010	75 FR 6309
8th Revision	APR 11, 2003	MAY 28, 2019	84 FR 24393

(6) SOURCE MONITORING:

(a) Specific monitoring and reporting requirements for particular sources:

1. Sources, and owners and operators of sources, subject to any New Source Performance Standard of or pursuant to 42 U.S.C. 7411, as amended, shall meet the monitoring and related requirements specified in the applicable New Source Performance Standard.

2. Existing sources, as herein designated, shall provide for the continuous monitoring of emissions as prescribed below:

(i) Fossil Fuel-fired Steam Generators. The owner or operator of any fossil fuel-fired steam generator, except as provided for in subparagraph (iii) of this paragraph, with an annual average capacity factor of greater than 30 percent, as reported to the Federal Power Commission for calendar year 1974, or as otherwise demonstrated to the Director by the owner or operator, shall install, calibrate, operate, and maintain all monitoring equipment necessary for the continuous monitoring of the following:

(I) Opacity, if such steam generator has a heat input greater than 250 million BTU's per hour, except where:

I. Gaseous fuel is the only fuel burned; or

II. Oil or mixture of gas and oil are the only fuels burned and the source is able to comply with the applicable particulate matter and opacity regulations without utilization of particulate matter collection equipment, and the source has never been found, through any administrative or judicial proceedings, to be in violation of any visible emission standard;

(II) Sulfur dioxide, if such steam generator has a heat input greater than 250 million BTU's per hour and has installed sulfur dioxide emission control equipment;

(III) The percent oxygen, or carbon dioxide, in the flue gas as necessary to accurately convert sulfur dioxide continuous emission monitoring data to units (pounds per hour) of the emission standard.

(ii) Sulfuric Acid Plants:

(I) The owner or operator of any sulfuric acid plant of greater than 300 tons per day production capacity, the production being expressed as 100 percent acid, shall, except as provided for in subparagraph (iv) of this paragraph, install, calibrate, maintain, and operate a continuous monitoring system for the measurement of sulfur dioxide for each sulfuric acid production facility within such plant.

(iii) Wood Waste Fired Combination Boilers:

(I) The owner or operator of any boiler which fires wood waste or wood waste in combination with fossil fuel(s) with a total heat input equal to or greater than 100 million BTU's per hour shall, except as provided for in paragraph (iv) of this subsection, install, calibrate, operate and maintain a continuous monitoring system for the measurement of opacity;

(II) Boilers subject to this subparagraph (iii) shall comply with the opacity monitoring requirements as specified for fossil fuel fired steam generators. In any rule or subdivision thereof dealing with opacity monitoring requirements for fossil fuel- fired steam generators, where reference is made to "Fossil Fuel Fired Steam Generators" the term "Wood Waste Combination Boilers" should be inserted for the purpose of this subparagraph.

(iv) Exemptions. A facility is exempt from the requirements otherwise imposed by this paragraph (a)(iv) if:

(I) It is subject to a New Source Performance Standard promulgated in 40 CFR, Part 60, pursuant to Section III of the Federal Act; or

(II) It is not subject to an applicable emission standard, or;

(III) The source is scheduled for retirement by October 6, 1980, provided that the source will cease operation prior to such date and adequate provisions are made for monitoring if retirement does not occur as scheduled.

(v) Monitoring Equipment:

(I) The monitoring equipment required pursuant to the previous subparagraphs (I) through (iv) shall be demonstrated by the owners or operators of such monitoring equipment to meet the performance specifications specified in the Georgia Department of Natural Resources **Procedures for Testing and Monitoring Sources of Air Pollutants**.

(II) Any source which has purchased an emission monitoring system(s) prior to September 11, 1974, is exempt from meeting the applicable test procedures prescribed in Appendix B of Part 60, as amended, for a period not to exceed five years from the effective date of this paragraph. Thereafter, the requirements of (v)(I) above apply.

(III) For sulfur dioxide monitoring systems installed on fossil fuel-fired steam generators or sulfuric acid plants, pursuant to subparagraphs 2.(I) and 2.(ii), respectively, the pollutant gas used to prepare calibration gas mixture shall be sulfur dioxide (SO 2). Span and zero gases should be traceable to National Bureau of Standards and analyses of such gases shall be performed at times by methods prescribed by the Director.

(IV) Cycling times shall include the total time a monitoring system requires to sample, analyze, and record an emission measurement.

I. Continuous monitoring systems for measuring opacity shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive ten second period;
II. Continuous monitoring systems for measuring carbon dioxide, oxygen, or sulfur dioxide shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

(V) The owner or operator of any continuous monitoring system required pursuant to this paragraph shall:

I. Record the zero and span drift in accordance with the method prescribed by the manufacturer of such instruments;

II. Subject the instruments to the manufacturer's recommended zero and span check at least once daily unless the manufacturer has recommended adjustments at shorter intervals, in such cases such recommendations shall be followed;

III. Adjust the zero and span whenever the 24-hour zero drift or 24-hour calibration drift limits of the applicable performance specification in Appendix B of 40 CFR, Part 60, as amended, are exceeded, and;

IV. Adjust continuous monitoring systems purchased or installed prior to September 11, 1974, whenever the 24-hour zero drift or 24-hour calibration drift exceed 10 percent of the emission standard.

(VI) Instrument span shall be approximately 200 percent of the expected instrument data display output corresponding to the emission standard for the source.

(VII) The owner or operator of a source subject to this rule or regulation shall install the required continuous monitoring systems or monitoring devices such that representative measurements of emissions or process parameters (i.e. oxygen or carbon dioxide) from the affected facility are obtained.

(VIII) When the emissions from two or more affected facilities of similar design and operating characteristics are combined before being released to the atmosphere, the owner or operator of a source subject to this paragraph (a)2. may install monitoring systems on the combined sessions. When the affected facilities are not of similar design and operating characteristics, or when the effluent from one affected facility is released to the atmosphere through more than one point, the owner or operator should establish alternative procedures to implement the intent of this requirement subject to approval by the Director.

(vi) Data Reporting:

(I) The owner or operator of a facility subject to the requirements of this paragraph 2. shall submit a written report for each calendar quarter and, if excess emissions have occurred, the report shall state the nature and cause of the excess emissions, if known. The averaging period used for

data reporting shall correspond to the averaging period specified in the emission test method used to determine compliance with an emission standard for the pollutant/source category in question. The required report shall include, as a minimum, the data specified in this subsection.

I. For opacity measurements, the summary shall consist of the magnitude in actual percent opacity of six minute average of opacity which is greater than the opacity standard applicable to the source. If more than one opacity standard applies, excess emissions data must be submitted in relation to all such standards.

II. For gaseous measurements, the summary shall consist of emission averages in the units of the applicable standard, for each averaging period during which the applicable standard was exceeded.

III. The data and time identifying each period during which the continuous monitoring system was inoperative, except for zero and span checks, and the nature of system repairs or adjustments shall be reported. The Director may require proof of continuous monitoring system performance whenever system repairs or adjustments have been made.

