APPENDIX A

Advanced Notice of Potential Rulemaking and Solicitation of Comments on Control Technology Guidelines (CTG) – AQ296

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Department of Agriculture and Forestry
Horticulture Commission

Landscape Architect Registration Exam

The next landscape architect registration examination will be given December 8-9, 2008, beginning at 7:45 a.m. at the College of Design Building, Louisiana State University Campus, Baton Rouge, LA. The deadline for sending the application and fee is as follows.

New Candidates:	September 5, 2008
Re-Take Candidates:	September 26, 2008
Reciprocity Candidates:	November 7, 2008

Further information pertaining to the examinations may be obtained from Craig Roussel, Director, Horticulture Commission, P.O. Box 3596, Baton Rouge, LA 70821-3596, phone (225) 952-8100.

Any individual requesting special accommodations due to a disability should notify the office prior to September 5, 2008. Questions may be directed to (225) 952-8100.

Mike Strain, DVM
Commissioner

0808#029

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Department of Agriculture and Forestry
Horticulture Commission

Retail Floristry Examination

The next retail floristry examinations will be given October 27-31, 2008 at 9:30 a.m. in the Nelson Memorial Building, Louisiana State University Campus, Baton Rouge, LA. The deadline for sending in application and fee is September 12, 2008. No applications will be accepted after September 12, 2008.

Further information pertaining to the examinations may be obtained from Craig Roussel, Director, Horticulture Commission, Box 3596, Baton Rouge, LA 70821-3596, phone (225) 952-8100.

Any individual requesting special accommodations due to a disability should notify the office prior to September 12, 2008. Questions may be directed to (225) 952-8100.

Mike Strain, DVM
Commissioner

0808#027

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Department of Agriculture and Forestry
Office of Agriculture and Environmental Sciences

Plant Protection and Quarantine (LAC 7:XV.Chapter 1)

In accordance with the Administrative Procedures Act, R.S. 49:950 et seq., R.S. 3:1652 and LAC 7:XV:107, 109 and 127(E) the annual quarantine listing for 2008 is being supplemented to include the following quarantines and locations.

Title 7
AGRICULTURE AND ANIMALS
Part XV. Plant Protection and Quarantine
Chapter 1. Crop Pests and Diseases
Supplement to Annual Quarantine Listing—2008

1.0 -12.0 ...

13.0 Asian Citrus Psyllid

LOUISIANA

Parishes of Jefferson, Lafourche, Orleans, Plaquemines, St. Charles, St. James, St. Tammany and Terrebonne.

Citrus Greening Disease (Huanglongbing disease of citrus)

LOUISIANA

Parishes of Orleans.

Mike Strain, DVM
Commissioner

0808#028

POTPOURRI

Department of Environmental Quality
Office of the Secretary
Legal Affairs Division

Advanced Notice of Rulemaking and Solicitation of Comments on Control Technology Guidelines (CTG)
Log #AQ296 (LAC 33:III.111, 2123, and 2143)

The Louisiana Department of Environmental Quality is requesting comments on the draft regulations regarding new and revised Control Technology Guidelines (CTG), LAC 33:III.111, 2123, and 2143 (AQ296). This is a preliminary step in the rulemaking process. Official rulemaking will be initiated after review and consideration of the comments received on this advanced notice. The revisions include changes made to the lithographic printing materials and letterpress printing materials CTG and the flexible package printing materials CTG that were published in the *Federal*

Register, Volume 71, on October 5, 2006, pages 58745-58753. The revisions also include changes to the paper, film, and foil coatings CTG, the metal furniture coatings CTG, and the large appliance coatings CTG that were published in the *Federal Register*, Volume 72, on October 9, 2007, pages 57215-57222. The final CTG for paper, film, and foil coatings have been revised to provide separate applicability recommendations for coating operations and cleaning operations, and the final CTG for metal furniture coatings and large appliance coatings have been revised to reflect a lower volatile organic compound (VOC) content coatings recommendations.

The Clean Air Act (CAA) Section 172(c)(1) provides that state implementation plans (SIPs) for nonattainment areas must include reasonably available control measures (RACM), including reasonably available control technology (RACT) for sources of emissions. CAA Section 182(b)(2)(A) provides that for certain nonattainment areas, states must revise their SIPs to include RACT for each category of VOC sources covered by a CTG document issued between November 15, 1990, and the date of attainment. EPA provides states with guidance concerning what types of controls could constitute a RACT for a given source category through issuance of a CTG. States can follow the CTG and adopt state regulations to implement the recommendations contained therein, or they can adopt alternative approaches. The states must submit their RACT rules to EPA for review and approval as part of the SIP process. This rule amends the state air regulations to follow the CTG recommendations provided by EPA, which will then be included in the SIP to meet the requirements of the CAA.

The department is seeking information regarding relevant information concerning the regulatory impact of these CTG, including, but not limited to, the fiscal and economic impact and cost compliance associated with adopting these CTG.

All interested persons are encouraged to submit written comments on the draft proposal. Comments are due no later than 4:30 p.m., September 22, 2008, and should be submitted to Michelle Morgan, Office of Environmental Assessment, Plan Development Section, Box 4314, Baton Rouge, LA 70821-4314 or to FAX (225) 219-3240 or by email to michelle.morgan@la.gov. Persons commenting should reference this document as AQ296. If you have any questions regarding this document please contact Michelle Morgan at (225) 219-3581. Copes of this draft proposed rule can be purchased by contacting DEQ Public Records Center at (225) 219-3168. Check or money order is required in advance for each copy of AQ296. This draft rule is available on the internet at:

www.deq.louisiana.gov/portal/tabid/1669/Default.aspx.

The draft rule is also available for inspection at the following DEQ office locations from 8 a.m. until 4:30 p.m.: 602 N. Fifth Street, Baton Rouge, LA 70802; 1823 Highway 546, West Monroe, LA 71292; State Office Building, 1525 Fairfield Avenue, Shreveport, LA 71101; 1301 Gadwall Street, Lake Charles, LA 70615; 645 N. Lotus Drive, Suite C, Mandeville, LA 70471; 111 New Center Drive, Lafayette, LA 70508; 110 Barataria Street, Lockport, LA 70374.

Title 33
ENVIRONMENTAL QUALITY
Part III. Air

Chapter 1. General Provisions

§111. Definitions

A. When used in these rules and regulations, the following words and phrases shall have the meanings ascribed to them below.

* * *

Miscellaneous Metal Parts and Products Coating—the coating of miscellaneous metal parts and products in the following categories:

a. - f. ...

g. any other category of coated metal products except those on the specified list in LAC 33:III.2123.C.1-3, 5-7, and 10 of surface coating processes, which are included in the Standard Industrial Classification Code major group 33 (primary metal industries), major group 34 (fabricated metal products), major group 35 (nonelectrical machinery), major group 36 (electrical machinery), major group 37 (transportation equipment), major group 38 (miscellaneous instruments), and major group 39 (miscellaneous manufacturing industries).

* * *

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended LR 14:348 (June 1988), LR 15:1061 (December 1989), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 17:777 (August 1991), LR 21:1081 (October 1995), LR 22:1212 (December 1996), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2444 (November 2000), amended by the Office of the Secretary, Legal Affairs Division, LR 32:808 (May 2006), LR 32:1599 (September 2006), LR 33:2082 (October 2007), LR 34:70 (January 2008), LR 34:

Chapter 21. Control of Emission of Organic Compunds

Subchapter B. Organic Solvents

§2123. Organic Solvents

A. Except as provided in Subsections B and C of this Section, any emission source using organic solvents having an emission of organic solvents of more than 3 pounds (1.3 kilograms) per hour or 15 pounds (6.8 kilograms) per day shall reduce the emission, where feasible, by incorporating one or more of the following control methods:

1. incineration, provided 90 percent of the carbon in the organic compounds being incinerated is oxidized to carbon dioxide (except as provided in Subsection D of this Section);

2. carbon adsorption, with a control efficiency of at least 90 percent, of the organic compounds;

3. any other equivalent means as may be approved by the administrative authority. Once a source exceeds the emission cutoff specified in this Section that source shall be subject and shall remain subject to the requirements of this Subsection regardless of future emission rates.

B. Soldering operations, painting and coating operations not listed in Subsection C of this Section, and dry cleaning

operations using organic solvents that are not considered photochemically reactive shall be considered for exemption from the requirements of this Section.

1. - 2. ...

C. Surface Coating Industries. No person may cause, suffer, allow, or permit volatile organic compound (VOC) emissions from the surface coating of any materials affected by this Subsection to exceed the emission limits as specified in this Section.

Affected Facility	Daily Weighted Average VOC Emission Limitation	
	Lbs. per Gal. of Coating as applied (minus water and exempt solvent)	Kgs. per Liter of Coating as applied (minus water and exempt solvent)
1. Large Appliance Coating Industry		
General, One Component (Baked/Air Dried)	2.3 / 2.3	0.275 / 0.275
General, Multi-Component (Baked/Air Dried)	2.3 / 2.8	0.275 / 0.340
Extreme High Gloss (Baked/Air Dried)	3.0 / 2.8	0.360 / 0.340
Extreme Performance (Baked/Air Dried)	3.0 / 3.5	0.360 / 0.420
Heat Resistant (Baked/Air Dried)	3.0 / 3.5	0.360 / 0.420
Metallic (Baked/Air Dried)	3.5 / 3.5	0.420 / 0.420
Pretreatment Coatings (Baked/Air Dried)	3.5 / 3.5	0.420 / 0.420
Solar Absorbent (Baked/Air Dried)	3.0 / 3.5	0.360 / 0.420
2. Surface Coating of Cans		
Sheet Basecoat (exterior and interior) and over-varnish: Two-piece can exterior (basecoat and over-varnish)	2.8	0.34
Two and three-piece can interior body spray, two-piece can exterior end (spray or roll coat)	4.2	0.51
Three-piece can side-seam spray	5.5	0.66
End sealing compound	3.7	0.44
3. Surface Coating of Coils		
Prime and topcoat or single coat operation	2.6	0.31
4. Surface Coating of Fabrics		
Fabric Facility	2.9	0.35
Vinyl Coating Line (except Plasticol coatings)	3.8	0.45
5. Surface Coating of Assembly Line Automobiles and Light Duty Trucks		
Prime application, flashoff area and oven (determined on a monthly basis)	1.2	0.14
Primer surface application flashoff area and oven	2.8	0.34
Topcoat application, flashoff area and oven	2.8	0.34
Final repair application, flashoff area and oven	4.8	0.58
As an alternative to the emission limitation of 2.8 pounds of VOC per gallon of coating applied for the primer surfacer and/or topcoat application, compliance with these emission limitations may be demonstrated by meeting a standard of 15.1 pounds of VOC per gallon of solids deposited.		
6. Surface Coating-Magnet Wire Coating		
Coating Line	1.7	0.20
7. Surface Coating of Metal Furniture		

Affected Facility	Daily Weighted Average VOC Emission Limitation	
	Lbs. per Gal. of Coating as applied (minus water and exempt solvent)	Kgs. per Liter of Coating as applied (minus water and exempt solvent)
General, One Component (Baked/Air Dried)	2.3 / 2.3	0.275 / 0.275
General, Multi-Component (Baked/Air Dried)	2.3 / 2.8	0.275 / 0.340
Extreme High Gloss (Baked/Air Dried)	3.0 / 2.8	0.360 / 0.340
Extreme Performance (Baked/Air Dried)	3.0 / 3.5	0.360 / 0.420
Heat Resistant (Baked/Air Dried)	3.0 / 3.5	0.360 / 0.420
Metallic (Baked/Air Dried)	3.5 / 3.5	0.420 / 0.420
Pretreatment Coatings (Baked/Air Dried)	3.5 / 3.5	0.420 / 0.420
Solar Absorbent (Baked/Air Dried)	3.0 / 3.5	0.360 / 0.420
8. Surface Coating of Miscellaneous Metal Parts and Products		
Clear Coat	4.3	0.52
Air or force air dried items (not oven dried)	3.5	0.42
Frequent color change and/or large numbers of colors applied, or first coat on untreated ferrous substrate	3.0	0.36
Outdoor or harsh exposure or extreme performance characteristics	3.5	0.42
No or infrequent color change, or small number of colors applied:		
a. Powder Coating	0.4	0.05
b. Other	3.0	0.36
These limits do not apply to operations covered in 1-7 or 10 herein or exterior coating of fully assembled aircraft, auto refinishing, and auto customizing topcoating (processing less than 35 vehicles per day).		
9. Factory Surface Coating of Flat Wood Paneling with VOC Emissions Greater Than 15 Pounds Per Day Before Controls		
All Inks, Coatings, and Adhesives	2.1	0.25
10. Surface Coating for Marine Vessels and Oilfield Tubulars and Ancillary Oilfield Equipment		
a. Except as otherwise provided in this Section, a person shall not apply a marine coating with a VOC content in excess of the following limits:		
Baked Coatings	3.5	0.42
Air-Dried Single-Component Alkyd or Vinyl Flat or Semi Gloss Finish Coatings	3.5	0.42
Two Component Coatings	3.5	0.42
b. Except for the parishes of Ascension, Calcasieu, East Baton Rouge, Iberville, Livingston, Pointe Coupee, and West Baton Rouge, in which the VOC limitations in Subparagraph C.10.a of this Section may not be exceeded, specialty marine coatings and coatings on oilfield tubulars and ancillary oilfield equipment with a VOC content not in excess of the following limits may be applied:		
Heat Resistant	3.5	0.42
Metallic Heat Resistant	4.42	0.53
High Temperature (Fed. Spec. TT-P-28)	5.41	0.65
Pre-Treatment Wash Primer	6.5	0.78
Underwater Weapon	3.5	0.42
Elastomeric Adhesives With 15 Percent Weight Natural or Synthetic Rubber	6.08	0.73

Affected Facility	Daily Weighted Average VOC Emission Limitation	
	Lbs. per Gal. of Coating as applied (minus water and exempt solvent)	Kgs. per Liter of Coating as applied (minus water and exempt solvent)
Solvent-Based Inorganic Zinc Primer	5.41	0.65
Pre-Construction and Interior Primer	3.5	0.42
Exterior Epoxy Primer	3.5	0.42
Navigational Aids	3.5	0.42
Sealant for Wire-Sprayed Aluminum	5.4	0.648
Special Marking	4.08	0.49
Tack Coat (Epoxies)	5.08	0.61
Low Activation Interior Coating	4.08	0.49
Repair and Maintenance Thermoplastic	5.41	0.65
Extreme High Gloss Coating	4.08	0.49
Antenna Coating	4.42	0.53
Antifoulant	3.66	0.44
High Gloss Alkyd	3.5	0.42
Anchor Chain Asphalt Varnish (Fed. Spec. TT-V-51)	5.2	0.62
Wood Spar Varnish (Fed. Spec. TT-V-119)	4.1	0.492
Dull Black Finish Coating (DOD-P-15146)	3.7	0.444
Tank Coatings (DOD-P-23236)	3.5	0.42
Potable Water Tank Coating (DOD-P-23236)	3.7	0.444
Flight Deck Markings (DOD-C-24667)	4.2	0.504
Vinyl Acrylic Top Coats	5.4	0.648
Antifoulant Applied to Aluminum Hulls	4.5	0.55
11. Paper, Film, Foil; Pressure Sensitive Tape, and Label Surface Coating	Daily Weighted Average VOC Emission Limitation	
	kg VOC/kg Solids (lb VOC/lb Solids)	kg VOC/kg Coating (lb VOC/lb Coating)
Paper, Film, and Foil	0.40	0.08
Pressure Sensitive Tape and Label	0.20	0.067

D. Control Techniques

1. If add-on controls such as incinerators or vapor recovery systems are used to comply with the emission limitation requirements, in terms of pounds per gallon of solids as applied (determined in accordance with Paragraph D.8 of this Section), the volatile organic compound capture and abatement system shall be at least 80 percent efficient overall (90 percent for factory surface coating of flat wood paneling). All surface coating facilities shall submit to the Office of Environmental Services, for approval, design data for each capture system and emission control device that is proposed for use. The effectiveness of the capture system (i.e., capture efficiency) shall be determined using the procedure specified in Paragraph E.6 of this Section.

2. If a person wishes to use low solvent technology to meet any of the emission limits specified in Subsection C of this Section and if the technology to be used for any particular application is not now proven but is expected to be proven in a reasonable length of time, he may request a compliance date extension from the administrative authority*. Compliance date extensions will require progress reports every 90 days, or as directed, to show reasonable progress, as determined by the administrative authority, toward technology to meet the specified emission limitation.

3. ...

4. Compliance with the alternative emission limit established in Paragraph C.5 of this Section of 15.1 pounds of VOC per gallon of solids deposited shall be determined in accordance with EPA's "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light Duty Truck Topcoat Operations", EPA 450/3-88-018, December, 1988.

5. ...

6. Surface coating facilities on any property in Ascension, Calcasieu, East Baton Rouge, Iberville, Livingston, Pointe Coupee, and West Baton Rouge parishes that when controlled have a potential to emit, at maximum production, a combined weight (total from the property) of VOCs less than 10 tons in any consecutive 12 calendar months are exempt from the provisions of Subsection C of this Section. Surface coating facilities on any property in parishes other than Ascension, Calcasieu, East Baton Rouge, Iberville, Livingston, Pointe Coupee, and West Baton Rouge that when uncontrolled have a potential to emit a combined weight of VOCs less than 100 pounds (45 kilograms) in any consecutive 24-hour period are exempt from the provisions of Subsection C of this Section. Any surface coating facility with VOC emissions of less than or equal to 15 pounds (6.8 kilograms) per day is exempt from the provisions of Paragraphs C.1, 8, and 11 of this Section.