IV. When no excess emissions have occurred and the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be included in the report.

V. The owners or operators of sources or facilities subject to this paragraph (a)2. shall maintain a file of all information reported in the quarterly summaries, and all other data collected either by the continuous monitoring system or as necessary to convert monitoring data to the units of the applicable standard for a minimum of two years from the date of collection of such data or submission of two summaries.

(vii) Data Conversion. The owner or operator of a source subject to this paragraph (a)2. shall use the following procedures for converting monitoring data to units of the applicable standard:

(I) For fossil fuel-fired steam generators, the procedures of Section 2.1 of the Georgia Department of Natural Resources **Procedures for Testing and Monitoring Sources of Air Pollutants** shall be used to convert gaseous emissions monitoring data in ppm to pounds/million BTU where necessary.

(II) For sulfuric acid plants the owner or operator shall:

I. Establish a conversion factor three times daily according to the procedures in Section 2.5 of the Georgia Department of Natural Resources **Procedures for Testing and Monitoring Sources of Air Pollutants**.

II. Multiply the conversion factor by the average sulfur dioxide concentration in the flue gases to obtain average sulfur dioxide emissions in lb/short ton, and;

III. Report the average sulfur dioxide emission for each averaging period in excess of the applicable emission standard in the quarterly summary.

(III) The owner or operator of a source subject to this regulation may employ data reporting or reduction procedures varying from those specified in this subparagraph(a)2.(vii) if such owner or operator shows to the satisfaction of the Director that such procedures are at lest as the procedures identified in this subparagraph. Such procedures may include, but are not limited to the following:

I. Alternative procedures for computing emission averages that do not require integration of data (e.g., some facilities may demonstrate that the variability of their emissions is sufficiently small to allow accurate reduction of data based upon computing averages from equally spaced data points over the averaging period);

II. Alternative methods of converting pollutant concentration measurements to the units of the emission standards.

(viii) In cases where the owner or operator of a source subject to this paragraph wishes to utilize different, but equivalent, procedures for continuous monitoring systems and/or alternative monitoring and data reporting procedures or other alternative equivalents to comply with the intent of this paragraph then:

(I) The owner or operator must submit:

I. A detailed summary of the limitations prohibiting the installation of a continuous monitor; and;

II. Alternative and/or equivalent emission monitoring and reporting requirements (e.g., periodic manual stack tests) to satisfy the intent of this paragraph.

(II) The use of any alternative or equivalent method for compliance with any requirement of this paragraph .02(6)(a)2. shall be subject to approval of the Director.

(ix) Monitor Malfunction:

(I) The requirements of this paragraph shall not apply during any period of monitoring system malfunction, provided that the source owner or operator shows, to the satisfaction of the Director that the malfunction was unavoidable and is being or was repaired as expeditiously as practicable.

(x) [Reserved]

(xi) Kraft Pulp Mills:

(I) On or before March 1, 1984, unless otherwise specified in an alternate compliance schedule as provided for in paragraph 391-3-1-.02(2)(a)9., the owner or operator of any kraft pulp mill subject to any limitation or requirement of, or under subsection (gg) of section 391-3-1-.02(2) shall, except as provided in part (II) of this subparagraph, install, calibrate, operate, and maintain a system to continuously measure and record the concentration of TRS emissions on a dry basis in the gases discharged from any lime kiln, recovery furnace, digester system, or multiple-effect evaporator system.

(II) The owner or operator of any kraft pulp mill which incinerates effluent gases emitted from any digester system or multiple-effect evaporator system subject to any limitation or requirement of, or under subsection (gg) of section 391-3-1- .02(2) shall install, calibrate, operate, and maintain a system to continuously measure and record the combustion temperature at the point of incineration.

(xii) Fuel Burning Equipment

(I) The owner or operator of any fuel burning equipment with a maximum design heat input capacity equal to or greater than 100 million Btu/hr subject to the provisions of subsection (lll) of section 391-3-1.02(2) shall install, calibrate, operate, and maintain a continuous emissions monitoring system (CEMS) for the measurement of the concentration of nitrogen oxides (NO_x) and the percent oxygen and shall record the output of the system.

(II) For any fuel burning equipment which only combusts gas residual oil with a nitrogen content less that 0.30 percent, or distillate oil or a combination of those fuels, the owner or operator may monitor equipment operating conditions to predict the concentration of nitrogen oxides, (Predictive Emissions Monitoring System) in lieu of the CEMS required in paragraph (I) provided such system meets the requirements of Section 2.119 of the **Procedures for Testing and Monitoring Sources of Air Pollutants**.

3. All sources, and owners and operators of sources, subject to any limitation of paragraphs (2)(t) through (2)(aa) [inclusive]; (2)(ii); (2)(jj); (2)(ll); (2)(mm); and (2)(tt) [inclusive] shall maintain, as specified by the Director, at the source, for a period of at least 2 years, records containing the following information for each production line:

(I) Process information, including, but not limited to,m hours of operation, method of application, and drying method.

(ii) Coating formulation and analytical data, including, but not limited to, the name of inks or coatings, coating or ink density, VOC content (weight or volume percent), and solids content (volume percent).

(iii) Coating consumption data, including, but not limited to, name of ink or coating used, amount of ink or coating used, name of diluent and amount of diluent used.

(iv) Capture and control equipment data, including, but not limited to, the destruction and removal efficiency, emission test results, and the capture efficiency.

(v) Transfer Efficiency Data, including, but not limited to, baseline transfer efficiency, actual transfer efficiency, and results of efficiency test.

4. Emission Statements:

(i) Owners and operators of stationary sources of nitrogen oxides or volatile organic compounds shall provide the Director with a statement, in such form as the director may prescribe, for classes or categories of sources determined by the Director, showing the actual emissions of nitrogen oxides and volatile organic compounds from that source.

(ii) Statements shall be submitted by June 15 of every year and shall show the actual emissions of the previous calendar year.

(iii) The requirements of this paragraph shall apply to all stationary sources of nitrogen oxides or volatile organic compounds which emit equal to or more

than 25 tons per calendar year of either pollutant and are located in Bartow, Clayton, Cobb, DeKalb, Fulton, Gwinnet, or Henry, counties.

(b) General Monitoring and Reporting Requirements:

1. All Sources:

(I) Any person engaged in operations which cause emissions to be released into the atmosphere which may result in air pollution may be required to install, maintain, and use emission monitoring devices, to sample such specific emissions as prescribed by the Director; to make periodic reports on the nature and amounts of emissions and provide such other information as the Director may reasonably require; and to maintain such records as the Director may prescribe so as to determine whether emissions from such operations are in compliance with the provisions of this Act or any rules and regulations promulgated thereunder.

(ii) Specific types of information and/or equipment installation which may be requested may include, but are not limited to, the following items:

(I) Photoelectric or other type smoke detector and recorders for continuous measurement and recording of smoke density emissions;

(II) Sulfur contents of solid and liquid fuels, the determination of which shall be conducted in accordance with acceptable and appropriate American Society for Testing and Materials procedures;

(III) Heating value and ash content of solid and liquid fuels;

(IV) As technology permits, instrumentation for continuously monitoring particulate and gaseous emissions;

(V) For incinerators, burning rates and hours of operation and monthly summaries of this information;

(VI) Daily production and feed rates, daily hours of operation and monthly summaries of this information.