7. Soldering and surface coating facilities or portions thereof, may request from the administrative authority* exemption from the requirements of Subsection C of this Section if all of the following conditions are met:

7.a. - 9....

E. Testing. Compliance with Subsections A, C, and D of this Section shall be determined by applying the following test methods, as appropriate.

1. - 7. ...

F. Recordkeeping. The owner/operator of any surface coating facility shall maintain records at the facility to verify compliance with or exemption from this Section. The records shall be maintained for at least two years and shall include, but not be limited to, the following:

1. records of any testing done in accordance with Subsection E of this Section;

2. records of the installation and maintenance of monitors to accurately measure and record operational parameters of all required control devices as necessary to ensure the proper functioning of those devices in accordance with the design specifications, including but not limited to:

2.a. - 4....

G. Mandatory Work Practices for Surface Coating of Flat Wood Paneling. The owner/operator of any facility performing factory surface coating of flat wood paneling shall comply with the following mandatory work practices:

1. store all VOC coatings, thinners, and cleaning materials in closed containers;

2. minimize spills and clean up spills immediately;

3. convey any coatings, thinners, and cleaning material in closed containers or pipes; and

4. close mixing vessels containing VOC coatings and other material except when specifically in use.

H. Definitions

Air Dried Coating—any coating that is cured at a temperature below 90°C (194°F).

Baked Coating—any coating that is cured at a temperature at or above 90°C (194°F).

Extreme High Gloss Coating—any coating that achieves at least 95 percent reflectance on a 60° meter when tested by ASTM Method D-523.

Heat Resistant Coating—any coating that during normal use must withstand temperatures of at least 204°C (400°F).

High Gloss Coating—any coating that achieves at least 85 percent reflectance on a 60° meter when tested by ASTM Method D-523.

High Temperature Coating—any coating that must withstand temperatures of at least 426°C (800°F).

Marine Coating—any coating, except unsaturated polyester resin (fiberglass) coatings, containing volatile organic materials and applied by brush, spray, roller, or other means to ships, boats, and their appurtenances, and to buoys and oil drilling rigs intended for the marine environment.

Metallic Heat Resistant Coating—any coating which contains more than five grams of metal particles per liter as applied and which must withstand temperatures over 80°C (175°F).

Repair and Maintenance Thermoplastic Coating—a resin-bearing coating in which the resin becomes pliable with the application of heat, such as vinyl, chlorinated rubber, or bituminous coatings.

I. Timing. A facility that has become subject to this regulation as a result of a revision of the regulation shall comply with the requirements of this Section as soon as practicable, but in no event later than one year from promulgation of the regulation revision.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended LR 16:119 (February 1990), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 17:654 (July 1991), LR 18:1122 (October 1992), LR 22:340 (May 1996), LR 22:1212 (December 1996), LR 23:1678 (December 1997), LR 24:23 (January 1998), LR 24:1285 (July 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 25:1240 (July 1999), LR 26:2453 (November 2000), LR 28:1765 (August 2002), LR 30:746 (April 2004), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2440 (October 2005), LR 33:2086 (October 2007), LR 34:

Subchapter H. Graphic Arts

§2143. Graphic Arts (Printing) by Rotogravure, Flexographic, Offset Lithographic, Letterpress, and Flexible Package Printing Processes

A. Control Requirements

1. No person shall operate or allow the operation of a packaging rotogravure, publication rotogravure, flexographic, or flexible package printing facility having a potential to emit 25 TPY or more of VOC in the parishes of Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge; having a potential to emit 50 TPY or more of VOC in the parishes of Calcasieu and Pointe Coupee; or having a potential to emit 100 TPY or more of VOC in any other parish, unless VOC emissions are controlled by one of the methods in Subparagraphs A.1.a-d of this Section. This requirement applies to affected machines on which both surface coating and printing operations are performed. Line-by-line compliance with these emission limits or control requirements is required. Any cross-line averaging or bubbling must receive approval from the administrative authority*. Once a facility is subject to the provisions of this Section, it remains so regardless of future variations in production.

a. The solvent fraction of ink, as it is applied to the substrate, less exempt solvent, shall contain 25 volume percent or less of organic solvent and 75 volume percent or more of water. Also acceptable as an alternative limit is ink containing no more than 0.5 pounds of volatile organic compounds per pound of solids. Exempt solvents are those compounds listed in LAC 33:III.2117.

b. A volatile organic compound adsorption or incineration system shall have at least 95 percent (by weight) control efficiency across the control device, which can be demonstrated to have an overall capture and abatement reduction of at least 85 percent.

c. The ink as it is applied to the substrate, less water and exempt solvent, shall contain 60 percent by volume or more of nonvolatile material.

d. Another control method approved by the administrative authority* may be employed.

2. Control for cleaning materials for those facilities where actual emissions from flexible package printing operations are greater than 15 pounds per day before consideration of controls shall be accomplished by one of the following methods.

a. Cleaning materials shall contain a VOC composite with a vapor pressure of less than 10 mm Hg (0.19psi) at 20°C or contain less than 70 percent VOC by weight.

b. Cleaning materials and used shop towels shall be kept in closed containers except when actually in use.

c. For blanket washing, roller washing, plate cleaners, metering roller cleaners, impression cylinder cleaners, rubber rejuvenators, and other cleaners used for cleaning a press or press parts, or to remove dried ink around a press, any amount greater than 110 gallons of cleaning materials per year shall meet either the low VOC composite vapor pressure requirement or the lower VOC requirement.

3. No person shall operate or allow the operation of an offset lithographic or letterpress printing facility having a potential to emit 25 TPY or more of VOC in the parish of Ascension, East Baton Rouge, Iberville, Livingston, or West Baton Rouge; having a potential to emit 50 TPY or more of VOC in the parish of Calcasieu or Pointe Coupee; or having a potential to emit 100 TPY or more of VOC in any other parish, unless VOC emissions are controlled by one of the methods in Subparagraphs A.3.a-c of this Section. Once a facility is subject to the provisions of this Section, it remains so regardless of future variations in production. Determination of potential to emit, for the purposes of applicability, shall be made without respect to any VOC control device.

a. Control for heatset web offset lithographic processes, letterpress dryers, and the volatilization of inks in a letterpress dryer shall be accomplished by:

i. a control device with at least 90 percent control efficiency for control devices installed prior to [INSERT DATE OF PROMULGATION]. The installation date does not change if the control device is later used to control a new or different press;

ii a control device with at least 95 percent control efficiency for control devices installed on or after [INSERT DATE OF PROMULGATION]; or

iii a control device that limits the control device outlet concentration to 20 ppmv or less as hexane on a dry basis.

b. Control for offset lithographic fountain solution processes emitting more than 15 pounds per day shall be accomplished as follows:

i. heatset printing—limit the amount of alcohol by weight to 1.6 percent or less;

ii. sheet-fed printing—limit the amount of alcohol by weight to 5 percent or less. Sheet-fed presses with sheet size of 11 x 17 inches or smaller or any press with a total fountain solution reservoir of less than 1 gallon are exempt;

iii. coldset printing—limit the amount of alcohol by weight to 5 percent or less as applied.

c. Another control method approved by the administrative authority* may be employed.

4. Control for cleaning materials for those facilities where actual emissions from printing operations are greater than 15 pounds per day before consideration of controls shall be accomplished by one of the following methods.

a. For offset lithographic and letterpress facilities, cleaning materials with a VOC composite vapor pressure less than 10 mm Hg (0.19 psi) at 20°C or cleaning materials that contain less than 70 percent VOC by weight shall be used.

b. Cleaning materials and used shop towels shall be kept in closed containers except when actually in use.

c. For blanket washing, roller washing, plate cleaners, metering roller cleaners, impression cylinder cleaners, rubber rejuvenators, and other cleaners used for cleaning a press or press parts, or to remove dried ink around a press, any amount greater than 110 gallons of cleaning materials per year shall meet either the low VOC composite vapor pressure requirement or the lower VOC requirement.

B. Exemptions

1. For those facilities where actual emissions from packaging rotogravure, publication rotogravure, and flexible package printing operations are greater than 15 pounds per day before consideration of controls and where the potential to emit is less than 25 TPY of VOC on a per press basis before controls, only the cleaning materials control requirements in Subparagraphs A.2.a-c of this Section are applicable.

2. The following equipment or processes are exempt from meeting the requirements of Subparagraphs A.3.a-c of this Section:

a. heatset web offset lithographic printing operations and heatset web letterpress printing operations with the potential to emit from the dryer, prior to controls, an amount equal to or less than 25 tons VOC (petroleum ink oil) per year, provided that an enforceable limit on potential emissions is obtained to keep an individual heatset press below the 25 TPY potential to emit threshold;

b. heatset presses used for book printing and presses with a maximum web width of less than or equal to 22 inches; and

c. operations with emissions from sheet-fed or coldset webinks, sheet-fed or coldset varnishes, waterborne coatings, and radiation cured materials.

C. – E. ...

F. Operating, Monitoring, and Maintenance Procedures. Operating, monitoring, and maintenance procedures for the facilities and equipment subject tot the requirements of this Section shall be incorporated into the housekeeping plan required by LAC 33:III.2113.A.4.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 16:964 (November 1990), LR 18:1123 (October 1992), LR 22:1212 (December 1996), LR 24:25 (January 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 25:1796 (October 1999), LR 28:1765 (August 2002), LR 30:746 (April 2004), amended by the Office of the Secretary, Legal Affairs Division, LR 34:

Herman Robinson, CPM
Executive Counsel

0808#053

POTPOURRI

Office of the Governor
Division of Administration
Office of Information Technology

OIT Bulletins Published

Pursuant to LAC 4:XV.501, et seq., the Office of Information Technology (OIT) published the following Bulletins in the period 07/01/2008 to 07/31/2008:

Bulletin Number	Topic	Date
ITB 08-05	**IT-STD-009, Revised Standard, Security: Authentication/Passwords**	**07/23/2008**
ITB 08-06	**IT-STD-016, Revised Standard, Desktop Configuration; PC and Printer IT Request and Budgeting Guidelines**	**07/31/2008**

OIT Bulletins, Standards, Guidelines and Policies are posted on the OIT web site at: http://oit.louisiana.gov

To receive e-mail notifications when an OIT Bulletin is published, register at http://oit.louisiana.gov

Ed Driesse
Chief Information Officer

0808#033

Public Comments on ANPR for AQ296

Michelle "Correa" Morgan

From: Todd Wiederhold [twiederhold@printpack.com]
Sent: Monday, September 22, 2008 4:55 PM
To: Michelle "Correa" Morgan
Subject: Comments Regarding AQ296

Dear Michelle:

Please find the following comments regarding the draft regulations on Control Technology Guidelines (CTG) for emission of VOC materials. Printpack's plant in Shreveport would be significantly affected by the proposed regulations. In general, the proposed regulations appear extremely restrictive compared to previous requirements for control of VOC emissions. Since Shreveport is located in an Ozone Attainment area, the justification for such an increased level of control is not immediately apparent.

The proposed RACT requirements applicable to flexible packaging printing facilities under LAC 33:III.A.1.b. and 2.a. are not consistent with the control levels recommended by USEPA in the Control Techniques Guidelines (CTG) for Flexible Package Printing. The RACT proposed by LDEQ is much more restrictive than what was recommended by USEPA in the CTG.

The proposed revisions to LAC 33:III.A.1.b. would dramatically change the VOC control requirements throughout the state regardless of ozone attainment status and is not consistent with the CTG. As found on page 13 of the USEPA CTG, the recommended control levels provided for consideration of equipment age by providing an increasing control level requirement as new equipment is installed. In fact the most restrictive of the control levels recommended by USEPA (80% overall control for new equipment) is less restrictive than the 85% control proposed by LDEQ for all installations regardless of age. This puts printers located within the State of Louisiana at a distinct competitive disadvantage to printers located in other states. Printpack requests that LDEQ revise the proposed control levels to be consistent with the CTG to allow for consideration of equipment age and appropriate levels of control.

Furthermore, the CTG specifically states that USEPA recommends the establishment of only an overall control efficiency (i.e., a combination of capture and control) rather than individual capture or control device efficiency. LDEQ has proposed in 33:III.A.1.b. that a facility not only an overall control efficiency of at least 85 percent, but that the control device itself must demonstrate a control efficiency across the control device of at least 95 percent. Such a dual requirement severely limits the options for how a facility can comply with these requirements. For example, an existing facility could have a flexographic printing press with a capture efficiency of 90% being controlled by an oxidizer that provides a VOC destruction efficiency of 90%. Under the LDEQ RACT proposal the facility's only option would be to purchase a new oxidizer at a considerable expense. If RACT were based on a single overall control limit the facility would have the option for determining the most cost effective means for improving either capture, control, or both depending upon their individual circumstances while providing the same level of overall emission control. Printpack requests that LDEQ modify the proposed control requirements such that it be expressed only as an overall efficiency limit as recommended by USEPA in the CTG.

Under 33:III.A.2.a LDEQ recommends imposition of a restriction on press cleaning materials based on volatility of the material; i.e., vapor pressure of the cleaning solvent limited to <10 mm mercury (Hg) at 20° C. This restriction would result in significant problems for our industry and would likely have a net negative effect on environmental initiatives because materials that are currently recycled would have to be shipped offsite for disposal. Moreover there would be little or no environmental benefit by regulating cleaning solvents through limitations on vapor pressure.

Flexible packaging printers use varying combinations of solvents in each of our as applied ink. Each solvent is introduced to impact a specific property important to the final package; e.g. slow drying, speed-up drying, keep the solids in suspension, promote ink adherence, minimize solvent retention on the web, offer compatibility to the substrate and other coat layers. The solvents most commonly used have vapor pressures both below and above the 10 mm Hg limit. It is common practice for printers to capture and recycle (either on-site or off-site distillation) waste inks. The recycled ink solvents comprise the primary press wash-up solvent used in our facilities. Since the solvent mix in the recycle is not static, it would be extremely difficult to determine the vapor pressure on an ongoing basis and there would be no way to be certain that the vapor pressure limit is being met. If we were precluded from using recycle solvent, the current recycle solvent would need to go for disposal and we would need to purchase solvent specifically for clean-up greatly adding to the cost and to waste disposal.

In addition, limitations on cleaning solvent vapor pressure would greatly complicate operation of in-line lamination stations. The primary solvent used in our laminating adhesives is ethyl acetate. Consequently ethyl acetate is used for adhesive clean-up because of its compatibility with the adhesive and its solvency of the adhesive solids. Ethyl acetate has a vapor pressure above 10 mm Hg which under the present proposal would preclude its use for in-line coating/lamination applications on presses.

Printpack requests that LDEQ revise the proposed RACT to be consistent with the work practice standards proposed by USEPA on page 14 of the CTG. LDEQ should only include work practice standards which will provide environmental benefits far in excess of a vapor pressure limits that would increase manufacturing costs, increase hazardous waste disposal volumes, promote a poor use of certain solvents and ultimately increase VOC emissions from cleaning operations.

Printpack appreciates the opportunity to comment on the proposed rule. Please let me know if you have any questions.

Thanks,

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Proposed Rule AQ296

courseware or software. Instructional Materials do not include electronic or computer hardware even if such hardware is bundled with software or other electronic media, nor does it include equipment or supplies.

* * *

Textbook—any medium or material (print or non-print), book, or electronic medium that constitutes the principal source for teaching and learning in a specified subject area. A textbook shall be a systematically organized core of stand alone instructional materials (which may be hardbound, softbound, electronic or other media) designed to support the teaching and learning of a curriculum based on the SBESE-approved Grade-Level Expectations or state curricular guides (e.g., home economics, foreign language, health, business education). These materials shall be limited to *instructional materials* (see definition herein).

* * *

AUTHORITY NOTE: Promulgated in accordance with Article VIII, Section 13(A) of 1984; R.S. 17:7(4); 8-8.1; 172; 351-353; 361-365; 415.1; 463.46.

HISTORICAL NOTE: Promulgated by the Board of Elementary and Secondary Education, LR 25:1436 (August 1999), repromulgated LR 26:992 (May 2000), amended LR 32:1030 (June 2006), LR 33:636 (April 2007), repromulgated LR 34:64 (January 2008), amended LR 35:

§311. Invitation Circular Letter

A. - G....

H. Any items designated as "free" by publishers must also be submitted on the appropriate "LT Submission" Form(s). Publishers may modify their free offerings by providing a written explanation and a detailed listing of items to be added to their original submission to the Department of Education within 60 days of the original due date. Any additions or offers of free materials or services made to local school systems verbally or in writing that are not included on forms submitted to the department will be considered a violation and may cause the publisher to be disqualified. All free items shall be *instructional materials* (see definitions in §301).

AUTHORITY NOTE: Promulgated in accordance with Article VIII, Section 13(A) of 1984; R.S. 17:7(4); 8-8.1; 172; 351-353; 361-365; 415.1; 463.46.

HISTORICAL NOTE: Promulgated by the Board of Elementary and Secondary Education, LR 25:1440 (August 1999), repromulgated LR 26:995 (May 2000), amended LR 29:124 (February 2003), LR 35:

Family Impact Statement

In accordance with Section 953 and 974 of Title 49 of the Louisiana Revised Statutes, there is hereby submitted a Family Impact Statement on the Rule proposed for adoption, repeal or amendment. All Family Impact Statements shall be kept on file in the State Board Office that has adopted, amended, or repealed a rule in accordance with the applicable provisions of the law relating to public records.

1. Will the proposed Rule affect the stability of the family? No

2. Will the proposed Rule affect the authority and rights of parents regarding the education and supervision of their children? No.