(iii) Records of information requested shall be submitted on forms supplied by the Director, or when forms are not supplied, in a format acceptable to and approved by the Director. The information obtained on request of the Director shall be retained for a period and shall be reported at time intervals to be specified. Records shall be kept current and be available for inspection at the discretion of the Director.

(iv) In the event of any malfunction or breakdown or process, fuel-burning, or emission control equipment for a period of four hours or more which results in excessive emissions for a major source, the owner or operator or such major source shall notify the Division by a written report which would describe the cause of the breakdown, the corrective actions taken, and the plans to prevent future occurrences. Unless otherwise specified in a permit or order, the report must be submitted no later than seven (7) days after the occurrence. The information submitted shall be adequate to allow the Director to determine whether the excessive emissions were due to a sudden and unavoidable breakdown. The reporting requirements of this subparagraph (iv) shall be in addition to any other reporting requirement under these rules (Chapter 391-3-1), and such reporting shall in no event serve to excuse, otherwise justify or in any manner affect any potential liability or enforcement action.

(v) All data gathered in the process of enforcing this or other Air Quality Control Rule or Regulation shall be considered public information and shall be made available upon request, except such information which is required to be kept confidential by Ga. Code Ann. Section 12-9-19, as amended.

(vi) Any continuous monitoring system or monitoring device shall be installed, operated, calibrated and maintained and information reported in accordance with the applicable procedures and performance specifications of the Georgia Department of Natural Resources **Procedures for Testing and Monitoring Sources of Air Pollutants**. Where no applicable procedure or performance specification for such installation, operation or reporting of data is published therein, the Director shall, as needed, specify or approve an applicable procedure or performance specification prior to operation of the monitoring system or monitoring device.

THIS IS THE FEDERALLY APPROVED REGULATION AS OF DECEMBER 2, 1999.

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2nd Revision:	NOV 15, 1994	FEB 02, 1996	61 FR 3817
3rd Revision:	NOV 13, 1992	FEB 02, 1996	61 FR 3819
4th Revision	JUL 10, 1998	DEC 02, 1999	64 FR 67491
5th Revision	OCT 28, 1999	JUL 10, 2001	66 FR 35906
6th Revision	JAN 4, 2001	JUL 11, 2002	67 FR 45909
7th Revision	MAR 5, 2007	NOV 27, 2009	74 FR 62249
8th Revision	JUL 25, 2014	JUL 28, 2017	82 FR 35106

9th Revision	NOV 4, 2021	MAR 9, 2022	87 FR 13179

(7) PREVENTION OF SIGNIFICANT DETERIORATION OF AIR QUALITY:

(a) General Requirement:

1. The provisions of this paragraph (7) shall apply to any source and the owner or operator of any source subject to any requirement under 40 Code of Federal Regulations (hereinafter, CFR) Part 52.21. The subparagraphs of Paragraph (7) that incorporate by reference paragraphs of 40 CFR Part 52.21 are as promulgated on January 17, 2017, unless otherwise specified. The dates associated with the incorporation by reference of federal rules into this paragraph (7) refer to the dates of publication of the promulgated rules in the Federal Register.

NOTE: As of 4/9/13 (78 FR 21065) EPA approved a revision to 391–3–1–.02(7) to incorporate by reference the version of 40 CFR 52.21 as of July 20, 2011, with the exception of the PM2.5 SMC and SILs thresholds and provisions promulgated in the October 20, 2010, PM2.5 PSD Increment-SILs-SMC Rule at 40 CFR 52.21(i)(5) and (k)(2) respectively. September 9, 2011 (76 FR 55572) - Georgia's PSD Rule 391–3–1–.02(7) incorporates by reference the regulations found at 40 CFR 52.21 as of June 3, 2010, with the exception of the administrative regulations amended in the Fugitive Emissions Rule (73 FR 77882). Lastly, this rule contains NOx as a precursor to ozone for PSD and NSR.

2. Definitions: For the purpose of this paragraph, 40 CFR, Part 52.21(b), as amended, is hereby incorporated by reference with the following exceptions:

(i) In lieu of the definition of "baseline actual emissions" as specified in paragraph (b)(48) of 40 CFR Part 52.21, the following shall apply:

"Baseline actual emissions" means the rate of emissions, in tons per year, of a regulated NSR pollutant, as determined in accordance with subparagraphs (7)(a)2.(i)(I) through (IV) of this rule.

(I) For any existing electric utility steam generating unit, baseline actual emissions means the average rate, in tons per year, at which the unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 5-year period immediately preceding when the owner or operator begins actual construction of the project. The Director shall allow the use of a different time period upon a determination that it is more representative of normal source operation.

I. The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions. However, fugitive emissions and/or emissions associated

with startups, shutdowns, and malfunctions shall or may be excluded in accordance with the following subparagraphs A and B.

A. If fugitive emissions or emissions from startups, shutdowns, and/or malfunctions during the consecutive 24-month period selected by the owner or operator are not quantifiable and are therefore not included in the calculation of baseline actual emissions, then fugitive emissions or emissions from startups, shutdowns, and/or malfunctions, respectively, shall not be included in the calculation of projected actual emissions (as defined in subparagraph (7)(a)2.(ii) of this rule).

B. The owner or operator may elect to omit malfunctions from the calculation of baseline actual emissions. If the owner or operator elects to do so, then malfunctions shall also be omitted from the calculation of projected actual emissions (as defined in subparagraph (7)(a)2.(ii) of this rule).

II. The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the consecutive 24-month period.

III. For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period may be used to determine the baseline actual emissions for the emissions units being changed. A different consecutive 24-month period can be used for each regulated NSR pollutant.

IV. The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, or for which there is inadequate information for adjusting this amount downward to exclude any non-compliant emissions as required by subparagraph (7)(a)2.(i)(I)II. of this rule.

V. If any physical change(s) or change(s) in the method of operation subsequent to the consecutive 24-month period selected by the owner or operator resulted in a permanent change in a basic design parameter (as defined in subparagraph (7)(a)2.(vii) of this rule), not including the voluntary addition of air pollution control equipment or increase in removal or collection efficiency of existing air pollution control equipment, and thus resulted in a corresponding reduction in actual

emissions of a regulated NSR pollutant, the baseline actual emissions shall be adjusted downward by a proportional reduction in emissions in tons per year or lbs/unit of production.

VI. The average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major stationary source must currently comply, had such major stationary source been required to comply with such limitations during the consecutive 24-month period. However, if an emission limitation is part of a Maximum Achievable Control Technology (MACT) standard that the Administrator of U.S. EPA has proposed or promulgated under 40 CFR, Part 63, the baseline actual emissions need only be adjusted if the Division has taken credit for such emissions reductions in an attainment demonstration or maintenance plan consistent with the requirements of 40 CFR, Part 51.165(a)(3)(ii)(G).