3. Will the proposed Rule effect the functioning of the family? No.

4. Will the proposed Rule effect family earnings and family budget? No.

5. Will the proposed Rule affect the behavior and personal responsibility of children? No.

6. Is the family or a local government able to perform the function as contained in the proposed Rule? Yes

Interested persons may submit written comments until 4:30 p.m., February 8, 2009, to Nina Ford, State Board of Elementary and Secondary Education, P. O. Box 94064, Capitol Station, Baton Rouge, LA 70804-9064.

Amy B. Westbrook, Ph.D.
Executive Director

FISCAL AND ECONOMIC IMPACT STATEMENT FOR ADMINISTRATIVE RULES
RULE TITLE: Bulletin 1794—State Textbook Adoption Policy and Procedure Manual

I. ESTIMATED IMPLEMENTATION COSTS (SAVINGS) TO STATE OR LOCAL GOVERNMENT UNITS (Summary)

The changes to the policy define certain terms, clarifies the state's role in preparing and storing electronic files, adds an appendix, and update the policy with technical changes. There will be no increase in costs for local governmental units. The estimated cost to the Department of Education for this rule change is $135 (for printing and postage).

II. ESTIMATED EFFECT ON REVENUE COLLECTIONS OF STATE OR LOCAL GOVERNMENTAL UNITS (Summary)

This rule change should have no significant effect on state or local revenue collections.

III. ESTIMATED COSTS AND/OR ECONOMIC BENEFITS TO DIRECTLY AFFECTED PERSONS OR NONGOVERNMENTAL GROUPS (Summary)

There is no measurable, anticipated cost or economic benefit to any person or non-governmental group.

IV. ESTIMATED EFFECT ON COMPETITION AND EMPLOYMENT (Summary)

There is no anticipated effect on competition or employment.

Beth Scioneaux	H. Gordon Monk
Deputy Superintendent	Legislative Fiscal Officer
0812#064	Legislative Fiscal Office

NOTICE OF INTENT

Department of Environmental Quality
Office of the Secretary
Legal Affairs Division

Control Technology Guidelines
(LAC 33:III.111, 2123, and 2143) (AQ296)

Under the authority of the Environmental Quality Act, R.S. 30:2001 et seq., and in accordance with the provisions of the Administrative Procedure Act, R.S. 49:950 et seq., the secretary gives notice that rulemaking procedures have been initiated to amend the Air regulations, LAC 33:III.111, 2123, and 2143 (Log #AQ296).

This Rule reflects changes made to the lithographic printing materials and letterpress printing materials Control Technology Guidelines (CTG) and the flexible package printing materials CTG that were published in the *Federal Register*, Volume 71, on October 5, 2006, pages 58745-58753. In addition, based on public comment, EPA

incorporated an option into the industrial cleaning solvents CTG. In the *Federal Register*, Volume 72, on October 9, 2007, pages 57215-57222, EPA made changes to the paper, film, and foil coatings CTG, and the metal furniture coatings and large appliance coatings CTG. The final CTG for paper, film, and foil coatings have been revised to provide separate applicability recommendations for coating operations and cleaning operations, and the final CTG for metal furniture coatings and large appliance coatings have been revised to reflect a lower volatile organic compound (VOC) content coatings recommendations. The Clean Air Act (CAA) Section 172(c)(1) provides that state implementation plans (SIPs) for nonattainment areas must include reasonably available control measures (RACM), including reasonably available control technology (RACT) for sources of emissions. CAA Section 182(b)(2)(A) provides that for certain nonattainment areas, states must revise their SIPs to include RACT for each category of VOC sources covered by a CTG document issued between November 15, 1990, and the date of attainment. EPA provides states with guidance concerning what types of controls could constitute RACT for a given source category through issuance of a CTG. States can follow the CTG and adopt state regulations to implement the recommendations contained therein, or they can adopt alternative approaches. The states must submit their RACT rules to EPA for review and approval as part of the SIP process. This rule amends the state air regulations to follow the CTG recommendations provided by EPA, which will then be included in the SIP to meet the requirements of the CAA. The basis and rationale for this rule are to meet the CAA requirements for SIP submittals. This proposed Rule meets an exception listed in R.S. 30:2019(D)(2) and R.S. 49:953(G)(3); therefore, no report regarding environmental/health benefits and social/economic costs is required.

Title 33
ENVIRONMENTAL QUALITY
Part III. Air

Chapter 1. General Provisions

§111. Definitions

A. When used in these rules and regulations, the following words and phrases shall have the meanings ascribed to them below.

* * *

Miscellaneous Metal Parts and Products Coating—the coating of miscellaneous metal parts and products in the following categories:

a. - f. ...

g. any other category of coated metal products except those on the specified list in LAC 33:III.2123.C.1-3, 5-7, and 10 of surface coating processes, which are included in the Standard Industrial Classification Code major group 33 (primary metal industries), major group 34 (fabricated metal products), major group 35 (nonelectrical machinery), major group 36 (electrical machinery), major group 37 (transportation equipment), major group 38 (miscellaneous instruments), and major group 39 (miscellaneous manufacturing industries).

* * *

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended LR 14:348 (June 1988), LR 15:1061 (December 1989), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 17:777 (August 1991), LR 21:1081 (October 1995), LR 22:1212 (December 1996), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2444 (November 2000), amended by the Office of the Secretary, Legal Affairs Division, LR 32:808 (May 2006), LR 32:1599 (September 2006), LR 33:2082 (October 2007), LR 34:70 (January 2008), LR 35:

Chapter 21. Control of Emission of Organic Compounds

Subchapter B. Organic Solvents

§2123. Organic Solvents

A. Except as provided in Subsections B and C of this Section, any emission source using organic solvents having an emission of organic solvents of more than 3 pounds (1.3 kilograms) per hour or 15 pounds (6.8 kilograms) per day shall reduce the emission, where feasible, by incorporating one or more of the following control methods:

1. incineration, provided 90 percent of the carbon in the organic compounds being incinerated is oxidized to carbon dioxide (except as provided in Subsection D of this Section);

2. carbon adsorption, with a control efficiency of at least 90 percent, of the organic compounds;

3. any other equivalent means as may be approved by the administrative authority. Once a source exceeds the emission cutoff specified in this Section that source shall be subject and shall remain subject to the requirements of this Subsection regardless of future emission rates.

B. Soldering operations, painting and coating operations not listed in Subsection C of this Section, and dry cleaning operations using organic solvents that are not considered photochemically reactive shall be considered for exemption from the requirements of this Section.

1. - 2. ...

C. Surface Coating Industries. No person may cause, suffer, allow, or permit volatile organic compound (VOC) emissions from the surface coating of any materials affected by this Subsection to exceed the emission limits as specified in this Section.

	Daily Weighted Average VOC Emission Limitation	
Affected Facility	Lbs. per Gal. of Coating as applied (minus water and exempt solvent)	Kgs. per Liter of Coating as applied (minus water and exempt solvent)
1. Large Appliance Coating Industry		
General, One Component (Baked/Air Dried)	2.3 / 2.3	0.275 / 0.275
General, Multi-Component (Baked/Air Dried)	2.3 / 2.8	0.275 / 0.340
Extreme High Gloss (Baked/Air Dried)	3.0 / 2.8	0.360 / 0.340
Extreme Performance (Baked/Air Dried)	3.0 / 3.5	0.360 / 0.420
Heat Resistant (Baked/Air Dried)	3.0 / 3.5	0.360 / 0.420
Metallic (Baked/Air Dried)	3.5 / 3.5	0.420 / 0.420
Pretreatment Coatings (Baked/Air Dried)	3.5 / 3.5	0.420 / 0.420
Solar Absorbent (Baked/Air Dried)	3.0 / 3.5	0.360 / 0.420

Affected Facility	Daily Weighted Average VOC Emission Limitation	
	Lbs. per Gal. of Coating as applied (minus water and exempt solvent)	Kgs. per Liter of Coating as applied (minus water and exempt solvent)
2. Surface Coating of Cans		
Sheet Basecoat (exterior and interior) and over-varnish: Two-piece can exterior (basecoat and over-varnish)	2.8	0.34
Two and three-piece can interior body spray, two-piece can exterior end (spray or roll coat)	4.2	0.51
Three-piece can side-seam spray	5.5	0.66
End sealing compound	3.7	0.44
3. Surface Coating of Coils		
Prime and topcoat or single coat operation	2.6	0.31
4. Surface Coating of Fabrics		
Fabric Facility	2.9	0.35
Vinyl Coating Line (except Plasticol coatings)	3.8	0.45
5. Surface Coating of Assembly Line Automobiles and Light Duty Trucks		
Prime application, flashoff area and oven (determined on a monthly basis)	1.2	0.14
Primer surface application flashoff area and oven	2.8	0.34
Topcoat application, flashoff area and oven	2.8	0.34
Final repair application, flashoff area and oven	4.8	0.58
As an alternative to the emission limitation of 2.8 pounds of VOC per gallon of coating applied for the primer surfacer and/or topcoat application, compliance with these emission limitations may be demonstrated by meeting a standard of 15.1 pounds of VOC per gallon of solids deposited.		
6. Surface Coating–Magnet Wire Coating		
Coating Line	1.7	0.20
7. Surface Coating of Metal Furniture		
General, One Component (Baked/Air Dried)	2.3 / 2.3	0.275 / 0.275
General, Multi-Component (Baked/Air Dried)	2.3 / 2.8	0.275 / 0.340
Extreme High Gloss (Baked/Air Dried)	3.0 / 2.8	0.360 / 0.340
Extreme Performance (Baked/Air Dried)	3.0 / 3.5	0.360 / 0.420
Heat Resistant (Baked/Air Dried)	3.0 / 3.5	0.360 / 0.420
Metallic (Baked/Air Dried)	3.5 / 3.5	0.420 / 0.420
Pretreatment Coatings (Baked/Air Dried)	3.5 / 3.5	0.420 / 0.420
Solar Absorbent (Baked/Air Dried)	3.0 / 3.5	0.360 / 0.420
8. Surface Coating of Miscellaneous Metal Parts and Products		
Clear Coat	4.3	0.52
Air or force air dried items (not oven dried)	3.5	0.42
Frequent color change and/or large numbers of colors applied, or first coat on untreated ferrous substrate	3.0	0.36
Outdoor or harsh exposure or extreme performance characteristics	3.5	0.42
No or infrequent color change, or small number of colors applied:		
a. Powder Coating	0.4	0.05
b. Other	3.0	0.36
These limits do not apply to operations covered in 1-7 or 10 herein or exterior coating of fully assembled aircraft, auto refinishing, and auto customizing topcoating (processing less than 35 vehicles per day).		

Affected Facility	Daily Weighted Average VOC Emission Limitation	
	Lbs. per Gal. of Coating as applied (minus water and exempt solvent)	Kgs. per Liter of Coating as applied (minus water and exempt solvent)
9. Factory Surface Coating of Flat Wood Paneling with VOC Emissions Greater Than 15 Pounds Per Day Before Controls		
All Inks, Coatings, and Adhesives	2.1	0.25
10. Surface Coating for Marine Vessels and Oilfield Tubulars and Ancillary Oilfield Equipment		
a. Except as otherwise provided in this Section, a person shall not apply a marine coating with a VOC content in excess of the following limits:		
Baked Coatings	3.5	0.42
Air-Dried Single-Component Alkyd or Vinyl Flat or Semi Gloss Finish Coatings	3.5	0.42
Two Component Coatings	3.5	0.42
b. Except for the parishes of Ascension, Calcasieu, East Baton Rouge, Iberville, Livingston, Pointe Coupee, and West Baton Rouge, in which the VOC limitations in Subparagraph C.10.a of this Section may not be exceeded, specialty marine coatings and coatings on oilfield tubulars and ancillary oilfield equipment with a VOC content not in excess of the following limits may be applied:		
Heat Resistant	3.5	0.42
Metallic Heat Resistant	4.42	0.53
High Temperature (Fed. Spec. TT-P-28)	5.41	0.65
Pre-Treatment Wash Primer	6.5	0.78
Underwater Weapon	3.5	0.42
Elastomeric Adhesives With 15 Percent Weight Natural or Synthetic Rubber	6.08	0.73
Solvent-Based Inorganic Zinc Primer	5.41	0.65
Pre-Construction and Interior Primer	3.5	0.42
Exterior Epoxy Primer	3.5	0.42
Navigational Aids	3.5	0.42
Sealant for Wire-Sprayed Aluminum	5.4	0.648
Special Marking	4.08	0.49
Tack Coat (Epoxies)	5.08	0.61
Low Activation Interior Coating	4.08	0.49
Repair and Maintenance Thermoplastic	5.41	0.65
Extreme High Gloss Coating	4.08	0.49
Antenna Coating	4.42	0.53
Antifoulant	3.66	0.44
High Gloss Alkyd	3.5	0.42
Anchor Chain Asphalt Varnish (Fed. Spec. TT-V-51)	5.2	0.62
Wood Spar Varnish (Fed. Spec. TT-V-119)	4.1	0.492
Dull Black Finish Coating (DOD-P-15146)	3.7	0.444
Tank Coatings (DOD-P-23236)	3.5	0.42
Potable Water Tank Coating (DOD-P-23236)	3.7	0.444
Flight Deck Markings (DOD-C-24667)	4.2	0.504
Vinyl Acrylic Top Coats	5.4	0.648
Antifoulant Applied to Aluminum Hulls	4.5	0.55
11. Paper, Film, Foil, Pressure Sensitive Tape, and Label Surface Coating	Daily Weighted Average VOC Emission Limitation	
	kg VOC/kg Solids (lb VOC/lb Solids)	kg VOC/kg Coating (lb VOC/lb Coating)
Paper, Film, and Foil	0.40	0.08
Pressure Sensitive Tape and Label	0.20	0.067

D. Control Techniques

1. If add-on controls such as incinerators or vapor recovery systems are used to comply with the emission limitation requirements, in terms of pounds per gallon of solids as applied (determined in accordance with Paragraph D.8 of this Section), the volatile organic compound capture and abatement system shall be at least 80 percent efficient overall (90 percent for factory surface coating of flat wood paneling). All surface coating facilities shall submit to the Office of Environmental Services, for approval, design data for each capture system and emission control device that is proposed for use. The effectiveness of the capture system (i.e., capture efficiency) shall be determined using the procedure specified in Paragraph E.6 of this Section.

2. If a person wishes to use low solvent technology to meet any of the emission limits specified in Subsection C of this Section and if the technology to be used for any particular application is not now proven but is expected to be proven in a reasonable length of time, he may request a compliance date extension from the administrative authority*. Compliance date extensions will require progress reports every 90 days, or as directed, to show reasonable progress, as determined by the administrative authority, toward technology to meet the specified emission limitation.

3. ...

4. Compliance with the alternative emission limit established in Paragraph C.5 of this Section of 15.1 pounds of VOC per gallon of solids deposited shall be determined in accordance with EPA's "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light Duty Truck Topcoat Operations", EPA 450/3-88-018, December, 1988.

5. ...

6. Surface coating facilities on any property in Ascension, Calcasieu, East Baton Rouge, Iberville, Livingston, Pointe Coupee, and West Baton Rouge parishes that when controlled have a potential to emit, at maximum production, a combined weight (total from the property) of VOCs less than 10 tons in any consecutive 12 calendar months are exempt from the provisions of Subsection C of this Section. Surface coating facilities on any property in parishes other than Ascension, Calcasieu, East Baton Rouge, Iberville, Livingston, Pointe Coupee, and West Baton Rouge that when uncontrolled have a potential to emit a combined weight of VOCs less than 100 pounds (45 kilograms) in any consecutive 24-hour period are exempt from the provisions of Subsection C of this Section. Any surface coating facility with VOC emissions of less than or equal to 15 pounds (6.8 kilograms) per day is exempt from the provisions of Paragraphs C.1, 8, and 11 of this Section.

7. Soldering and surface coating facilities or portions thereof, may request from the administrative authority* exemption from the requirements of Subsection C of this Section if all of the following conditions are met:

7.a. - 9....

E. Testing. Compliance with Subsections A, C, and D of this Section shall be determined by applying the following test methods, as appropriate.

1. - 7. ...

F. Recordkeeping. The owner/operator of any surface coating facility shall maintain records at the facility to verify compliance with or exemption from this Section. The records shall be maintained for at least two years and shall include, but not be limited to, the following:

1. records of any testing done in accordance with Subsection E of this Section;

2. records of the installation and maintenance of monitors to accurately measure and record operational parameters of all required control devices as necessary to ensure the proper functioning of those devices in accordance with the design specifications, including but not limited to:

2.a. - 4....

G. Mandatory Work Practices for Surface Coating of Flat Wood Paneling. The owner/operator of any facility performing factory surface coating of flat wood paneling shall comply with the following mandatory work practices:

1. store all VOC coatings, thinners, and cleaning materials in closed containers;

2. minimize spills and clean up spills immediately;

3. convey any coatings, thinners, and cleaning material in closed containers or pipes; and

4. close mixing vessels containing VOC coatings and other material except when specifically in use.

H. Definitions

Air Dried Coating—any coating that is cured at a temperature below 90°C (194°F).

Baked Coating—any coating that is cured at a temperature at or above 90°C (194°F).

Extreme High Gloss Coating—any coating that achieves at least 95 percent reflectance on a 60° meter when tested by ASTM Method D-523.

Heat Resistant Coating—any coating that during normal use must withstand temperatures of at least 204°C (400°F).

High Gloss Coating—any coating that achieves at least 85 percent reflectance on a 60° meter when tested by ASTM Method D-523.

High Temperature Coating—any coating that must withstand temperatures of at least 426°C (800°F).