(II) For an existing emissions unit (other than an electric utility steam generating unit), baseline actual emissions means the average rate, in tons per year, at which the emissions unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 10-year period immediately preceding either the date the owner or operator begins actual construction of the project, or the date a complete permit application is received by the Division for a permit required under this paragraph or by the reviewing authority for a permit required by a plan, whichever is earlier.

I. The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions. However, fugitive emissions and/or emissions associated with startups, shutdowns, and malfunctions shall or may be excluded in accordance with the following subparagraphs A and B.

A. If fugitive emissions or emissions from startups, shutdowns, and/or
malfunctions during the consecutive 24-month period selected by the owner or operator are not quantifiable and are therefore not included in the calculation of baseline actual emissions, then fugitive emissions or emissions from startups, shutdowns, and/or malfunctions, respectively, shall not be included in the calculation of projected actual emissions (as defined in subparagraph (7)(a)2.(ii) of this rule).

B. The owner or operator may elect to omit malfunctions from the

calculation of baseline actual emissions. If the owner or operator elects to do so, then malfunctions shall also be omitted from the calculation of projected actual emissions (as defined in subparagraph (7)(a)2.(ii) of this rule).

II. The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above an emission limitation that was legally enforceable during the consecutive 24-month period.

III. The average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major stationary source must currently comply, had such major stationary source been required to comply with such limitations during the consecutive 24-month period. However, if an emission limitation is part of a Maximum Achievable Control Technology (MACT) standard that the Administrator of U.S. EPA has proposed or promulgated under 40 CFR, Part 63, the baseline actual emissions need only be adjusted if the Division has taken credit for such emissions reductions in an attainment demonstration or maintenance plan consistent with the requirements of 40 CFR Part 51.165(a)(3)(ii)(G).

IV. For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period may be used to determine the baseline actual emissions for all the emissions units being changed. A different consecutive 24-month period can be used for each regulated NSR pollutant.

V. The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, or for which there is inadequate information for adjusting this amount downward to exclude any non-compliant emissions as required by subparagraph (7)(a)2.(i)(II)II. or III. of this rule.

VI. If any physical change(s) or change(s) in the method of operation subsequent to the consecutive 24-month period selected by the owner or operator resulted in a permanent change in a basic design parameter (as defined in subparagraph (7)(a)2.(viii) of this Rule), not including the voluntary addition of air pollution control equipment or increase in removal or collection efficiency of existing air pollution control equipment, and thus resulted in a corresponding reduction in actual emissions of a regulated NSR pollutant, the baseline actual emissions shall be adjusted

downward by a proportional reduction in emissions in tons per year or lbs/unit of production.

(III) For a new emissions unit, the baseline actual emissions for purposes of determining the emissions increase that will result from the initial construction and operation of such unit shall equal zero; and thereafter, for all other purposes, shall equal the unit's potential to emit (as long as the unit remains a "new emissions unit" as defined in 40 CFR Part 52.21(b)(7)(i)).

(IV) For a PAL for a stationary source, the baseline actual emissions shall be calculated for existing electric utility steam generating units in accordance with the procedures contained in subparagraph (7)(a)2.(i)(I) of this rule, for other existing emissions units in accordance with the procedures contained in subparagraph (7)(a)2.(i)(II) of this rule, and for a new emissions unit in accordance with the procedures contained in subparagraph (7)(a)2.(i)(III) of this rule. For existing emission units, the baseline actual emissions shall be based on any consecutive 24-month period selected by the operator within the appropriate PAL baseline period. For existing electric steam generating units, the PAL baseline period is the 5-year period (or different period allowed by the Director that is more representative or normal source operation) immediately preceding submission of a complete PAL application to the Division. For other existing emission units, the PAL baseline period is the 10-year period immediately preceding submission of a complete PAL permit application to the Division.

(ii) In lieu of the definition of "projected actual emissions" as specified in paragraph (b)(41) of 40 CFR Part 52.21, the following shall apply:

(I) "Projected actual emissions" means the maximum annual rate, in tons per year, at which an existing emissions unit is projected to emit a regulated NSR pollutant in any one of the 5 years (12-month period) following the date the unit resumes regular operation after the project, or in any one of the 10 years following that date, if the project involves increasing the emissions unit's design capacity or its potential to emit that regulated NSR pollutant and full utilization of the unit would result in a significant emissions increase or a significant net emissions increase at the major stationary source.

(II) In determining the projected actual emissions under subparagraph (7)(a)2.(ii)(I) (before beginning actual construction), the owner or operator of the major stationary source:

I. Shall consider all relevant information, including but not limited to, historical operational data, the company's own representations, the company's expected business activity and the company's highest projections of business activity, the company's filings with the State or Federal regulatory authorities, and compliance plans under the approved State Implementation Plan; and

II. Shall include fugitive emissions to the extent quantifiable and emissions associated with startups, shutdowns, and malfunctions. However, fugitive emissions and/or emissions associated with startups, shutdowns, and malfunctions shall or may be excluded in accordance with the following subparagraphs A., B., and C.

A. If projected fugitive emissions or emissions from startups, shutdowns, and/or malfunctions are not quantifiable and are therefore not included in the calculation of projected actual emissions, then fugitive emissions or emissions from startups, shutdowns, and/or malfunctions, respectively, shall not be included in the calculation of baseline actual emissions (as defined in subparagraph (7)(a)2.(i) of this rule).

B. The owner or operator may elect to omit malfunctions from the calculation of projected actual emissions. If the owner or operator elects to do so, then malfunctions shall also be omitted from the calculation of baseline actual emissions (as defined in subparagraph (7)(a)2.(i) of this rule).

C. If the project involves increasing the emissions unit's design capacity or its potential to emit that regulated NSR pollutant and the increase in projected emissions associated with startups, shutdowns, and malfunctions is not proportional to the increase in the emission unit’s design capacity or its potential to emit that regulated NSR pollutant, the owner or operator must include with the information required under subparagraph (7)(b)15.(i)(I) of this rule documentation that supports the projected emissions associated with startups, shutdowns, and malfunctions subsequent to completion of the project; and

III. May exclude, in calculating any increase in emissions that results from the particular project, that portion of the unit's emissions following the project that an existing unit could have accommodated during the consecutive 24-month period used to establish the baseline actual emissions under subparagraph (7)(a)2.(i) of this rule and that is also unrelated to the particular project, including any increased utilization due to product demand growth (the increase in emissions that may be

excluded under this subparagraph shall hereinafter be referred to as “demand growth emissions”);

A. If the project involves increasing the emissions unit's design capacity or its potential to emit that regulated NSR pollutant, the owner or operator shall either:

(A) not exclude demand growth emissions, or

(B) must include in the information required under subparagraph (7)(b)15.(i)(I) of this paragraph, documentation that demand growth emissions are emissions that the emissions unit could have accommodated during the consecutive 24-month period used to establish the baseline actual emissions, are not related to the particular project, and are due to product demand growth; must have documentation supporting the portion of the emissions increase that is due to demand growth; and, following the change, must be able to track the emissions increase due to demand growth; or

IV. In lieu of using the method set out in subparagraphs (7)(a)2.(ii)(II)I. through III. of this rule, may elect to use the emissions unit's potential to emit, in tons per year, as defined under paragraph (b)(4) of 40 CFR Part 52.21.