Marine Coating—any coating, except unsaturated polyester resin (fiberglass) coatings, containing volatile organic materials and applied by brush, spray, roller, or other means to ships, boats, and their appurtenances, and to buoys and oil drilling rigs intended for the marine environment.

Metallic Heat Resistant Coating—any coating that contains more than 5 grams of metal particles per liter as applied and that must withstand temperatures over 80°C (175°F).

Repair and Maintenance Thermoplastic Coating—a resin-bearing coating in which the resin becomes pliable with the application of heat, such as vinyl, chlorinated rubber, or bituminous coatings.

I. Timing. A facility that has become subject to this regulation as a result of a revision of the regulation shall comply with the requirements of this Section as soon as practicable, but in no event later than one year from promulgation of the regulation revision.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended LR 16:119 (February 1990), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 17:654 (July 1991), LR 18:1122 (October 1992), LR 22:340 (May 1996), LR 22:1212 (December 1996), LR 23:1678 (December 1997), LR 24:23

(January 1998), LR 24:1285 (July 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 25:1240 (July 1999), LR 26:2453 (November 2000), LR 28:1765 (August 2002), LR 30:746 (April 2004), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2440 (October 2005), LR 33:2086 (October 2007), LR 35:

Subchapter H. Graphic Arts

§2143. Graphic Arts (Printing) by Rotogravure, Flexographic, Offset Lithographic, Letterpress, and Flexible Package Printing Processes

A. Control Requirements

1. After [INSERT DATE ONE YEAR AFTER PROMULGATION], no person shall operate or allow the operation of a packaging rotogravure, publication rotogravure, or flexographic printing facility having a potential to emit 25 TPY or more of VOC in the parishes of Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge; having a potential to emit 50 TPY or more of VOC in the parishes of Calcasieu and Pointe Coupee; or having a potential to emit 100 TPY or more of VOC in any other parish, unless VOC emissions are controlled by one of the methods in Subparagraphs A.1.a-d of this Section. This requirement applies to affected machines on which both surface coating and printing operations are performed. Line-by-line compliance with these emission limits or control requirements is required. Any cross-line averaging or bubbling must receive approval from the administrative authority*. Once a facility is subject to the provisions of this Section, it remains so regardless of future variations in production.

a. The solvent fraction of ink, as it is applied to the substrate, less exempt solvent, shall contain 25 volume percent or less of organic solvent and 75 volume percent or more of water. Also acceptable as an alternative limit is ink containing no more than 0.5 pounds of volatile organic compounds per pound of solids. Exempt solvents are those compounds listed in LAC 33:III.2117.

b. A volatile organic compound adsorption or incineration system shall have at least 95 percent (by weight) control efficiency across the control device, which can be demonstrated to have an overall capture and abatement reduction of at least 85 percent.

c. The ink as it is applied to the substrate, less water and exempt solvent, shall contain 60 percent by volume or more of nonvolatile material.

d. Another control method approved by the administrative authority* may be employed.

2. After [INSERT DATE ONE YEAR AFTER PROMULGATION], no person shall operate or allow the operation of a flexible package printing facility having a potential to emit 25 TPY or more of VOC in the parishes of Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge; having a potential to emit 50 TPY or more of VOC in the parishes of Calcasieu and Pointe Coupee; or having a potential to emit 100 TPY or more of VOC in any other parish, unless VOC emissions are controlled to the applicable control efficiency specified in Subparagraphs A.2.a-d or e of this Section. Once a piece of equipment is subject to the provisions of this Section, it remains so regardless of future variations in production or transfers to different locations.

a. A press that was first installed prior to March 14, 1995, and that is controlled by an add-on air pollution control device (APCD) whose first installation was prior to December 20, 1987, shall have 65 percent control efficiency.

b. A press that was first installed prior to March 14, 1995, and that is controlled by an add-on APCD whose first installation was on or after December 20, 1987, shall have 70 percent control efficiency.

c. A press that was first installed on or after March 14, 1995, and that is controlled by an APCD whose first installation was prior to December 20, 1987, shall have 75 percent control efficiency.

d. A press that was first installed on or after March 14, 1995, and that is controlled by an add-on APCD whose first installation was on or after December 20, 1987, shall have 80 percent control efficiency.

e. As an alternative to Subparagraph A.2.a, b, c, or d, a facility shall meet the average VOC content limit on a single press of 0.8 kg VOC/kg solids applied or 0.16 kg VOC/kg materials applied.

3. After [INSERT DATE ONE YEAR AFTER PROMULGATION], no person shall operate or allow the operation of an offset lithographic or letterpress printing facility having a potential to emit 25 TPY or more of VOC in the parish of Ascension, East Baton Rouge, Iberville, Livingston, or West Baton Rouge; having a potential to emit 50 TPY or more of VOC in the parish of Calcasieu or Pointe Coupee; or having a potential to emit 100 TPY or more of VOC in any other parish, unless VOC emissions are controlled by one of the methods in Subparagraphs A.3.a-c of this Section. Once a facility is subject to the provisions of this Section, it remains so regardless of future variations in production. Determination of potential to emit, for the purposes of applicability, shall be made without respect to any VOC control device.

a. Control for heatset web offset lithographic processes, letterpress dryers, and the volatilization of inks in a letterpress dryer shall be accomplished by:

i. a control device with at least 90 percent control efficiency for control devices installed prior to [INSERT DATE OF PROMULGATION]. The installation date does not change if the control device is later used to control a new or different press;

ii a control device with at least 95 percent control efficiency for control devices installed on or after [INSERT DATE OF PROMULGATION]; or

iii a control device that limits the control device outlet concentration to 20 ppmv or less as hexane on a dry basis.

b. Control for offset lithographic fountain solution processes emitting more than 15 pounds per day shall be accomplished as follows:

i. heatset printing—limit the amount of alcohol by weight to 1.6 percent or less;

ii. sheet-fed printing—limit the amount of alcohol by weight to 5 percent or less. Sheet-fed presses with sheet size of 11 x 17 inches or smaller or any press with a total fountain solution reservoir of less than 1 gallon are exempt;

iii. coldset printing—limit the amount of alcohol by weight to 5 percent or less as applied.

c. Another control method approved by the administrative authority* may be employed.

4. Control for cleaning materials for those facilities where actual emissions from lithographic and letterpress

printing operations are greater than 15 pounds per day (before consideration of controls) shall be accomplished by one of the following methods.

a. Cleaning materials shall contain a VOC composite with a vapor pressure of less than 10 mm Hg (0.19 psi) at 20°C or contain less than 70 percent VOC by weight.

b. Cleaning materials and used shop towels shall be kept in closed containers except when actually in use.

c. For blanket washing, roller washing, plate cleaners, metering roller cleaners, impression cylinder cleaners, rubber rejuvenators, and other cleaners used for cleaning a press or press parts, or to remove dried ink around a press, any amount greater than 110 gallons of cleaning materials per year shall meet either the low VOC composite vapor pressure requirement or the lower VOC requirement.

5. Control for cleaning materials for those facilities where actual emissions from flexible package printing operations are greater than 15 pounds per day (before consideration of controls) shall be accomplished by one of the following methods.

a. Cleaning materials and used shop towels shall be kept in closed containers except when actually in use.

b. Cleaning materials shall be conveyed from one location to another in closed containers or pipes.

6. Control for cleaning materials for those facilities where actual emissions from printing operations are greater than 15 pounds per day (before consideration of controls) shall be accomplished by one of the following methods.

a. Cleaning materials and used shop towels shall be kept in closed containers except when actually in use.

b. For blanket washing, roller washing, plate cleaners, metering roller cleaners, impression cylinder cleaners, rubber rejuvenators, and other cleaners used for cleaning a press or press parts, or to remove dried ink around a press, any amount greater than 110 gallons of cleaning materials per year shall meet either the low VOC composite vapor pressure requirement or the lower VOC requirement.

B. Exemptions

1. For those facilities where actual emissions from packaging rotogravure and publication rotogravure printing operations are greater than 15 pounds per day (before consideration of controls) and where the potential to emit is less than 25 TPY of VOC on a per press basis before controls, only the cleaning materials control requirements in Paragraph A.6 of this Section are applicable.

2. The following equipment or processes are exempt from meeting the requirements of Paragraph A.6 of this Section:

a. heatset web offset lithographic printing operations and heatset web letterpress printing operations with the potential to emit from the dryer, prior to controls, an amount equal to or less than 25 tons VOC (petroleum ink oil) per year, provided that an enforceable limit on potential emissions is obtained to keep an individual heatset press below the 25 TPY potential to emit threshold;

b. heatset presses used for book printing and presses with a maximum web width of less than or equal to 22 inches; and

c. operations with emissions from sheet-fed or coldset webinks, sheet-fed or coldset varnishes, waterborne coatings, and radiation cured materials.

C. - E. ...

F. Operating, Monitoring, and Maintenance Procedures. Operating, monitoring, and maintenance procedures for the facilities and equipment subject to the requirements of this Section shall be incorporated into the housekeeping plan required by LAC 33:III.2113.A.4.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 16:964 (November 1990), LR 18:1123 (October 1992), LR 22:1212 (December 1996), LR 24:25 (January 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 25:1796 (October 1999), LR 28:1765 (August 2002), LR 30:746 (April 2004), amended by the Office of the Secretary, Legal Affairs Division, LR 34:1892 (September 2008), LR 35:

Family Impact Statement

This proposed rule has no known impact on family formation, stability, and autonomy as described in R.S. 49:972.

A public hearing will be held on January 27, 2009, at 1:30 p.m. in the Galvez Building, Oliver Pollock Conference Room, 602 N. Fifth Street, Baton Rouge, LA 70802. The hearing will also be for the revision to the State Implementation Plan (SIP) to incorporate this proposed Rule. Interested persons are invited to attend and submit oral comments on the proposed amendments. Should individuals with a disability need an accommodation in order to participate, contact Christopher A. Ratcliff at the address given below or at (225) 219-3471. Two hours of free parking are allowed in the Galvez Garage with a validated parking ticket.

All interested persons are invited to submit written comments on the proposed regulation. Persons commenting should reference this proposed regulation by AQ296. Such comments must be received no later than February 3, 2009, at 4:30 p.m., and should be sent to Christopher A. Ratcliff, Attorney Supervisor, Office of the Secretary, Legal Affairs Division, Box 4302, Baton Rouge, LA 70821-4302 or to fax (225) 219-3398 or by e-mail to chris.ratcliff@la.gov. Copies of this proposed regulation can be purchased by contacting the DEQ Public Records Center at (225) 219-3168. Check or money order is required in advance for each copy of AQ296. This regulation is available on the Internet at www.deq.louisiana.gov/portal/tabid/1669/default.aspx.

This proposed regulation is available for inspection at the following DEQ office locations from 8 a.m. until 4:30 p.m.: 602 N. Fifth Street, Baton Rouge, LA 70802; 1823 Highway 546, West Monroe, LA 71292; State Office Building, 1525 Fairfield Avenue, Shreveport, LA 71101; 1301 Gadwall Street, Lake Charles, LA 70615; 111 New Center Drive, Lafayette, LA 70508; 110 Barataria Street, Lockport, LA 70374; 645 N. Lotus Drive, Suite C, Mandeville, LA 70471.

Herman Robinson, CPM
Executive Counsel

FISCAL AND ECONOMIC IMPACT STATEMENT FOR ADMINISTRATIVE RULES
RULE TITLE: Control Technology Guidelines

I. ESTIMATED IMPLEMENTATION COSTS (SAVINGS) TO STATE OR LOCAL GOVERNMENT UNITS (Summary)

There are no expected implementation costs or savings to state or local governmental units from the proposed rule.

II. ESTIMATED EFFECT ON REVENUE COLLECTIONS OF STATE OR LOCAL GOVERNMENTAL UNITS (Summary)

No effect on revenue collections of state or local governmental units is expected as a result of the proposed rule.

III. ESTIMATED COSTS AND/OR ECONOMIC BENEFITS TO DIRECTLY AFFECTED PERSONS OR NONGOVERNMENTAL GROUPS (Summary)

Based on the comments received from the Advanced Notice of Rulemaking, there are minimal estimated costs or economic benefits to directly affected persons or non-governmental groups from the proposed rule. The proposed changes, which are consistent with Control Technology Guideline recommendations provided by EPA and which will be included in the State Implementation Plan to meet federal Clean Air Act requirements, are primarily incremental and are not anticipated to result in a significant impact to industry.

IV. ESTIMATED EFFECT ON COMPETITION AND EMPLOYMENT (Summary)

There is no estimated effect on competition or employment by the proposed rule.

Herman Robinson, CPM	H. Gordon Monk
Executive Counsel	Legislative Fiscal Officer
0812#071	Legislative Fiscal Office

NOTICE OF INTENT

Department of Environmental Quality
Office of the Secretary
Legal Affairs Division

Statutory Exemption for Air Permits
(LAC 33:III.501) (AQ270)

Under the authority of the Environmental Quality Act, R.S. 30:2001 et seq., and in accordance with the provisions of the Administrative Procedure Act, R.S. 49:950 et seq., the secretary gives notice that rulemaking procedures have been initiated to amend the Air regulations, LAC 33:III.501 (Log #AQ270).

Act 547 of the 2008 Regular Session of the Louisiana Legislature provides for exemptions from permitting requirements for certain air emissions sources by enacting R.S. 30:2054(B)(2)(b)(ix). The exemption applies to any source for which facility-wide potential emissions are less than 5 tons per year for each of any regulated air pollutant as defined by the Clean Air Act, 42 U.S.C. 7401 et seq., less than 15 tons per year emitted of all such defined pollutants combined, and less than the minimum emission rate for each toxic air pollutant established pursuant to R.S. 30:2060, unless such source is required to obtain a permit pursuant to the Clean Air Act, 42 U.S.C. 7661 et seq. The Statute also states, "For purposes of this Item, "potential emissions" shall mean the emissions the facility is capable of emitting considering all control measures in place, utilized and properly maintained and historical practices, including hours of operation and number of employees at the facility." This Rule will add the statutory exemption to the air quality regulations (LAC 33:III). The basis and rationale for this proposed rule are to add the statutory exemption from the requirement to obtain an air permit to the air quality regulations. This proposed Rule meets an exception listed in R.S. 30:2019(D)(2) and R.S. 49:953(G)(3); therefore, no report regarding environmental/health benefits and social/economic costs is required.

Title 33
ENVIRONMENTAL QUALITY
Part III. Air

Chapter 5. Permit Procedures

§501. Scope and Applicability

A. - B.1.d. ...

2. Statutory Exemptions. The requirement to obtain a permit in accordance with this Chapter does not apply to:

a. ...

b. controlled burning of agricultural by-products in the field or of cotton gin agricultural wastes;

c. controlled burning in connection with timber stand management, or of pastureland or marshland in connection with trapping or livestock production; or

d. any source that is not a *Part 70 source*, as defined in LAC 33:III.502, and for which:

i. facility-wide potential emissions are less than:

(a). 5 tons per year for each of any regulated air pollutant as defined by the Clean Air Act;

(b). 15 tons per year of all such defined pollutants combined; and

(c). the minimum emission rate (MER) for each toxic air pollutant established by Tables 51.1 and 51.3 of LAC 33:III.Chapter 51; and

ii. for purposes of this exemption, any physical limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment, shall be treated as part of its design.

B.3. - C.13. ...

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2011 and 2054.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 16:613 (July 1990), LR 17:478 (May 1991), LR 19:1420 (November 1993), LR 20:1281 (November 1994), LR 20:1375 (December 1994), LR 23:1677 (December 1997), amended by the Office of the Secretary, LR 25:660 (April 1999), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2445 (November 2000), LR 28:997 (May 2002), amended by the Office of Environmental Assessment, LR 31:1063 (May 2005), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2436 (October 2005), LR 32:1842 (October 2006), LR 33:2082 (October 2007), LR 33:2626 (December 2007), LR 35:

Family Impact Statement

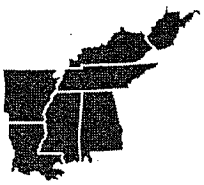
This proposed Rule has no known impact on family formation, stability, and autonomy as described in R.S. 49:972.

A public hearing will be held on January 27, 2009, at 1:30 p.m. in the Galvez Building, Oliver Pollock Conference Room, 602 N. Fifth Street, Baton Rouge, LA 70802. Interested persons are invited to attend and submit oral comments on the proposed amendments. Should individuals

Public Comments on Proposed Rule AQ296

pias

printing
industry
association
of the
south



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February 6, 2009

Mr. Christopher Ratcliff
Attorney Supervisor
Office of the Secretary, Legal Affairs Division
Box 4302
Baton Rouge, Louisiana 70821-4302

Re: Proposed regulation AQ296

Dear Mr. Ratcliff:

The Printing Industry Association of the South (PIAS) thanks you for the opportunity to review and comment on the Louisiana Department of Environmental Quality's (DEQ) proposed amendments to Part III, Sections 111, 2123, and 2143 (Log #AQ296) of the Louisiana Administrative Code (LAC), specifically the proposed amendments regarding the application of reasonably available control technology (RACT) in the offset lithography industry. PIAS appreciates your willingness to work with the printing industry in developing these amendments.

To assist the DEQ in its review of the comments below we have enclosed a marked-up version of the draft rule that contains our suggested revisions to the proposed amendments. The enclosed marked-up version of the draft rule shows insertions to the regulatory language in underline, deletions in ~~strikethrough~~.