(iii) The definition of “major stationary source” contained in 40 CFR Part 52.21(b)(1), shall be modified as follows:

(I) paragraph (i)(b) shall read as follows: Notwithstanding the stationary source size specified in paragraph (b)(1)(i)(a) of this section, any stationary source which emits, or has the potential to emit, 250 tons per year or more of a regulated NSR pollutant; or

(v) The definition of “potential to emit” contained in 40 CFR Part 52.21(b)(4), shall be modified as follows:

(I) The phrase “is federally enforceable” shall read “is federally enforceable or enforceable as a practical matter.”

(vi) The definition of “allowable emissions” contained in 40 CFR Part 52.21(b)(16), shall be modified as follows:

(I) The phrase “unless the source is subject to federally enforceable limits which restrict the operating rate, or hours of operation, or both” shall

read, “unless the source is subject to enforceable limits which restrict the operating rate, or hours of operation, or both.”

(II) paragraph (iii) shall read as follows: The emissions rate specified as an enforceable permit condition, including those with a future compliance date.

(vii) The following shall be added to the definition of “major source baseline date” contained in 40 CFR Part 52.21(b)(14):

(I) Baseline dates established prior to April 19, 2006 will remain in effect.

(viii) In lieu of paragraph (b)(33)(iii) of the definition of “replacement unit” as specified in paragraph (b)(33) of 40 CFR, Part 52.21, the following shall apply:
The replacement does not alter the basic design parameters of the process unit. Basic design parameters are defined as follows:

(I) Except as provided in subparagraph (7)(a)2.(viii)(III) of this rule, for a process unit at a steam electric generating facility, the owner or operator may select as its basic design parameters either maximum hourly heat input and maximum hourly fuel consumption rate or maximum hourly electric output rate and maximum steam flow rate. When establishing fuel consumption specifications in terms of weight or volume, the minimum fuel quality based on British Thermal Units content shall be used for determining the basic design parameter(s) for a coal-fired electric utility steam generating unit.

(II) Except as provided in subparagraph (7)(a)2.(viii)(III) of this rule, the basic design parameter(s) for any process unit that is not at a steam electric generating facility are maximum rate of fuel or heat input, maximum rate of material input, or maximum rate of product output. Combustion process units will typically use maximum rate of fuel input. For sources having multiple end products and raw materials, the owner or operator should consider the primary product or primary raw material when selecting a basic design parameter.

(III) If the owner or operator believes the basic design parameter(s) in subparagraphs (7)(a)2.(viii)(I) and (II) of this rule is (are) not appropriate for a specific industry or type of process unit, the owner or operator may propose to the Division an alternative basic design parameter(s) for the source's process unit(s). If the Director approves of the use of an alternative basic design parameter(s), he or she shall issue a permit that is legally enforceable that records such basic design parameter(s) and requires the owner or operator to comply with such parameter(s).

(IV) The owner or operator shall use credible information, such as results of historic maximum capability tests, design information from the manufacturer, or engineering calculations, in establishing the magnitude of the basic design parameter(s) specified in subparagraphs (7)(a)2.(viii)(I) and (II) of this rule.

(V) If design information is not available for a process unit, then the owner or operator shall determine the process unit's basic design parameter(s) using the maximum value achieved by the process unit in the five-year period immediately preceding the planned activity.

(VI) Efficiency of a process unit is not a basic design parameter.

(ix) [Reserved]

(x) [Reserved]

(xi) In the definition of "net emissions increase" as specified in paragraph (b)(3) of 40 CFR Part 52.21, paragraphs (iii)(b) and (vi)(d), related to increases and decreases at a clean unit, are not adopted.

3. Applicability procedures: 40 CFR Part 52.21(a)(2), as amended, is hereby incorporated and adopted by Reference.

4. Except as noted below, the word "Administrator" as used in regulations adopted by reference in this paragraph shall mean the "Director" as defined in 391-3-1.01(q). For the following provisions adopted by reference in this paragraph, the word "Administrator" shall mean the Administrator of the U.S. Environmental Protection Agency or, where allowable, his or her designee.

(i) 40 CFR Part 52.21(b)(17), definition of "Federally enforceable"

(ii) 40 CFR Part 52.21(b)(37)(i), first paragraph within the definition of "Repowering"

(iii) 40 CFR Part 52.21(b)(43), definition of "Prevention of Significant Deterioration (PSD)"

(iv) 40 CFR Part 52.21(b)(51), definition of "Reviewing Authority"

(v) 40 CFR Part 52.21(g), Redesignation

(vi) 40 CFR Part 52.21(l), Air quality models

(vii) 40 CFR Part 52.21(p)(2), Federal Land Manager

(viii) 40 CFR Part 52.21(o)(3), Visibility monitoring

[Note to reader: As of the date of publication of this rule, the Division has taken credit for VOC and NOx reductions from all maximum available control technology (MACT) standards that the Administrator of U.S. EPA has promulgated under 40 CFR, Part 63, that had a compliance date during or prior to calendar year 2002 in an attainment plan or maintenance plan. Therefore, baseline actual VOC and NOx emissions must be adjusted for all MACT standards with a compliance date during or prior to 2002.]

[editorial note: the "a" in the phrase "(b)(1)(i)(a)" shall remain underlined when the strikeout/underline is removed from this text.]

[editorial note: the "e" in the phrase "Part 52.21(a)(2)(iv)(e)" shall remain underlined when the strikeout/underline is removed from this text]

[editorial note: the "c" and "d" in the phrase "paragraphs (a)(2)(iv)(c) and (d)" shall remain underlined when the strikeout/underline is removed from this text]

(b) Prevention of Significant Deterioration Standards:

1. Ambient air increments: 40 CFR Part 52.21(c), as amended, is hereby incorporated and adopted by reference.

2. Ambient air ceilings: 40 CFR Part 52.21(d), as amended, is hereby incorporated and adopted by reference.

3. Restrictions on area classifications: 40 CFR Part 52.21(e), as amended, is hereby incorporated and adopted by reference.