As background, PIAS represents the printing and publishing industry (SIC 2700 and various NAICS 323 codes) across a seven state region, including those printers in Louisiana the proposed amendments would affect. PIAS currently has 51 members in Louisiana and there are approximately 340 companies employing about 8,700 workers engaged in offset lithographic printing in Louisiana. As reported in the 2008 Print Market Atlas, the value of goods shipped for the industry in these metropolitan areas is approximately $1.55 billion. Over 79% of printers in Louisiana employ less than 20 employees. Printing is a prime example of small businesses involved in manufacturing.

Overall, PIAS supports the DEQ in its use of the U.S. Environmental Protection Agency's (USEPA) 2006 *Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing* (hereafter referred to as the *CTG for Offset Lithographic Printing*) as the basis for

developing RACT requirements for the commercial offset lithographic printing industry. PIAS, however, is concerned with several requirements the draft regulation establishes and that many critical elements contained in the *CTG for Offset Lithographic Printing* providing guidance on compliance demonstration were not included in the proposed amendments. While the DEQ's Notice of Intent relating to the RACT amendments acknowledges the USEPA's *CTG for Offset Lithographic Printing* is the basis for the proposed regulatory amendments, the DEQ is proposing standards that deviate from and are more stringent than what the USEPA *CTG for Offset Lithography* identifies as reasonable. PIAS is also concerned regarding the regulatory status of inks, coatings, and varnishes that are applied in-line during the lithographic printing process as outlined in Title 33, Chapter 21, Subchapter B of the LAC.

Specifically, PIAS has the following concerns regarding the DEQ's amendments to Part III, Sections 111, 2123, and 2143:

- **Applicability Thresholds** – The proposed amendments create different daily and annual emissions-based applicability criteria that need to be clarified and consistently expressed in terms of tons per year (tpy), not pounds per day (lbs/day). In addition, the proposed amendments create confusing and overlapping requirements that are based on varying applicability thresholds.

- **Exemptions** – The proposed exemptions in Section 2143(A) and (B) need to be streamlined and revised to be consistent with the USEPA's *CTG for Offset Lithographic Printing*.

- **Economic Analysis** – The DEQ does not present an economic impact analysis that supports the assertion that the proposed amendments are reasonable. The DEQ cannot fully understand the cost-benefit impact of the draft rule without performing a new, complete economic impact analysis.

- **Control Requirements for Heatset Web Offset Lithographic Presses** – The volatile organic compound (VOC) control system requirements for this section need to include the requirement that the dryer pressure be maintained lower than the surrounding pressroom air to ensure proper capture efficiency and that the control device destruction efficiency testing allow for the exclusion of exempt VOC compounds.

- **Fountain Solution Emissions Limitations for Lithographic Printing Presses** – The proposed fountain solution control requirements for lithographic printing presses need to be revised to permit the use of higher VOC contents in conjunction with refrigeration when alcohol is used and the ability to use alcohol substitutes in fountain solutions.

- **Cleaning Material Control Requirements for Lithographic Printing Presses** – The cleaning material VOC control and composite partial vapor pressure control requirements for subject lithographic printing presses need to be clearly expresses as as-applied limits.

- **Industrial Organic Solvent Exemption** – LAC Title 33:III:2123 needs to be clarified and revised to exempt lithographic printing from the DEQ's organic solvents rule.

- **Compliance Test Methods** – The draft rule's VOC compliance test methods need greater flexibility for the use of a batch calculation for both alcohol- and non-alcohol-based fountain solutions and the use of supplier data for non-diluted fountain and

cleaning solutions. The test methods for add on controls also needs to allow use of EPA Methods 18 and 25A for gaseous VOC concentrations.

- **Monitoring and Recordkeeping Requirements** – The proposed amendments need to include reasonable fountain solution and cleaning solvent monitoring and recordkeeping requirements that minimize the economic burden associated with the requirements while maintaining assurance that the requirements in the rule are being met.

- **Emission Calculations** – The draft rule does not address key emission and retention factors that are specific to the lithographic printing industry and are necessary to perform accurate emission determinations.

- **Definitions** – Several of the proposed definitions need clarification and some additional definitions need to be added to the regulation.

Applicability Thresholds

The DEQ's proposed amendments create three separate and distinct LAC sections within Subchapter H that establish different daily and annual VOC emissions-based applicability criteria for the control of VOC emissions from heatset web offset lithographic processes, lithographic fountain solution processes, and cleaning materials at lithographic printing facilities. The differences in proposed applicability criteria are unclear and require revision to be less confusing and provide consistency with the USEPA's *CTG for Offset Lithographic Printing*.

1. Proposed section 2143(A)(3) contains a 25 tpy applicability threshold for ozone non-attainment areas that is based on the facility-wide potential to emit; facilities emitting more than 25 tpy are required to control VOC emissions by one of the methods outlined in sections 2143(A)(3)(a –c), which list both heatset web offset add-on and lithographic fountain solution control options. The DEQ's proposed amendments are not clear if this 25 tpy applicability threshold applies just to the implementation of heatset web offset process controls, lithographic fountain solution process controls, or both.

   In addition, the applicability threshold for heatset web add-on control requirements needs to be stated in terms of VOC petroleum ink oil emissions. On Page 14 the USEPA's *CTG for Offset Lithographic Printing* clearly states:

   > "As explained above in section III, we recommend [controls for] individual heatset web offset lithographic printing presses with potential to emit from the dryer, prior to controls, of at least 25 tpy of VOC (petroleum ink oil) . . . We recommend providing printers with the option of using an enforceable limitation on potential emissions to keep an individual heatset press below this 25 tpy potential to emit threshold. This equates to using inks and coatings which contain less than 31.25 tpy VOC (petroleum ink oil) because of the 20 percent ink oil retention. We also recommend excluding heatset presses used for book printing and excluding heatset presses with maximum web width of 22 inches or less from the add-on control recommendations. We believe that control of a press that is above the 25 tpy threshold will generally be cost effective. Control of a press that is below the 25 tpy threshold, presses used for book printing, and presses with maximum web width of 22 inches or less will generally not be cost effective."

   The *CTG for Offset Lithographic Printing* specifically uses ink oil emissions since these emissions are the predominant VOC found in the stack from heatset web press dryers. In

addition, to avoid the confusion associated with determining the potential emissions from a printing press, the proposed limit for this rule should use a threshold based on actual emissions. The use of actual emissions provides better certainty as to the applicability of the regulation.

The USEPA also recognizes the uncertainty in determining potential emissions from printing operations. As the USEPA describes in its Technical Support Document (TSD) for Title V Permitting of Printing Operations (www.epa.gov/ttn/oarpg/t5/memoranda/tsd.pdf), potential to emit (PTE) calculations for printing presses require many assumptions, and there is no straight forward way to determine potential emissions from printing presses.

Section 2.1.1 of the TSD states:

> "Calculating PTE for printing operations is not as straightforward as for sources that can document maximum throughput capacities, (e.g., a boiler). Applying the EIIP approach to calculating existing emissions requires the use of data on actual usage rates for individual materials with known VOC/HAP contents. To calculate PTE, we recommend that you use conservative assumptions to project maximum material usage rates and VOC/HAP content for the PTE material balance. PTE represents the "maximum capacity of a stationary source to emit under its physical and operational design. Any physical or operational limitation on the source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation, or on the type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the (EPA) Administrator" [see 40 CFR §§ 52.21(b)(4), 51.165(a)(1)(iii), and 51.166(b)(4) see also 40 CFR § 63.2]. Stated differently, the PTE calculation should reflect the maximum hourly usage rate times the worst-case VOC/ HAP content times the maximum feasible hours of operation. The PTE would be reduced after consideration of any enforceable limits on emissions, such as hours of operation and material throughput. The maximum hours of operation, unless limited by permit, should be based on round-the-clock press operation (8,760 hours/year), less time required for makeready/setup as determined by a documented, conservative review of historical data for the facility. As discussed below, there may be ways to constrain PTE reasonably through certain types of permit conditions. "

Given the multitude of variations and assumptions that need to be made to determine PTEs for presses, basing the threshold on actual emissions allows for a much easier and more predictable determination of applicability.

2. Proposed section 2143(A)(3)(b) contains a 15 lb/day applicability threshold for lithographic fountain solution processes, however, the fountain solution controls listed under section (3)(b) are identified as a control options under Section 2143(A)(3) for facilities with the potential to emit more than 25 tpy (see comment 1 above). Thus it is not clear if the operative applicability threshold for the DEQ's proposed fountain solution controls is 25 tpy, 15 lbs/day, or a combination of both.

   The proposed 15 lb/day applicability threshold for fountain solution control requirements also needs to be expresses as an EPA-acceptable three tons per year equivalent annual actual emissions limit, otherwise the rule will force all subject facilities to develop and maintain hourly or daily material consumption records in order to determine applicability, which is both administratively and economically unacceptable or necessary. Accurate hourly and even daily recordkeeping in the lithographic printing process is difficult and almost impossible to

accomplish due to numerous factors including material consumption and the number of jobs produced. Each job may last from 30 minutes to over several days. Many jobs start on one shift and end on another. The variety, combinations, and consumption rate of inks alone would make this a costly and burdensome task. Input material consumption rates are better gauged over a longer period because consumption based on purchasing can be correlated with measured values such as impressions.

Daily emissions thresholds do not allow for any variability within an operation. If a facility routinely operates below a daily threshold all but one day it will fall under the DEQ's RACT rule. The USEPA's *CTG for Offset Lithographic Printing* clearly allows and supports the use of an annual emission rate applicability threshold, stating on Page 4:

> "In developing their RACT rules, State and local agencies should consider carefully the facts and circumstances of the affected sources in their States. As noted above, States can adopt the above recommended 15 lb/day actual emissions of VOC applicability criterion before consideration of controls, or an equivalent applicability level expressed on a monthly basis (e.g., 450 lb/month) or 12-month rolling basis (e.g., 3 tons per 12-month rolling period) . . ."

3. Proposed Section 2143(A)(4) contains a 15 lb/day applicability threshold for cleaning materials that is based on the actual facility emissions. This applicability threshold needs to be expressed as an EPA-acceptable three tons per year equivalent annual actual emissions limit (see comment 2 above) and incorporated into proposed Section 2143(A)(3) in order to keep all lithographic printing control requirements under one paragraph of Section 2143.

   Therefore, in light of comments 1- 3 above, proposed amended Section 2143(A)(3) should be revised to read:

   3. Lithographic and Letterpress Printing Control Requirements

   a. Applicability

   1. The heatset web offset lithographic and letterpress dryer control requirements in subparagraph (b) below apply to subject presses that meet any of the following criteria:

   i. The press is located in the parish of Ascension, East Baton Rouge, Iberville, Livingston, or West Baton Rouge and has actual VOC ink oil emissions from the press dryer that are greater than 25 tons per year before the application of control devices; or

   ii. The press is located in the parish of Calcasieu or Pointe Coupee and has actual has actual VOC ink oil emissions from the press dryer that are greater than 50 tons per year before the application of control devices; or

   iii. The press is located in any other parish and has actual VOC ink oil emissions that are greater than 100 tons per year.

   2. The lithographic fountain solution control requirements in subparagraph (c) below apply to lithographic printing facilities that meet all the following criteria:

i. The facility is located in the parish of Ascension, East Baton Rouge, Iberville, Livingston, or West Baton Rouge; and

ii. The facility has total actual VOC emissions from all lithographic fountain solution processes that are greater than three tons per year.

3. The lithographic and letterpress cleaning solution control requirements in subparagraph (d) below apply to lithographic printing facilities that meet all the following criteria:

i. The facility is located in the parish of Ascension, East Baton Rouge, Iberville, Livingston, or West Baton Rouge; and

ii. The facility has total actual VOC emissions from all lithographic and/or letterpress printing operations (including emissions from cleaning solutions used on lithographic and/or letterpress printing presses) that are greater than three tons per year.

4. If a lithographic or letterpress line at a source is or becomes subject to the provisions of this section it remains so regardless of the future variations in production.

The recommended revisions provide consistency with the recommendations of the USEPA's *CTG for Offset Lithographic Printing*. The USEPA extensively reviewed and documented these recommendations for technical feasibility and cost requirements and set an applicability threshold that reflects a balance between these two factors.

Exemptions

The DEQ's proposed amendments create two distinct LAC sections within Subchapter H identifying lithographic operations that are exempt from the proposed amendments' heatset web offset lithographic control requirements, lithographic fountain solution control requirements, and cleaning solution control requirements. There are several concerns related to these proposed exemptions as they are confusing with respect to applicability and require revision to be consistent with the USEPA's *CTG for Offset Lithographic Printing*.

4. Proposed amended Sections 4123(A)(3)(b)(ii) lists two lithographic sheet-fed printing rule exemptions that are consistent with the USEPA's *CTG for Offset Lithographic Printing.* To prevent confusion over which exemptions apply to lithographic printing presses and streamline the regulation, PIAS recommends incorporating proposed amended section 4123(A)(3)(b)(ii) into the DEQ's proposed amended Section 4123(B)(2) in order to keep all lithographic printing control requirements under one paragraph of Section 2143.

5. Proposed amended Section 4123(B)(2) exempts certain lithographic printing presses from the DEQ's proposed cleaning material requirements in amended Paragraph (A)(6), including heatset web presses with the potential to emit less than 25 tpy of VOC emissions, heatset web presses used for book printing, and heatset web presses with a maximum web width of 22 inches or less. The USEPA also recommends excluding these presses from add-on control requirements, stating on Page 5 of the *CTG for Offset Lithographic Printing*:

"We believe add-on control for heatset presses with potential to emit below 25 tpy is too costly for the emission reduction that would be achieved.

We also recommend excluding heatset presses used for book printing and excluding heatset presses with maximum web width of 22 inches or less from the add-on control recommendations. We believe ad-on control for such heatset presses is too costly for the emissions reduction that would be achieved."

Therefore, in light of comments 4 and 5 above, proposed amended section 4123(B)(2) should be revised to read:

2. *Lithographic and Letterpress Printing Exemptions*

   a. *The following operations are exempt from the fountain solution control requirements of subparagraph (3)(c) above:*

      1. *Any sheet-fed press with a maximum sheet size eleven by seventeen inches or smaller;*

      2. *Any press with a total fountain solution reservoir capacity of less than one gallon;*

   b. *The following operations are exempt from the cleaning solution control requirements of subparagraph (3)(d) above:*

      1. *Heatset web offset lithographic printing operations and heatset web letterpress printing operations that do not meet the add-on control requirement applicability thresholds in subparagraph (3)(a)(1);*

      2. *Heatset presses used for book printing;*

      3. *Heatset presses with a maximum web-width of less than or equal to 22 inches;*

      4. *Operations with emissions from sheet-fed or non-heatset inks, sheet-fed or non-heatset varnishes, waterborne coatings, and radiation cured materials.*

   c. *The following operations are exempt from the add-on control requirements of subparagraph (3)(b) above:*

      1. *Heatset web offset lithographic printing operations and heatset web letterpress printing operations that do not meet the add-on control requirement applicability thresholds in subparagraph (3)(a)(1));*

      2. *Heatset presses used for book printing;*

      3. *Heatset presses with a maximum web-width of less than or equal to 22 inches;*

These recommendations are consistent with the USEPA's *CTG for Offset Lithographic Printing* and would achieve the most economical emissions reductions from the printing industry.

Economic Impact Analysis

The DEQ does not support its claim that the proposed rules will not result in a significant economic impact, especially for the small businesses that are prevalent in the lithographic printing industry.

6. The DEQ should not rely upon the add-on control and fountain solution cost-effective analyses contained in the USEPA's 2006 *CTG for Offset Lithographic Printing*. The Printing Industries of America, PIAS's national association, submitted extensive comments on the draft *CTG for Offset Lithographic Printing* criticizing USEPA's assumptions and economic analysis. Due to an imposed court ordered deadline, USEPA did not conduct a new economic analysis of the impact of the draft *CTG for Offset Lithographic Printing* and as a result, the impact on small printers is not fully known or understood.

USEPA relied upon its original economic impact analysis done during the late 1980's and early 1990's that was included in the 1993 Draft CTG for Offset Lithography. In the development of this earlier economic impact analysis, USEPA made several critical and erroneous assumptions. Most significantly, USEPA assumed that all lithographic printers used isopropyl alcohol as a wetting additive in their fountain solution at a concentration of 17 percent. This assumption was not correct in the early 1990's and is certainly not correct today. As a result of this erroneous assumption, in the most recently released CTG USEPA was able to show that printers would actually save money by using less alcohol. While this would be a true statement if all printers used isopropyl alcohol at the levels assumed in the early 1990's, USEPA failed to take into account that many printers had already completely eliminated the use of isopropyl alcohol. Even in the early 1990's many printers had either dramatically reduced the use of isopropyl alcohol or had already completely eliminated it from their operations. USEPA also failed to factor into the economic analysis the costs associated with the reduction and/or conversion to alcohol substitutes.

Due the costs and technical difficulties associated with reducing or eliminating alcohol, small printing facilities face a more difficult transition to meet the recommended VOC levels for fountain solutions. Generally, larger printers have the resources to purchase necessary support equipment such as reverse osmosis units and typically use newer presses that are designed to run with reduced alcohol or no alcohol in the fountain solution. Smaller printing facilities typically use equipment that has not been designed to run with reduced or no alcohol. Oftentimes, the equipment used by smaller facilities is bought as used, not new.

As such, the DEQ should not rely upon the cost-effectiveness analysis contained in the USEPA's *2006 CTG for Offset Lithographic Printing* as an economic justification for the draft regulation. PIAS requests that the DEQ conduct its own economic impact analysis that estimates the number of affected facilities, the anticipated emission reductions that will be gained, the cost per ton for the emission reductions, and most importantly the technical feasibility of its proposal. The DEQ cannot fully understand the true cost benefit impact of the proposed amendments without this complete economic analysis.

Control Requirements for Heatset Web Offset Lithographic Presses

7. The heatset web offset lithographic press control requirements in proposed amended Section 2143(A)(3)(a) are consistent with the recommendations in the USEPA's CTG for offset lithographic printing. However, the proposed amendments should include the requirement to maintain a negative dryer pressure relative to the surrounding pressroom air, the ability to exclude EPA exempt VOC compounds from destruction efficiency tests and

should reflect the restructuring recommended in comment 1. Proposed amended Section 2143(A)(3)(a), therefore, should be revised to read:

b. Dryer Exhaust Control Requirements

1. Any person who owns or operates a subject heatset web lithographic printing press or a subject heatset web letterpress printing press shall maintain the dryer pressure lower than the press room pressure at all times the press is operating and operate a control system that:

a. Reduces VOC emissions from the press dryer exhaust by 90% by weight (excluding methane and ethane) for a control system whose first installation date was prior to the effective date of this rule; or

b. Reduces VOC emissions from the press dryer by at least 95% by weight (excluding methane and ethane) for a control system whose first installation date was on or after the effective date of this rule; or

c. As an alternative to paragraph's (a) or (b) above, maintain a maximum VOC outlet concentration of 20 ppmv (excluding methane and ethane) as hexane (C_6H_{14}) on a dry basis.

Fountain Solution Control Requirements for Lithographic Presses

The DEQ's proposed amended section 2143(A)(3)(b) does not permit the use of fountain solutions with a greater VOC concentration in conjunction with refrigeration or the use of fountain solution with alcohol-substitutes fountain solutions in heatset and sheet-fed lithographic printing processes.

8. The provisions addressing VOC in fountain solutions need to be revised to allow for higher VOC content in conjunction with refrigeration on sheetfed presses. This provides the maximum amount of operational flexibility for those printers that operate sheetfed presses as reducing VOC content in the fountain solution on these types poses the greatest technological challenge. Many older existing sheetfed and web fed presses were designed to run exclusively with isopropyl alcohol at much higher concentrations and the limits in EPA's CTG allow for a reasonable compromise between lowering the VOC emissions and the technical and economic limitations of the printers who use these older presses

   In addition, it is critical to acknowledge by including a provision that allows for the use of alcohol substitutes in sheetfed and heatset web presses. Alcohol substitutes represent the state-of-the-art technology for VOC emission reductions in fountain solutions that result in significant reductions in VOC emissions. Therefore, the proposed amendments need to include provisions that allow for their utilization.

   Allowing the higher VOC contents in conjunction with refrigeration and alcohol substitutes is consistent with USEPA's recommendations as described on pages 15 – 16 of the *CTG for Offset Lithographic Printing,* which state:

   "We recommend the following approaches for controlling VOC emissions from fountain solution . . .

- Heatset Web Offset Lithographic Printing
  The recommended level of control for VOC emissions from on-press (as-applied) fountain solution for heatset web offset lithographic printing is 1.6 percent alcohol (by weight) in the fountain or equivalent. There are at least three different approaches for achieving this level of control. The first approach involves reducing the on-press (as-applied) alcohol content to 1.6 percent alcohol or less (by weight). The second approach involves using 3 percent alcohol or less (by weight) on-press (as-applied) in the fountain solution if the fountain solution is refrigerated to below 60°F (15.5°C). The third approach involves using 5 percent alcohol substitute or less (by weight) on-press (as-applied) and no alcohol in the fountain solution.

- Sheet-fed Offset Lithographic Printing
  The recommended level of control for VOC emissions from on-press (as-applied) fountain solution for sheet-fed printing is equivalent to 5 percent alcohol (by weight) in the fountain or equivalent. There are at least three different approaches for achieving this recommended level of control. The first approach involves reducing the on-press (as applied) alcohol content to 5.0 percent alcohol or less (by weight). The second approach involves using 8.5 percent alcohol or less (by weight) on-press (as-applied) in the fountain solution provided the fountain solution is refrigerated to below 60°F (15.5 °C). The third approach involves using 5 percent alcohol substitute or less (by weight) on-press (as-applied) and no alcohol in the fountain solution. This recommendation does not apply to sheet-fed presses with sheet size of 11 inches by 17 inches or smaller, and does not apply to any press with total fountain solution reservoir of less than 1 gallon.

- Coldset Web Offset Lithographic Printing
  The recommended level of control for VOC emissions from fountain solution for coldset web is 5 percent alcohol substitute or less (by Weight) on-press (as-applied) and no alcohol in the fountain solution."

9. Proposed amended section 2143(A)(3)(b) also needs to clearly state that the fountain solution limitations are on as-applied basis and should allow for the application of site-specific control limits in instances where the proposed limits are economically or technologically infeasible.

   Therefore, proposed amended Section 2143(A)(3)(b) should be revised to be consistent with the USEPA's *CTG for Offset Lithographic Printing* and restructured per the recommendations in comment 1 above to read:

   c. *Fountain Solution Control Requirements*

      1. *Any person who owns or operates a subject heatset web offset lithographic printing press shall meet the following for the fountain solution used on that press:*

         a. *If the fountain solution contains alcohol, maintain the as-applied VOC content of the fountain solution at or below 1.6 percent, by weight, or maintain the as-applied VOC content of the fountain solution at or below 3.0 percent, by weight, and refrigerate the fountain solution to 60°F or less; or*

b. *Maintain the as-applied VOC content of the fountain solution at or below 5.0 percent, by weight, and use no alcohol in the fountain solution.*

2. *Any person who owns or operates a subject sheet-fed offset lithographic printing press shall meet the following for the fountain solution used on that press:*

   a. *If the fountain solution contains alcohol, maintain the as-applied VOC content of the fountain solution at or below 5.0 percent, by weight, or maintain the as-applied VOC content of the fountain solution at or below 8.5 percent, by weight, and refrigerate the fountain solution to 60°F or less; or*

   b. *Maintain the as-applied VOC content of the fountain solution at or below 5.0 percent, by weight, and use no alcohol in the fountain solution.*

3. *Any person who owns or operates a subject non-heatset web offset lithographic printing press shall meet the following for the fountain solution used on that press:*

   a. *Maintain the as-applied VOC content of the fountain solution at or below 5.0 percent, by weight, and use no alcohol in the fountain solution.*

4. *Where it can be demonstrated to the satisfaction of the permitting authority that a subject lithographic printing press cannot be operated with fountain solutions meeting the limits in Paragraphs (c)(1), (c)(2), or (c)(3) above for reasons of technological and/or economic feasibility the permitting authority may establish* site-specific limits subject to approval by USEPA as a SIP revision.

Cleaning Material Control Requirements for Lithographic Presses

10. The cleaning material control requirements in proposed amended Section 2143(A)(4) are consistent with the recommendations in the USEPA's CTG for offset lithographic printing, however, the section needs to clearly state that the cleaning material limitations are on an as-applied basis. PIAS also recommends that proposed amended section 2143(A)(4) be incorporated into section 2143(A)(3) (see comments 7 and 8) in order to keep all lithographic printing control requirements under one paragraph of Section 2143. Therefore, proposed amended Section 2143 (A)(4) should be revised and restructured to read:

    d. *Cleaning Material Control Requirements*

    1. *Any person who owns or operates a subject offset lithographic or letterpress printing press shall meet control cleaning material VOC emissions by one of the following methods:*

       a. *Maintain the as-applied VOC content of the cleaning material at or below 70%, by weight, or maintain the as-applied VOC composite partial vapor pressure of the cleaning material at or below 10 mm Hg at 20 °C (°68 F).*

       The use of cleaning solutions not meeting either the low VOC content or VOC composite partial vapor pressure requirements is permitted provided that the

quantity used does not exceed 110 gallons over any consecutive twelve month period ; or

b. *Keep cleaning materials and used shop towels in closed containers at all times except when actually in use.*

Industrial Organic Solvent Exemption

The proposed industrial organic solvent operation amendments to Chapter 21, Subchapter B need to be clarified to ensure it is clear that lithographic cleaning solutions are regulated under Chapter 21, Subchapter H and not under the industrial organic solvent requirements.

11. The DEQ's proposed lithographic and letterpress cleaning material amendments would render the control requirements of amended section 2143(A)(4) the operative requirements for cleaning materials used on subject lithographic presses and would eliminate the need for lithographic and letterpress cleaning materials to be regulated under the DEQ's existing industrial organic solvent control requirements of Section 2123(A). Proposed amended Section 2132(B), therefore, should be revised to read:

    B. *Soldering operations, painting and coating operations not listed in Subsection C of this Section, including lithographic and letterpress printing operations regulated under LAC 33:III:2143, and dry cleaning operations using organic solvents that are not considered photochemically reactive shall be considered exempt from the requirements of this Section.*

    This exclusion is supported completely by USEPA in the *Control Techniques Guidelines: Industrial Cleaning Solvents* (EPA 453/R-06-001) where on page 8, it states (emphasis added):

    "B. Suggested Exclusions

    This section includes product categories that EPA has listed for regulation under section 183(e) as well as categories of cleaning operations that are specifically excluded from applicability in Bay Area Regulation 8 rule 4. The Bay Area exclusions are provided as examples for consideration by the State and local agencies.

    1. Categories Listed for Regulation under CAA Section 183(e)
    We recommend that the States exclude from applicability those cleaning operations in the following categories listed for regulation under CAA section 183(e):

    1 Aerospace coatings;
    2 Wood furniture coatings;
    3 Shipbuilding and repair coatings;
    4 Flexible packaging printing materials;
    5 Lithographic printing materials;
    6 Letterpress printing materials;
    7 Flat wood paneling coatings;
    8 Large appliance coatings;
    9 Metal furniture coatings;
    10 Paper film and foil coating;
    11 Plastic parts coatings;

12 Miscellaneous metals parts coatings;
13 Fiberglass boat manufacturing materials;
14 Miscellaneous industrial adhesives; and
15 Auto and light-duty truck assembly coatings".

12. Proposed amended Section 2123(C) contains VOC emission limitations for surface coating industries, however, neither LAC Title 33:III Chapter 1 nor 21 define or provide a reference definition for the term "surface coating industries". The EPA's 2006 *CTG for Offset Lithographic Printing* is very clear regarding the regulatory status of varnishes and other coating used on lithographic printing presses. Page 7 of the *CTG for Offset Lithographic Printing* states:

    "Varnishes are unpigmented offset lithographic inks. They are applied on offset lithographic presses in the same manner (i.e., using a lithographic printing plate, fountain solution and blanket cylinder) as offset lithographic ink. Heatset varnishes are unpigmented heatset inks. The emissions generated by heatset varnishes are similar in nature to the emissions generated by heatset inks and they can be controlled in the same manner. Sheet-fed and coldset web varnishes are unpigmented sheet-fed and coldset web inks. Sheet-fed and coldset web varnishes exhibit the same high level of ink oil retention and generate the same inherently low emissions as sheet-fed and coldset web inks. The coatings used on offset lithographic presses are predominantly waterbased or radiation (ultra-violet or electron beam) cured materials which generate minimal VOC emissions. We recommend that varnishes and coatings used on offset lithographic printing presses be considered part of the offset lithographic printing process and that the recommendations described below in section VI for heatset web offset lithographic inks and dryers apply equally to varnishes. We recommend that varnishes and coatings used on offset lithographic printing presses not be considered as a separate process (e.g., paper coating)."

    In light of the definitive position taken by USEPA regarding coatings and varnishes used in lithographic printing, the DEQ should provide a specific exception for lithographic printing from the paper coating VOC emissions limitations in item 11 of the table in proposed amended Section 2132(C). Therefore, the table in proposed amended section 2132(c) should be revised to read:

    *11. Paper, Film, Foil, Pressure Sensitive Tape, and Label Surface Coating**
    ** These coating operations do not include lithographic printing lines*

Compliance Testing

The DEQ is not proposing to modify the existing sampling and analytical procedures contained in Section 2143 (C) and does not provide a background discussion of the test methods to be used for the fountain solutions and cleaning solutions as specified in the draft rule.

13. Existing Section 2143(C)(1) specifies Method 24 as the test method for determining the VOC content of lithographic inks, fountain solutions, and cleaning solvents, but does not provide a method to determine the VOC composite partial vapor pressure of cleaning solutions.

    In addition, the rule needs to allow the use of a material balance calculation to demonstrate compliance with the VOC content and composite partial vapor pressure limits of the rule. A

material balance calculation is effective in determining compliance with these limits because the fountain solutions and cleaning solvents used on press will always be prepared in the same manner. Some small presses do not require diluting fountain solution mixtures or cleaning solutions with water. In these instances where no dilution occurs, the as-applied VOC content of the non-diluted solution would be readily available from the product's supplier or Material Safety Data Sheet (MSDS). Thus, the proposed amendments also need to permit the use of supplier provided Method 24 data to demonstrate compliance.

Therefore, existing section 2143(C)(1) should be revised by adding new subparagraphs (a) and (b) related to compliance testing for lithographic fountain solutions and cleaning materials to read:

a. *For any offset lithographic printing press that is subject to the fountain solution and/or cleaning material VOC content requirements of section (A)(3)(c) or (A)(3)(d) of this rule, the VOC content of the as-applied material shall be determined by one of the following methods:*

   1. *If diluted prior to use, a calculation that combines EPA Method 24 analytical data for the concentrated materials used in preparation of the as-applied fountain solution and the proportions in which they are mixed to make the as-applied material. The analysis of the concentrated materials may be performed by the supplier of those materials. Owners and/or operators may use formulation information provided with the concentrated materials used to prepare the fountain solution, such as the container label, the product data sheet, or the MSDS sheet to document the VOC content of the concentrated material; or*

   2. *If not diluted prior to use, owners and/or operators shall use formulation information provided by the supplier, such as the container label, the product data sheet, or the product MSDS sheet; or*

   3. *Analysis by EPA Method 24 of a sample of as-applied fountain solution.*

b. *For any offset lithographic printing press that is subject to the cleaning material VOC composite partial vapor pressure requirements of Section (A)(3)(d) of this rule, the VOC composite partial vapor pressure of the as-applied shall be determined by one of the following methods:*

   1. *If diluted prior to use, calculate the VOC composite vapor pressure of the as-applied solvent by using the formula for "VOC composite vapor pressure" as follows:*

      Determine the identity and quantity of each compound or class of compounds in a blended organic solvent by using ASTM D2306, or by using ASTM E260 for organics and ASTM D3792 for water content, if applicable, or the manufacturer's product formulation data.

      Determine the vapor pressure of each pure VOC component by using ASTM D2879 or publications such as Perry's Chemical Engineer's Handbook, CRC Handbook of Chemistry and Physics, or Lange's Handbook of Chemistry

Calculate the VOC composite partial pressure of the solvent by using the formula for "VOC composite vapor pressure." For the purpose of this calculation, the blended solvent shall be assumed to be an ideal solution where Raoult's Law applies. The partial pressures of each compound at twenty degrees Celsius (sixty-eight degrees Fahrenheit) shall be used in the formula. The VOC composite vapor pressure shall be calculated as follows:

$$PP_c = \sum_{i=1}^{n} \frac{(W_i)(VP_i)/MW_i}{\frac{M_w}{MW_w} + \frac{W_e}{MW_e} + \sum_{i=1}^{n} \frac{W_i}{MW_i}}$$

Where:

W_i = Weight of the "i"th VOC compound, in grams.

W_w = Weight of water, in grams.

W_e = Weight of exempt compound, in grams.

MW_i = Molecular weight of the "i"th VOC compound, in grams per gram-mole.

MW_w = Molecular weight of water, in grams per gram-mole.

MW_e = Molecular weight of the "e"th exempt compound, in grams per gram-mole.

PP_c = VOC composite vapor pressure at twenty degrees Celsius (sixty-eight degrees Fahrenheit), in mm Hg.

VP_i = Vapor pressure of the "i"th VOC compound at twenty degrees Celsius (sixty-eight degrees Fahrenheit), in mm Hg; or

2. *If not diluted prior to use owners and/or operators shall use formulation information provided by the supplier, such as the container label, the product data sheet, or the product MSDS sheet; or*

3. *Analysis by an appropriate method for VOC composite partial vapor pressure of a sample of the as-applied cleaning solution. The analysis may be performed by the supplier of those materials.*

14. Existing Section 2143(C)(3) specifies Method 25 as the test method for determining total gaseous nonmethane organic emissions as carbon. Due to well documented problems with achieving consistent rest results with Method 25 and emissions from heatset web offset printing presses, this section needs to allow EPA Method 18 and 25A as an acceptable test methods.

    This is supported by USEPA as on Page 20 of the USEPA *CTG for Offset Lithographic Printing,* USEPA clearly states:

"We recommend using EPA Method 25A in lieu of EPA Method 25 for determining the destruction efficiency of an oxidizer (inlet and outlet concentrations) when:

- An exhaust concentration of 50 or less parts per million volume (ppmv) as carbon (C1) is required to comply with the applicable standard;
- The inlet concentration and the required level of control results in an exhaust concentration of 50 or less ppm as C1l or
- The high efficiency of the control device alone results in an exhaust concentration of 50 or less ppmv as C1."

Therefore, Section 2143(c)(3) should be revised to read:

3. *Test Methods 18, 25, or 25A (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III:3003) for determining total gaseous nonmethane organic emissions as carbon;*

   a. *If Method 25A is used the outlet readings from a thermal or catalytic oxidizer may be corrected by using Method 18 or 25 to determine non-VOC components (methane and ethane) and subtracting these from the Method 25A result.*

Monitoring and Recordkeeping Requirements

The proposed amendments need to include fountain solution and cleaning material monitoring and recordkeeping requirements that streamline the requirements and minimize the economic burden associated with the requirements while maintaining assurance that the requirements in the rule are being met.