4. Redesignation: 40 CFR Part 52.21(g), as amended, is hereby incorporated and adopted by reference.

5. Stack heights: 40 CFR Part 52.21(h), as amended, is hereby incorporated and adopted by reference.

6. Exemptions: 40 CFR Part 52.21(i), as amended, is hereby incorporated and adopted by reference.

7. Control technology review: 40 CFR Part 52.21(j), as amended, is hereby incorporated and adopted by reference.

8. Source impact analysis: 40 CFR Part 52.21(k), as amended, is hereby incorporated and adopted by reference.

9. Air quality models: 40 CFR Part 52.21(l), as amended, is hereby incorporated and adopted by reference.

10. Air quality analysis: 40 CFR Part 52.21(m), as amended, is hereby incorporated and adopted by reference.

11. Source information: 40 CFR Part 52.21(n), as amended, is hereby incorporated and adopted by reference with the following exception:

(i) The first sentence of paragraph (n)(1) shall read as follows, "With respect to a source or modification to which paragraphs (j), (l), (o) and (p) of this section apply, such information shall include:"

12. Additional impact analyses: 40 CFR Part 52.21(o), as amended, is hereby incorporated and adopted by reference.

13. Sources impacting Federal class I areas--additional requirements: 40 CFR Part 52.21(p), as amended, is hereby incorporated and adopted by reference with the following exception:

(i) The beginning of paragraph (p)(8) should read "In the case of a permit issued pursuant to paragraph (p) (6) or (7) of this section…

14. Public participation: 40 CFR Part 52.21(q), as amended, is hereby incorporated and adopted by reference.

15. Source obligation: 40 CFR Part 52.21(r), as amended, is hereby incorporated and adopted by reference with the following exceptions:

(i) In lieu of the provisions of paragraph (r)(6), the following shall apply:

The provisions of this subparagraph 15(i) apply to projects at an existing emissions unit at a major stationary source (other than projects at a source with a PAL) that are required to obtain a permit under the Construction (SIP) Permit requirements of paragraph 391-3-1-.03(1) of these rules and the owner or operator elects to use the method specified Subparagraph (7)(a)2.(ii)(ll)I. through Ill. of this rule for calculating projected actual emissions.

(I) Before beginning actual construction of the project, the owner or operator shall document and maintain a record of the following information:

I. A description of the project;

II. Identification of the emissions unit(s) whose emissions of a regulated NSR pollutant could be affected by the project; and

III. A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions, the projected actual emissions, the amount of emissions excluded under Subparagraph (7)(a)2.(ii)(ll)III of this rule and an explanation for why such amount was excluded, and any netting calculations, if applicable.

IV. The records required in subparagraph (7)(b)15.(i)(I) of this rule shall be retained for a period of 10 years following resumption of regular operations after the change, or for a period of 15 years following resumption of regular operations after the change if the project increases the design capacity of or potential to emit of a regulated NSR pollutant at such emissions unit.

(II) The owner or operator shall provide a copy of the information set out in subparagraph (7)(b)15.(i)(I) of this rule with the application for construction required under paragraph 391-3-1-.03(1) of these rules.

(III) The owner or operator shall monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any emissions unit identified in subparagraph (7)(b)15.(i)(I)II of this rule, and calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five years following resumption of regular operations after the change, or for a period of 10 years following resumption of regular operations after the change if the project increases the design capacity of or potential to emit of that regulated NSR pollutant at such emissions unit. These records shall be retained for a period of five years past the end of each calendar year. If an owner or operator is required to or elects to exclude emissions associated with startups, shutdowns, and/or malfunctions from estimations of projected actual emissions for PSD applicability purposes as allowed by subparagraph (7)(a)2.(ii)(ll)II. of this rule, the owner or operator may exclude such emissions from the ·calculation of annual emissions.

(IV) If the owner or operator excluded demand growth emissions from the projected actual emissions for a project and that project is subject to the requirements of subparagraph (7)(a)2.(ii)(II)III.A.(B) of this rule, the owner or

operator shall calculate the actual increase in emissions due to demand growth, in tons per year on a calendar year basis, for a period 10 years following resumption of regular operations after the change. These records shall be retained for a period of five years past the end of each calendar year.

(V) The owner or operator shall submit a report to the Division within 60 days after the end of each year during which records must be generated under subparagraphs (7)(b)15.(i)(III) and (IV) of this rule setting out the unit's annual emissions and, if applicable, the unit's actual increase in emissions due to demand growth during the calendar year that preceded submission of the report.

16. Innovative control technology: 40 CFR Part 52.21(v), as amended, is hereby incorporated and adopted by reference

17. Permit rescission: 40 CFR Part 52.21(w), as amended, is hereby incorporated and adopted by reference with the following exceptions:

(i) Paragraph (1) of 40 CFR Part 52.21(w) shall read as follows: Any permit issued under this section or a prior version of this section shall remain in effect, unless and until it expires under paragraph (r) of this section or is rescinded.

(ii) Paragraph (3) of 40 CFR Part 52.21(w) shall read as follows: The Director may grant an application for rescission if the application shows that this section, as it existed at the time the permit was issued, would not apply to the source or modification.

18. [Reserved]

19. [Reserved]

20. [Reserved]

21. Actuals PALs: 40 CFR, Part 52.21(aa), as amended, is hereby incorporated by reference with the following exceptions:

(i) [Reserved]

(ii) In lieu of the public participation requirements for PALs of 40 CFR Part 52.21(aa)(5), PALs for existing major stationary sources shall be established, renewed, or increased through the procedures for Title V Permit issuance, renewal, and reopenings, and revisions specified in subparagraph 391-3-1-.03(10)(e) of these rules.

(iii) In addition to the provisions for setting the 10-year actual PAL level specified in 40 CFR Part 52.21(aa)(6)(i), the PAL level shall be adjusted

downward to exclude any non-compliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the consecutive 24-month period used to determine the baseline actual emissions for the PAL pollutant.

(iv) In lieu of the provisions of 40 CFR Part 52.21(aa)(6)(ii), the following shall apply:

For newly constructed units (which do not include modifications to existing units) on which actual construction began after the consecutive 24-month period selected for setting the 10-year actuals PAL level, in lieu of adding the baseline emissions as specified in paragraph (aa)(6)(i) of 40 CFR Part 52.21, the emissions must be added to the PAL level as follows:

(I) For an emissions unit on which actual operation commenced less than 36 months prior to submission of a complete PAL permit application, the emissions must be added to the PAL level in an amount equal to the potential to emit of the unit.

(II) For an emissions unit on which actual operation commenced greater than or equal to 36 months and less than 48 months prior to submission of a complete PAL permit application, the emissions must be added in an amount equal to the rate, in tons per year, at which the unit actually emitted the PAL pollutant during any consecutive 12-month period, selected by the owner or operator, that preceded submission of the PAL permit application.

(III) For an emissions unit on which actual operation commenced greater than or equal to 48 months prior to submission of a complete PAL permit application, the emissions must be added in an amount equal to the average rate, in tons per year, at which the unit actually emitted the PAL pollutant during any consecutive 24-month period, selected by the owner or operator, that preceded submission of the PAL permit application.

(v) In addition to the contents of the PAL permit specified in 40 CFR Part 52.21(aa)(7), the PAL permit must contain a requirement that emissions calculations for compliance purposes must include non-compliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable and that were in excess of that allowed by any state or Federal air quality regulation or permit condition.

(vi) In lieu of the provisions of 40 CFR Part 52.21(aa)(8)(ii)(c), the following shall apply:

All reopenings shall be carried out in accordance with the procedures for Title V Permit issuance, renewal, and reopenings, and revisions specified in subparagraph 391-3-1-.03(10)(e) of these rules.

(vii) In lieu of the provisions for PAL adjustment in 40 CFR Part 52.21(aa)(10)(iv), the following shall apply:

PAL adjustment. The Director shall set the PAL level for a renewed PAL permit in accordance with subparagraphs (7)(b)21.(vii)(I) and (II) of this rule. However, in no case may any PAL level fail to comply with subparagraph (7)(b)21.(vii)(III) of this rule.

(I) If the emissions level calculated in accordance with paragraph (aa)(6) of 40 CFR Part 52.21 and subparagraphs (7)(b)21.(iii) and (iv) of this rule is equal to or greater than 80 percent of the PAL level, the Director may renew the PAL at the same level. If the emissions level calculated in accordance with (aa)(6) of 40 CFR Part 52.21 and subparagraphs (7)(b)21.(iii) and (iv) of this rule is less than 80 percent of the PAL level, the Director may renew the PAL at a level determined using the procedures set forth in 40 CFR Part 52.21(aa)(6) and subparagraphs (7)(b)21.(iii) and (iv) of this rule.

(II) The Director may set the PAL at a level that he or she determines to be more representative of the source's baseline actual emissions, or that he or she determines to be more appropriate considering air quality needs, advances in control technology, anticipated economic growth in the area, desire to reward or encourage the source's voluntary emissions reductions, or other factors as specifically identified by the Director in his or her written rationale.

(III) Notwithstanding subparagraphs (7)(b)21.(vii)(I) and (II) of this rule:

I. If the potential to emit of the major stationary source is less than the PAL, the Director shall adjust the PAL to a level no greater than the potential to emit of the source; and

II. The Director shall not approve a renewed PAL level higher than the current PAL, unless the major stationary source has complied with the provisions of paragraph (aa)(11) of 40 CFR Part 52.21 (increasing a PAL).

(viii) The following is added to the list of acceptable general monitoring approaches listed in 40 CFR Part 52.21(aa)(12)(ii).

(I) Mass balance calculations for sulfur dioxide emissions from fuel combustion.

(ix) The mass balance calculation requirements of 40 CFR Part 52.21(aa)(12)(iii) shall apply for mass balance calculations for sulfur dioxide emissions from fuel combustion.

(x) The data relied upon, including, but not limited to, any quality assurance or quality control data, in calculating the monthly and annual PAL pollutant emissions shall not be submitted with the semiannual report as specified in paragraph (aa)(14)(i)(c) of 40 CFR Part 52.21, but shall be retained in permanent form suitable for inspection and submission to the Division. The records shall be retained for at least five years following the end of each calendar year.

(xi) Paragraph 40 CFR Part 52.21(aa)(12)(i)(b) shall read as follows: The PAL monitoring· system must employ · one of the general monitoring approaches meeting the minimum requirements set forth in paragraph (aa)(12)(ii) of this section and must be approved by the Director. ·

[editorial note: the "c" in the phrase "Part 52.21(aa)(8)(ii)(c)" shall remain underlined when the strikeout/underline is removed from this text.]

EDITORIAL NOTE: The word "Administrator" as used in regulations adopted in this section should be read as the "Director of EPD."

[editorial note: the "a" and "c" in the phrase "(b)(41)(ii)(a) through (c)" shall remain underlined when the strikeout/underline is removed from this text]

[editorial note: the "c" in the phrase "(b)(41)(ii)(c)" shall remain underlined when the strikeout/underline is removed from this text.]

THIS IS THE FEDERALLY APPROVED REGULATION AS OF OCTOBER 1, 2020.

	Date Submitted to EPA	Date Approved by EPA	Federal Register
Original Reg:	JAN 17, 1979	SEP 18, 1979	44 FR 54047
1st Revision:	DEC 18, 1980	FEB 10, 1982	47 FR 6017
2nd Revision:	JAN 03, 1991	JUNE 09, 1992	57 FR 24371
3rd Revision:	APR 15, 1988	DEC 14, 1992	57 FR 58989
	JAN 03, 1991	DEC 14, 1992	57 FR 58989
	APR 03, 1991	DEC 14, 1992	57 FR 58989
4th Revision:	JUN 24, 1994	FEB 02, 1996	61 FR 3817
5th Revision:	JUL 10, 1998	DEC 02, 1999	64 FR 67491
6th Revision:	OCT 31, 2006	NOV 22, 2010	75 FR 71018
" "	MAR 5, 2007	NOV 22, 2010	75 FR 71018
" "	AUG 22, 2007	NOV 22, 2010	75 FR 71018
7th Revision:	JAN 13, 2011	SEP 8, 2011	76 FR 55572

8th Revision:	JUL 26, 2012	APR 9, 2013	78 FR 21065
9th Revision:	NOV 12, 2014	OCT 16, 2017	82 FR 47993
10th Revision:	NOV 29, 2017	DEC 14, 2018	83 FR 64285
11th Revision	SEP 15, 2008	SEP 16, 2020	85 FR 57707
12th Revision	SEP 1, 2020	MAY 9, 2022	87 FR 27519

(8) New Source Performance Standards (NSPS) (not Federally approved into SIP)
(9) Emission Standards for Hazardous Air Pollutants (not Federally approved into SIP)
(10) Chemical Accident Prevention Provisions (not Federally approved into SIP)

(11) Compliance Assurance Monitoring

(a) General Requirements. The provisions of this section (11) shall apply to any stationary source and to the owner or operator of any stationary source subject to any requirement under 40 CFR Part 64 as amended, which is incorporated and adopted herein by reference.

(b) The word "Administrator" as used in regulations adopted in this section shall mean the Director of EPD.
Authority, O.C.G.A. §12-9-1 et seq., as amended.

THIS IS THE FEDERALLY APPROVED REGULATION AS OF DECEMBER 2, 1999.

	Date Submitted to EPA	Date Approved by EPA	Federal Register
Original Reg:	JUL 10, 1998	DEC 02, 1999	64 FR 67491

(12) Cross State Air Pollution Rule NOx Annual Trading Program

(a) General Requirements. The provisions of this paragraph (12) except as provided in subparagraphs (f) and (g) shall apply to any source and the owner and operator of any such source subject to any requirements under 40 Code of Federal Regulations (hereinafter, 40 CFR), Part 97 Subpart AAAAA, as amended (at 81 FR 74604-07, October 26, 2016). The term "Permitting Authority" as used in regulations adopted in this paragraph shall mean, for a unit located in Georgia, the Environmental Protection Division of the Georgia Department of Natural Resources. For a unit located outside the State of Georgia participating in the trading program, the "Permitting Authority" is as defined in 40 CFR Part 97.402.

(b) General Provisions. 40 CFR Part 97.401 through 40 CFR Part 97.408, as amended is hereby incorporated and adopted by reference.

(c) Designated Representative. 40 CFR Part 97.413 through 40 CFR Part 97.418, as amended is hereby incorporated and adopted by reference.