15. The proposed amendments need to include fountain solution monitoring and recordkeeping requirements that reflect use of alcohol- or alcohol-substitute containing solutions. Therefore, Section 2143(D) should be revised by adding new paragraph (4) to read:

    4. *Recordkeeping for Lithographic Fountain Solutions*

       a. *The owner or operator of a subject lithographic printing press using alcohol containing fountain solution shall:*

          1. *Measure the alcohol content of the as-applied fountain solution using a hydrometer with an accuracy of 0.5 percent and equipped with temperature correction or with readings adjusted for temperature at least once per shift or once per batch, whichever is longer.*

          2. *Use a standard solution to calibrate the hydrometer for the type of alcohol used in the fountain solution.*

          3. *If the owner or operator of a subject offset lithographic printing press uses refrigerated fountain solution to comply with the alcohol content limitations of paragraphs (A)(3)(c)(1)(a) or (A)(3)(c)(2)(a) of this rule, the owner or operator shall measure the temperature of the fountain solution at the recirculating tank at least once per day, in degrees Fahrenheit.*

b. *The owner or operator of a subject offset lithographic printing press using fountain solution containing only alcohol substitutes shall maintain records of the calculation of the as-applied VOC content, the formulation information provided by the alcohol-substitute supplier, or the results of the Method 24 analysis as described in paragraph (C)(1)(a) of this rule. For fountain solutions containing alcohol substitutes purchased with less than 5% VOC content before dilution and addition, the owner or operator need not keep records of VOC dilution and addition, and only need to maintain records of product MSDS sheets with VOC content determined by Method 24.*

16. The proposed amendments need to include cleaning material monitoring and recordkeeping requirements. Therefore, Section 2143(D) should be revised by adding new paragraph (5) to read:

    5. *Recordkeeping for Lithographic Cleaning Materials*

    a. *The owner or operator of a subject offset lithographic or letterpress printing facility shall maintain monthly records of the VOC content or VOC composite vapor pressure of all cleaning materials employed in all the lithographic and letterpress printing operations.*

    b. *The owner or operator of a subject offset lithographic printing press using an automatic blanket wash system that mixes cleaning solution at the point of application shall document that flow meters or fixed volume spray systems result in the VOC content of the mixed solution that complies with paragraph (A)(3)(d)(1)(a).*

    c. *The owner or operator of a subject heatset, non-heatset, or sheet-fed lithographic printing press or letterpress printing press shall maintain monthly records of the total amount, in gallons, of the clean-up materials employed that exceed the allowable VOC content or VOC composite vapor pressure limitations of paragraph (A)(3)(d)(1)(a) of this rule.*

Emission Calculations

The DEQ is not proposing to modify the existing methods to be used for quantifying actual emissions contained in subject facilities and does not provide a background discussion on factors that affect VOC emissions in the lithographic printing industry. In order to ensure that the proper emission and retention factors are applied for purposes of determining applicability and compliance, the appropriate factors need to be included in the revisions to the rule. The recommended section will clarify the methodology for estimating actual emissions in the lithographic printing industry, saving administrative time and costs for both the DEQ and the printing industry.

17. The inclusion of the emission and retention factors are supported by USEPA as *the CTG for Offset Lithographic Printing* states on Pages 18-20:

    "This section provides a summary of some of the recommendations EPA has previously made to States concerning factors that may be considered in determining VOC emissions from offset lithographic printing and letterpress printing operations. These factors are important for a number of reasons including determining whether a facility or a press exceeds the applicability thresholds recommended in this CTG or other

applicability thresholds that a state may consider including in its regulations. The factors described below and other relevant factors are discussed in the 1993 draft CTG, the 1994 ACT and the 2005 Printing TSD.

A. Ink Oil Retention

Heatset Inks – We recommend using a 20 percent VOC retention factor for petroleum ink oils and a 100 percent retention factor for vegetable ink oils in heatset inks. The VOC emissions, before consideration of any control, from a heatset ink would therefore be 80 percent of the petroleum ink oil content. The petroleum ink oil content of a heatset ink can be determined from formulation data (e.g., technical data sheet or material safety data sheet). We believe that a Method 24 test of a heatset ink will volatilize the petroleum ink oils and will not volatilize the vegetable ink oils.

Sheet-fed and oldest web inks – We recommend using a 95 percent VOC retention factor for petroleum ink oils and a 100 percent retention factor for vegetable ink oils in sheet-fed and oldest web inks. The VOC emissions from a sheet-fed or oldest web ink would therefore be 5 percent of the petroleum ink oil content. The petroleum ink oil content of a sheet-fed or oldest web ink can be determined from formulation data (e.g., technical data sheet or material safety data sheet). We believe that an EPA Method 24 test of a sheet-fed or oldest web ink will volatilize the petroleum ink oils and will not volatilize the vegetable ink oils. The ASTM method D6419 (Standard Test Method for Volatile Content of Sheet-Fed and Coldset Web Offset Printing Inks) is a more precise method for determining the volatile (petroleum ink oil) content of sheet-fed and oldest web inks than ASTM D2369 which is referenced in EPA Method 24.

B. Retention of Low VOC Composite Vapor Pressure Cleaning Materials in Shop Towels

We recommend using a 50 percent VOC retention factor for low VOC composite vapor pressure cleaning materials in shop towels where (1) VOC composite vapor pressure of the cleaning material is less than 10 mm Hg at 20 °C, and (2) cleaning materials and used shop towels are kept in closed containers.

C. Carryover of VOC from Automatic Blanket Wash and Fountain Solution to Offset Lithographic Heatset Dryers

We recommend using a 40 percent VOC carryover (capture) factor for automatic blanket washing when the VOC composite vapor pressure of the cleaning material is less than 10mm Hg at 20°C. We recommend using a 70 percent VOC carryover (capture) factor for alcohol substitutes in fountain solution.

D. Capture of Petroleum Ink Oil in Heatset Dryers

For heatset web offset lithographic presses and heatset web letterpress presses, we believe capture efficiency for VOC (petroleum ink oils) from oil based paste inks and oil-based paste varnishes (coatings) can be demonstrated by showing that the dryer is operating at negative pressure relative to the surrounding pressroom. We recommend that as long as the dryer is operated at negative pressure, the capture efficiency for VOC from the heatset lithographic inks and varnishes (coatings) formulated with low volatility ink oils can be assumed to be 100 percent of the VOC (ink oils) volatilized in the dryer. We do not recommend conducting a capture efficiency test in this situation.

Conventional heatset lithographic inks and varnishes are paste-type materials. The VOC in these materials are oils with high boiling points, which volatilize only within the dryer. Some ink oils, nominally 20 percent, are not volatilized and remain in the substrate. If other types (e.g., fluid type) of coating materials are used on a heatset lithographic press or a heatset letterpress press, we recommend that capture efficiency testing be conducted for the VOC from these other materials if the printer wants to take into account the effect that the dryer controls have on VOC emissions from these other types of coatings. The most common other types of coatings materials used on heatset presses are waterbased or radiation (ultra-violet light or electron beam) cured materials which generate minimal VOC emissions."

Therefore, PIAS recommends inserting new section 2143(A)(3)(e) to the proposed amendments. The recommended section should read as follows:

e. Retention Factors and Capture Efficiencies

1. For purposes of determining VOC emissions from offset lithographic printing operations, the following retention factors and capture efficiencies shall be used:

i. A portion of the VOC contained in inks and cleaning solution is retained in the printed web or in the shop towels used for cleaning. The following retention factors shall be used:

(a) A 20% VOC retention factor shall be used for heatset inks printed on absorptive substrates, meaning 80% of the VOC in the ink is emitted during the printing process and is available for capture and control by an add-on pollution control device.

(b) A 95% VOC retention factor shall be used for sheet-fed and non-heatset web inks printed on absorptive substrates, meaning 5% of the VOC in the ink is emitted during the printing process.

(c) A 50% VOC retention factor shall be used for cleaning solution VOC in shop towels for cleaning solutions with a VOC composite vapor pressure of no more than 10 mm of mercury (Hg) at 20°C (68°F) if the contaminated shop towels are kept in closed containers, meaning 50% of the VOC used on the shop towels is emitted during the cleaning process.

ii. A portion of the VOC contained in inks, fountain solutions, and automatic blanket washes on heatset presses is captured in the press dryer for control by add-on pollution control devices. The following capture efficiencies are to be used:

(a) A 100% VOC carry over efficiency shall be used for inks. All the VOC in the ink that is not retained is assumed to be volatilized in the press dryer. Capture efficiency testing for heatset dryers is not required if it is demonstrated that pressure in the dryer is negative relative to the surrounding press room and the airflow is into the dryer.

(b) A 70% VOC carry over efficiency shall be used for fountain solutions containing alcohol substitutes.

(c) *A 40% VOC carry over efficiency shall to be used for automatic blanket wash solutions with a VOC composite vapor pressure of no more than 10 mm of mercury (Hg) at 20°C (68°F).*

Definitions

18. The DEQ proposes to use the definitions and key terms related to the lithographic printing industry contained in LAC 33:III:111. PIAS recommends adding or amending the following definitions in LAC 33:III:111 in order to clarify the applicability and compliance requirements of the rulemaking in regards to the lithographic printing industry

Alcohol - Any of the following compounds, when used as a fountain solution additive for offset lithographic printing: ethanol, n-propanol, and isopropanol.

Alcohol Substitutes - Nonalcohol additives that contain VOCs and are used in the fountain solution. Some additives are used to reduce the surface tension of water; others are added to prevent piling (ink build-up).

Cleaning Material – With respect to a surface coating operation or graphic arts operation, a liquid solvent or solution used to clean the operating surfaces of a printing press and its parts. For purposes of this standard, cleaning solutions include, but are not limited to blanket wash, roller wash, metering roller cleaner, plate cleaner, impression cylinder washes, rubber rejuvenators, and other cleaners used for cleaning a press, press parts, or to remove dried ink or coating from areas around the press.

Dampening System - Equipment used to deliver the fountain solution to the lithographic plate.

Fountain Solution - A mixture of water and other volatile and non-volatile chemicals and additives used in lithographic printing operations that maintains the quality of the printing plate including preventing debris build up (e.g., spray power, paper fiber, coating particles, dried ink particles, and other materials), and increases viscosity and reduces the surface tension of the water so that it spreads easily across the printing plate surface. The fountain solution wets the nonimage area so that the ink is maintained within the image areas. Non-volatile additives include mineral salts and hydrophilic gums. Alcohol and alcohol substitutes are the most common VOC additives used to reduce the surface tension of the fountain solution.

Fountain Solution Batch – A supply of fountain solution that is prepared and used without alteration until completely used or removed from the printing process. For the purposes of this rule, this term may apply to solutions prepared in either discrete batches or solutions that are continuously blended with automatic mixing units.

Fountain Solution Reservoir - The collection tank that accepts fountain solution recirculated from printing unit(s). In some cases, the tanks are equipped with cooling coils for refrigeration of the fountain solution.

Heatset - A lithographic printing process where the printing inks are set by the evaporation of the ink oils in a heatset dryer.

Heatset Dryer - A hot air dryer used in heatset lithography to heat the printed substrate and to promote the evaporation of ink oils.

Inking System - A series of rollers used to meter ink onto the lithographic plate. The system can include agitators, pumps, totes, and other types of ink containers.

Lithographic printing or lithographic printing operation - A planographic printing process where the image and nonimage areas are chemically differentiated; the image area is oil receptive and the nonimage area is water receptive. This method differs from other printing methods, where the image is typically printed from a raised or recessed surface. A lithographic printing operation includes, but is not limited to, a heatset web lithographic printing operation, a coldset web offset lithographic printing operation, and a sheet-fed offset lithographic printing operation.

Non-heatset Lithographic Printing - A lithographic printing process where the printing inks are set by absorption and/or oxidation of the ink oil, not by evaporation of the ink oils in a dryer. Use of an infrared heater or printing conducted using ultraviolet-cured or electron beam-cured inks is considered non-heatset.

Offset Lithography- A printing process that transfers the ink film from the lithographic plate to an intermediary surface (blanket), which, in turn, transfers the ink film to the substrate.

Press - A printing production assembly composed of one or more units used to produce a printed substrate including any associated coating, spray powder application, heatset web dryer, ultraviolet or electron beam curing units, or infrared heating units.

Sheet-fed Lithographic Printing- means a non-heatset lithographic printing process where individual sheets of substrate are fed into the press sequentially.

Unit - The smallest complete printing component, composed of inking and dampening systems, of a printing press.

VOC Composite Partial Vapor Pressure - The sum of the partial pressure of the compounds defined as VOCs. VOC composite partial vapor pressure is calculated as follows:

$$PP_c = \sum_{i=1}^{n} \frac{(W_i)(VP_i)/MW_i}{\frac{W_w}{MW_w} + \frac{W_c}{MW_c} + \sum_{i=1}^{n} \frac{W_i}{MW_i}}$$

Where:

W_i	=	*Weight of the "i"th VOC compound, in grams*
W_w	=	*Weight of water, in grams*
W_c	=	*Weight of exempt compound, in grams*
MW_i	=	*Molecular weight of the "i"th VOC compound, in g/g-mole*
MW_w	=	*Molecular weight of water, in g/g-mole*
MW_c	=	*Molecular weight of exempt compound, in g/g-mole*
PP_c	=	*VOC composite partial vapor pressure at 20°C (68°F), in mm Hg*
VP_i	=	*Vapor pressure of the "i"th VOC compound at 20°C (68°F), in mm Hg*

Web– A lithographic printing process where a continuous roll of substrate is fed into the press.

Summary and Conclusion

PIAS would like to express our appreciation for the opportunity to review and provide comments on the Louisiana DEQ's proposed RACT amendments for lithographic printing. Overall, we support the DEQ in their approach to establish a clear set of VOC control criteria based on the USEPA's *CTG for Offset Lithographic Printing*. It is hoped that these comments provide additional insight into the differences between the proposed rule and USEPA's *CTG for Offset Lithographic Printing* document, and that our suggestions help establish a mutually beneficial set of conditions that are both technically and economically feasible.

PIAS would be willing to meet with representatives from the DEQ to discuss our concerns with the current draft of the proposed regulation. Please feel free to contact Gary Jones, Printing Industries of America's Director of Environmental, Health and Safety Affairs, at 412-259-1794 with any questions you may have or to arrange a meeting time that is convenient for you and the appropriate staff involved in the development of the regulation.

Sincerely,

Ed Chalifoux

Ed Chalifoux
President
Printing Industry Association of the South

Enclosure (1)

Comment Summary and Responses for Proposed Rule AQ296

Comment Summary Response & Concise Statement – AQ296
Amendments to the Air Regulations
Control Technology Guidelines
LAC 33:III.111, 2123, and 2143

Concise Statement arguments:

FOR: [The reason supporting WHY the suggestion in the comment should be adopted by DEQ. Usually this is the commenter's perspective.]

AGAINST: [The reason WHY the department feels the suggestion should NOT be adopted.]

COMMENT 1: Applicability Thresholds — Consistency and clarification is needed in the proposed amendments dealing with emissions-based applicability criteria. The applicability criteria should be expressed in tons per year (tpy), not pounds per day (lbs/day). The proposed amendments create three areas in Subchapter H that establish different daily and annual volatile organic compound (VOC) emissions-based applicability criteria for the control of VOC emissions from heatset web offset lithographic processes, lithographic fountain solution processes, and cleaning materials at lithographic printing facilities. This is confusing and inconsistent with EPA's *2006 Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing* (*CTG for Offset Lithographic Printing*). Proposed §2143.A.3 contains a 25 tpy applicability threshold for ozone non-attainment areas, based on the facility-wide potential to emit (PTE). Facilities emitting more than 25 tpy are required to control VOC emissions by one of the methods outlined in §2143.A.3.a-c. Both heatset web offset add-on and lithographic fountain solution control options are listed. It is not clear whether this 25 tpy applicability threshold applies to the implementation of heatset web offset process controls, lithographic fountain solution process controls, or both.

As stated in EPA's *CTG for Offset Lithographic Printing*, the applicability threshold for heatset web add-on control requirements needs to be stated in terms of VOC petroleum ink oil emissions. These emissions are the predominant VOCs found in the stack from heatset web press dryers. Also, a threshold based on actual emissions should be used because there are many variations and assumptions needed to determine PTE for presses.

FOR: The rule should clarify if the 25 TPY applicability threshold applies just to the implementation of heatset web offset process controls, lithographic fountain solution controls, or both, and that the applicability threshold for heatset web add-on control requirements apply to petroleum ink oil emissions. The rule should use actual emissions instead of potential to emit (PTE) because there are many variations and

assumptions needed to determine PTE for presses.

AGAINST: All facilities are initially restricted by the appropriate (25 TPY, 50 TPY or 100 TPY) applicability threshold for VOC emissions. Then additional thresholds are applied. Ink oil emissions are the predominant VOCs found in the stack from heatset web press dryers; therefore additional clarification is not needed. The use of PTE is consistent with the original intent of the rule and is consistent with the department's regulations.

RESPONSE 1: Applicability Thresholds — The department will not be making the recommended changes. The 25 TPY applicability threshold and the use of PTE as opposed to actual emissions are consistent with the original intent of the rule and consistent with the department's Reasonably Available Control Technology (RACT) regulations. A clarification of the applicability threshold for heatset web and add-on controls is not needed since the predominant VOCs found in the stack from the heatset web press dryers is petroleum ink oil emissions.

COMMENT 2: Applicability Thresholds — Proposed §2143.A.3.b is a 15 lbs/day applicability threshold for lithographic fountain solution processes. The fountain solution controls are control options under §2143.A.3, for facilities with the potential to emit more than 25 tpy. It is unclear whether the operative applicability threshold is 25 tpy, 15 lbs/day, or a combination of both.