(d) [Reserved]

(e) [Reserved]

(f) Allowance Allocations. 40 CFR Part 97.411 through 40 CFR Part 97.412, as amended is hereby incorporated and adopted by reference with the following exceptions: 40 CFR 97.411(b)(2), 40 CFR 97.411(c)(5)(iii) and 97.412(b).

For purposes of this paragraph (12), the Georgia NOx Annual trading budget and new unit set-aside for allocations of CSAPR NOx Annual allowances, and the variability limit for the Georgia NOx Annual trading budget, for the control periods in 2017 and thereafter are as follows:

1. The NOx Annual trading budget is 53,738 tons.

2. The new unit set-aside is 1,075 tons.

3. The variability limit is 9,673 tons.

4. The Georgia NOx Annual trading budget in this subparagraph includes any tons in the new unit set-aside but does not include any tons in the variability limit.

(g) Allowance Tracking System. 40 CFR Part 97.420 through 40 CFR Part 97.421 and 40 CFR Part 97.424 through 40 CFR Part 97.428, as amended is hereby incorporated and adopted by reference with the following exceptions: 40 CFR 97.421(h) and 40 CFR 97.421(j).

(h) Allowance Transfers. 40 CFR Part 97.422 through 40 CFR Part 97.423, as amended is hereby incorporated and adopted by reference.

(i) Monitoring and Reporting. 40 CFR Part 97.430 through 40 CFR Part 97.435, as amended is hereby incorporated and adopted by reference.

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	Date Submitted to EPA	Date Approved by EPA	Federal Register
Original Reg.	SEP 26, 2007	DEC 07, 2007	72 FR 69148
1st Revision	AUG 22, 2007	NOV 27, 2009	74 FR 62249
2nd Revision	JUL 26, 2017	OCT 13, 2017	82 FR 47930
3rd Revision	JUL 31, 2018	FEB 18, 2020	85 FR 8749

(13) Cross State Air Pollution Rule SO_2 Annual Trading Program

(a) General Requirements. The provisions of this paragraph (13) except as provided in subparagraphs (f) and (g) shall apply to any source and the owner and operator of any such source subject to any requirements under 40 Code of Federal Regulations (hereinafter, 40 CFR), Part 97 Subpart DDDDD, as amended (at 81 FR 74618-21, October 26, 2016). The term "Permitting Authority" as used in regulations adopted in this paragraph shall mean, for a unit located in Georgia, the Environmental Protection Division of the Georgia Department of Natural Resources. For a unit located outside the State of Georgia participating in the trading program, the "Permitting Authority" is as defined in 40 CFR Part 97.702.

(b) General Provisions. 40 CFR Part 97.701 through 40 CFR Part 97.708, as amended is hereby incorporated and adopted by reference.

(c) Designated Representative. 40 CFR Part 97.713 through 40 CFR Part 97.718, as amended is hereby incorporated and adopted by reference.

(d) [Reserved]

(e) [Reserved]

(f) Allowance Allocations. 40 CFR Part 97.711 through 40 CFR Part 97.712, as amended is hereby incorporated and adopted by reference with the following exceptions: 40 CFR 97.711(b)(2), 40 CFR 97.711(c)(5)(iii) and 97.712(b).

For purposes of this paragraph (13), the Georgia SO_2 Group 2 trading budget and new unit set-aside for allocations of CSAPR SO_2 Group 2 allowances, and the variability limit for the Georgia SO_2 Group 2 trading budget, for the control periods in 2017 and thereafter are as follows:

1. The SO_2 Group 2 trading budget is 135,565 tons.

2. The new unit set-aside is 2,711 tons.

3. The variability limit is 24,402 tons.

4. The Georgia SO_2 Group 2 trading budget in this subparagraph includes any tons in the new unit set-aside but does not include any tons in the variability limit.

(g) Allowance Tracking System. 40 CFR Part 97.720 through 40 CFR Part 97.721 and 40 CFR Part 97.724 through 40 CFR Part 97.728, as amended is hereby incorporated and adopted by reference with the following exceptions: 40 CFR 97.721(h) and 40 CFR 97.721(j).

(h) Allowance Transfers. 40 CFR Part 97.722 through 40 CFR Part 97.723, as amended is hereby incorporated and adopted by reference.

(i) Monitoring and Reporting. 40 CFR Part 97.730 through 40 CFR Part 97.735, as amended is hereby incorporated and adopted by reference.

THIS IS THE FEDERALLY APPROVED REGULATION AS OF OCTOBER 1, 2020.

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3rd Revision	JUL 31, 2018	FEB 18, 2020	85 FR 8749

(14) Cross State Air Pollution Rule NOx Ozone Season Trading Program

(a) General Requirements. The provisions of this paragraph (14) except as provided in subparagraphs (f) and (g) shall apply to any source and the owner and operator of any such source subject to any requirements under 40 Code of Federal Regulations (hereinafter, 40 CFR), Part 97 Subpart BBBBB as amended (at 81 FR 74607-14, October 26, 2016). The term "Permitting Authority" as used in regulations adopted in this paragraph shall mean, for a unit located in Georgia, the Environmental Protection Division of the Georgia Department of Natural Resources. For a unit located outside the State of Georgia participating in the trading program, the "Permitting Authority" is as defined in 40 CFR Part 97.502.

(b) General Provisions. 40 CFR Part 97.501 through 40 CFR Part 97.508, as amended is hereby incorporated and adopted by reference.

(c) Designated Representative. 40 CFR Part 97.513 through 40 CFR Part 97.518, as amended is hereby incorporated and adopted by reference.

(d) [Reserved]

(e) [Reserved]

(f) Allowance Allocations. 40 CFR Part 97.511 through 40 CFR Part 97.512, as amended is hereby incorporated and adopted by reference with the following exceptions: 40 CFR 97.511(b)(2), 40 CFR 97.511(c)(5)(iii) and 97.512(b).

For purposes of this paragraph (14), the Georgia NOx Ozone Season Group 1 trading budget and new unit set-aside for allocations of CSAPR NOx Ozone Season Group 1 allowances, and the variability limit for the Georgia NOx Ozone Season Group 1 trading budget, for the control periods in 2017 and thereafter are as follows:

1. The NOx Ozone Season Group 1 trading budget is 24,041 tons.

2. The new unit set-aside is 481 tons.

3. The variability limit is 5,049 tons.

4. The Georgia NOx Ozone Season Group 1 trading budget in this subparagraph includes any tons in the new unit set-aside but does not include any tons in the variability limit.

(g) Allowance Tracking System. 40 CFR Part 97.520 through 40 CFR Part 97.521 and 40 CFR Part 97.524 through 40 CFR Part 97.528, as amended is hereby incorporated and adopted by reference with the following exceptions: 40 CFR 97.521(h) and 40 CFR 97.521(j).

(h) Allowance Transfers. 40 CFR Part 97.522 through 40 CFR Part 97.523, as amended is hereby incorporated and adopted by reference.

(i) Monitoring and Reporting. 40 CFR Part 97.530 through 40 CFR Part 97.535, as amended is hereby incorporated and adopted by reference.

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