The 15 lbs/day applicability threshold for fountain solution control requirements should be expressed as 3 tpy equivalent annual actual emissions limit. Without this change facilities will be forced to develop and maintain hourly or daily material consumption records. Hourly or daily material consumption records would be almost impossible to maintain because a job may last from 30 minutes to several days. Also, a job may begin on one shift and end on another shift. This would be a costly task due to the variety, combinations, and consumption rate of inks alone. Input material consumption rates are better gauged over a longer period because consumption based on purchasing can be correlated with measured values.

Daily emissions thresholds do not allow for any variability. Even one day of operation above a daily threshold could cause a facility to fall under DEQ's Reasonably Available Control Technology (RACT) rule.

FOR: The rule should clarify if the applicability threshold for lithographic fountain solution emissions is 15 lb/day or 25 TPY. Change the 15 lb/day applicability threshold for fountain solution control requirements to 3 TPY equivalent annual actual emissions limit. This would make recordkeeping easier, more cost effective, and would give the facility more variability in their emissions over the course of a year.

AGAINST: The applicability threshold for a facility is 25 TPY, 50 TPY, or 100 TPY. The applicability threshold for the fountain solution portion of the printing operation is 15 lb/day. The CTG recommends the 15 lb/day applicability threshold which is consistent with the applicability threshold in many other CTGs.

RESPONSE 2: Applicability Thresholds — The department will not amend the proposed rule to accommodate the comment. Clarification is not necessary for the applicability thresholds since the 25 TPY applies to a facility located within the non-attainment area and the 15 lb/day applies to the fountain solution portion of the printing operation. The department is going to use the recommendation of the CTG and use the 15 lb/day applicability threshold which is consistent with the applicability thresholds of many other CTGs and is deemed appropriate by the EPA.

COMMENT 3: Applicability Thresholds — The applicability threshold in §2143.A.4 needs to be changed from 15 lbs/day for cleaning materials, based on the actual facility emissions, to 3 TPY equivalent annual actual emissions. Incorporating this change into §2143.A.3 would keep all lithographic printing control requirements under one paragraph.

In conjunction with the above comments on applicability thresholds, §2143.A.3 should be revised to read:

3. Lithographic and Letterpress Printing Control Requirements

a. Applicability

1. The heatset web offset lithographic and letterpress dryer control requirements in subparagraph (b) below apply to subject presses that meet any of the following criteria:

i. The press is located in the parish of Ascension, East Baton Rouge, Iberville, Livingston, or West Baton Rouge and has actual VOC ink oil emissions from the press dryer that are greater than 25 tons per year before the application of control devices; or

ii. The press is located in the parish of Calcasieu or Pointe Coupee and has actual has actual VOC ink oil emissions from the press dryer that are greater than 50 tons per year before the application of control devices; or

iii. The press is located in any other parish and has actual VOC ink oil emissions that are greater than 100 tons per year.

2. The lithographic fountain solution control requirements in subparagraph (c) below apply to lithographic printing facilities that meet all the following criteria:

i. The facility is located in the parish of

Ascension, East Baton Rouge, Iberville, Livingston, or West Baton Rouge; and

ii. The facility has total actual VOC emissions from all lithographic fountain solution processes that are greater than three tons per year.

3. The lithographic and letterpress cleaning solution control requirements in subparagraph (d) below apply to lithographic printing facilities that meet all the following criteria:

i. The facility is located in the parish of Ascension, East Baton Rouge, Iberville, Livingston, or West Baton Rouge; and

ii. The facility has total actual VOC emissions from all lithographic and/or letterpress printing operations (including emissions from cleaning solutions used on lithographic and/or letterpress printing presses) that are greater than three tons per year.

4. If a lithographic or letterpress line at a source is or becomes subject to the provisions of this section it remains so regardless of the future variations in production.

FOR: Changing the applicability threshold for cleaning materials based on actual emissions to 3 TPY equivalent annual actual emissions will give facilities more flexibility in determining applicability.

AGAINST: The CTG recommends the 15 lb/day applicability threshold which is consistent with the applicability thresholds in many CTGs.

RESPONSE 3: Applicability Thresholds — The proposed rule will remain unchanged with respect to the comment. Use of the 15 lb/day applicability threshold is consistent with many CTGs, and is deemed appropriate by EPA.

COMMENT 4: Exemptions — It is recommended that §2143.A.3.b.ii be incorporated into §2143.B.2 in order to keep all lithographic printing control requirements under §2143. This would streamline the regulations and prevent confusion over which exemptions apply to lithographic printing presses.

FOR: Incorporating §2143.A.3.b.ii into 2143.B.2 would simplify the regulations and prevent confusion over which exemptions apply to lithographic printing presses.

AGAINST: Clause 2143.A.3.b.ii contains control options and is not strictly an exemption.

RESPONSE 4: Exemptions — Clause 2413.A.3.b.ii contains a VOC control option for the offset lithographic fountain solution in addition to an exemption

specific to that process. A change would make the rule inconsistent with respect to format. Therefore, no changes will be made.

COMMENT 5: Exemptions — It is recommended that heatset presses used for book printing and heatset presses with maximum web width of 22 inches or less should be excluded from the add-on control recommendations. It is too costly for the emissions reduction that would be achieved. These recommendations are consistent with EPA's *CTG for Offset Lithographic Printing* and would achieve the most economical emissions reductions from the printing industry. In conjunction with the above comment on exemptions, §2143.B.2 should be revised to read:

2. Lithographic and Letterpress Printing Exemptions

a. The following operations are exempt from the fountain solution control requirements of subparagraph (3)(c) above:

1. Any sheet-fed press with a maximum sheet size eleven by seventeen inches or smaller;

2. Any press with a total fountain solution reservoir capacity of less than one gallon;

b. The following operations are exempt from the cleaning solution control requirements of subparagraph (3)(d) above:

1. Heatset web offset lithographic printing operations and heatset web letterpress printing operations that do not meet the add-on control requirement applicability thresholds in subparagraph (3)(a)(1);

2. Heatset presses used for book printing;

3. Heatset presses with a maximum web-width of less than or equal to 22 inches;

4. Operations with emissions from sheet-fed or non-heatset inks, sheet-fed or non-heatset varnishes, waterborne coatings, and radiation cured materials.

c. The following operations are exempt from the add-on control requirements of subparagraph (3)(b) above:

1. Heatset web offset lithographic printing operations and heatset web letterpress printing operations that do not meet the add-on control requirement applicability thresholds in subparagraph (3)(a)(1));

2. Heatset presses used for book printing;

3. Heatset presses with a maximum web-width of less than or equal to 22 inches;

FOR: Add-on controls for heatset presses used for book printing and presses with a maximum web width of 22 inches or less are too costly for the emissions reduction that would be achieved.

AGAINST: There is already a provision in the rule to exempt facilities that emit less

than 25 TPY, 50 TPY, or 100 TPY by parish.

RESPONSE 5: Exemptions — This rule applies only to facilities whose emissions are 25 TPY or greater, and not to those facilities whose emissions are less than 25 TPY. No change is necessary to the proposed rule.

COMMENT 6: Economic Impact Analysis — The department should not rely on EPA's cost-effective analyses in the *CTG for Offset Lithographic Printing* as its economic justification for this regulation. DEQ should conduct its own economic impact analysis that estimates the number of affected facilities, the anticipated emission reductions that will be gained, the cost per ton for the emission reductions, and the technical feasibility of its proposal. A complete economic analysis is needed in order to truly understand the cost benefit impact of this proposal.

EPA relied upon the original impact analysis done during the late 1980's and early 1990's which contained several critical and erroneous assumptions. Comments were submitted to EPA concerning these incorrect assumptions. EPA did not conduct a new economic analysis as a result of an imposed court ordered deadline. Therefore, the impact on small printers is not fully known or understood.

The most significant incorrect assumption made by EPA concerns the use of isopropyl alcohol as a wetting additive in the fountain solution at a concentration of 17 per cent. Many printers have already eliminated or reduced isopropyl alcohol from their operations. Small printing facilities face difficulties associated with reducing or eliminating alcohol from their operations. Smaller printing facilities typically use equipment that has not been designed to run with reduced or no alcohol and often purchase used equipment. Small printing facilities face a difficult transition in order to meet the recommended VOC levels for fountain solutions.

FOR: A complete economic analysis is needed in order to truly understand the cost benefit impact of this proposal.

AGAINST: The department published an Advance Notice of Potential Rulemaking (ANPR) and Solicitation of Comments on the CTG on August 20, 2008. The purpose of the department's ANPR was to substantiate or refute EPA's economic impact analysis. In the department's ANPR, comments were specifically sought concerning the regulatory impact of the CTG, including but not limited to, the fiscal and economic impact and cost compliance associated with adopting these CTGs. The department received one comment to the ANPR and the comment did not concern an economic impact or compliance issue associated with adopting these CTGs.

The comments that the department received on this proposed rule are inadequate to justify the department conducting an economic impact

analysis. The comments lacked information regarding yearly VOC emissions from the facilities located within nonattainment areas, and did not address specific costs associated with control approaches.

EPA used their model plant analysis conducted in the 1993 draft CTG and updated it to 2005 costs using a cost index. EPA is satisfied that the model plant analysis is representative of current operations in the offset lithographic printing industry and current control options, and that the control approaches addressed in the 1993 draft CTG are the same approaches that are available today.

RESPONSE 6: Economic Impact Analysis — The department will not conduct an additional economic analysis for this rule. The comment on this proposed rule did not adequately identify and address what the commenter considered to be EPA's critical erroneous assumptions.

COMMENT 7: Control Requirements for Heatset Web Offset Lithographic Presses — The proposed amendments should include the requirement to maintain a negative dryer pressure relative to the surrounding pressroom air, the ability to exclude EPA exempt VOC compounds from destruction efficiency tests, and should reflect previously mentioned restructuring. Note the recommended language below.

b. Dryer Exhaust Control Requirements

1. Any person who owns or operates a subject heatset web lithographic printing press or a subject heatset web letterpress printing press shall maintain the dryer pressure lower than the press room pressure at all times the press is operating and operate a control system that:

a. Reduces VOC emissions from the press dryer exhaust by 90% by weight (excluding methane and ethane) for a control system whose first installation date was prior to the effective date of this rule; or

b. Reduces VOC emissions from the press dryer by at least 95% by weight (excluding methane and ethane) for a control system whose first installation date was on or after the effective date of this rule; or

c. As an alternative to paragraphs (a) or (b) above, maintain a maximum VOC outlet concentration of 20 ppmv (excluding methane and ethane) as hexane (C_6H_{14}) on a dry basis.

FOR: According to the CTG, if the dryer is operated at negative pressure, the capture efficiency for VOCs from the heatset lithographic inks and varnishes formulated with low volatility ink oils can be assumed to be 100% of the VOCs volatilized in the dryer. Therefore, no additional control would be required.

AGAINST: The rule does not specify how to operate dryers. Clauses 2143.A.3.a.i, ii, and iii require a certain percentage of control efficiency for the control devices. Not requiring certain types of control devices or how the control devices are operated, gives more flexibility to facilities to control emissions in the most efficient and cost effective manner.

RESPONSE 7: Control Requirements for Heatset Web Offset Lithographic Presses — No change is necessary. The rule, as written, provides facilities with flexibility for efficient and cost effective emissions control.

COMMENT 8: Fountain Solution Control Requirements for Lithographic Presses — The proposed regulation should allow for higher VOC content in conjunction with refrigeration on sheetfed presses. This would provide the maximum amount of operational flexibility for those printers that operate sheetfed presses. Many older existing sheetfed and web fed presses were designed to run exclusively with isopropyl alcohol at higher concentrations. EPA's *CTG for Offset Lithographic Printing* allows for a reasonable compromise between lowering the VOC emissions and the technical and economic limitations of the printers who use these older presses.

The proposed regulation should also allow for the use of alcohol substitutes in sheetfed and heatset web presses. Alcohol substitutes represent the state-of-the-art technology for VOC emission reductions in fountain solutions that result in significant reductions in VOC emissions.

Allowing alcohol substitutes and higher VOC contents in conjunction with refrigeration is consistent with EPA's recommendations in the *CTG for Offset Lithographic Printing*.

FOR: The rule should allow for higher VOC content in conjunction with refrigeration on sheetfed presses, which would provide the maximum amount of operational flexibility for those printers that operate sheetfed presses. To promote the use of state-of-the-art technology for VOC emissions reductions, the use of alcohol substitutes in sheetfed and heatset web presses should also be allowed.

AGAINST: Clauses 2143.A.3.b.i, ii, and iii are three control options available to offset lithographic fountain solution controls. However, the controls are not limited to these three options. Subparagraph 2143.A.3.c gives flexibility to facilities in the form of controls that are more efficient and cost effective.

RESPONSE 8: Fountain Solution Control Requirements for Lithographic Presses — No changes will be made. As written, the rule provides flexibility for the facilities to use efficient and cost effective emissions controls.

COMMENT 9: Fountain Solution Control Requirements for Lithographic Presses — The proposed regulation should clearly state that the fountain solution limitations are on an as-applied basis and should allow for the application of site-specific control limits in instances where the proposed limits are economically or technologically not feasible. See the recommended language below.

c. Fountain Solution Control Requirements

1. Any person who owns or operates a subject heatset web offset lithographic printing press shall meet the following for the fountain solution used on that press:

a. If the fountain solution contains alcohol, maintain the as-applied VOC content of the fountain solution at or below 1.6 percent, by weight, or maintain the as-applied VOC content of the fountain solution at or below 3.0 percent, by weight, and refrigerate the fountain solution to 60°F or less; or

b. Maintain the as-applied VOC content of the fountain solution at or below 5.0 percent, by weight, and use no alcohol in the fountain solution.

2. Any person who owns or operates a subject sheet-fed offset lithographic printing press shall meet the following for the fountain solution used on that press:

a. If the fountain solution contains alcohol, maintain the as-applied VOC content of the fountain solution at or below 5.0 percent, by weight, or maintain the as-applied VOC content of the fountain solution at or below 8.5 percent, by weight, and refrigerate the fountain solution to 60°F or less; or

b. Maintain the as-applied VOC content of the fountain solution at or below 5.0 percent, by weight, and use no alcohol in the fountain solution.

3. Any person who owns or operates a subject non-heatset web offset lithographic printing press shall meet the following for the fountain solution used on that press:

a. Maintain the as-applied VOC content of the fountain solution at or below 5.0 percent, by weight, and use no alcohol in the fountain solution.

4. Where it can be demonstrated to the satisfaction of the permitting authority that a subject lithographic printing press cannot be operated with fountain solutions meeting the limits in Paragraphs (c)(1), (c)(2), or (c)(3) above for reasons of technological and/or economic feasibility the permitting authority may establish site-specific limits subject to approval by USEPA as a SIP revision.

FOR: The phrase, as-applied, will clarify how to determine facility emissions and therefore, applicability to the rule. The phrase will also provide consistency with the CTG language.

AGAINST: The fountain solution is a water-based mixture applied to the lithographic plate to render the non-image areas unresponsive to ink. Since the fountain solution is a mixture created at the facility, it should be understood that the determination of VOC emissions is on an "as-applied" basis.

RESPONSE 9: Fountain Solution Control Requirements for Lithographic Presses — The phrase "as-applied" will be added to Clauses 2143.A.3.b.i and ii, as a technical amendment.

COMMENT 10: Cleaning Material Control Requirements for Lithographic Presses — Clearly state that the cleaning material limitations are on an as-applied basis. Also, keep all lithographic printing control requirements under one paragraph in §2143. See the recommended language below.

d. Cleaning Material Control Requirements

1. Any person who owns or operates a subject offset lithographic or letterpress printing press shall meet control cleaning material VOC emissions by one of the following methods:

a. Maintain the as-applied VOC content of the cleaning material at or below 70%, by weight, or maintain the as-applied VOC composite partial vapor pressure of the cleaning material at or below 10 mm Hg at 20°C (68°F). The use of cleaning solutions not meeting either the low VOC content or VOC composite partial vapor pressure requirements is permitted provided that the quantity used does not exceed 110 gallons over any consecutive twelve month period ; or

b. Keep cleaning materials and used shop towels in closed containers at all times except when actually in use.

FOR: The phrase, as-applied, will clarify how to determine facility emissions and therefore, applicability to the rule.

AGAINST: Cleaning materials are typically mixtures of organic (often petroleum-based) solvents. Since the mixture could be created at the facility, it should be understood that the determination of VOC emissions from the cleaning materials is on an "as-applied" basis.

RESPONSE 10: Cleaning Material Control Requirements for Lithographic Presses — The department will not be making the recommended change. Cleaning materials are typically mixtures of organic solvents that may be created at the facility. Therefore, it should be understood that the determination of VOC emissions from the cleaning materials is on an "as-applied" basis.

COMMENT 11: Industrial Organic Solvent Exemption — Revise §2123.B to include lithographic and letterpress printing operations. It should be clear that lithographic cleaning solutions are not regulated under industrial organic solvent requirements. This is supported by EPA's *Control Techniques Guidelines: Industrial Cleaning Solvents* (EPA 453/R-06-001). See revised language below.

B. Soldering operations, painting and coating operations not listed in Subsection C of this Section, including lithographic and letterpress printing operations regulated under LAC 33:III:2143, and dry cleaning operations using organic solvents that are not considered photochemically reactive shall be considered exempt from the requirements of this Section.

FOR: Lithographic cleaning solutions should be exempted in the proposed rule to clarify that lithographic cleaning solutions are not regulated under industrial organic solvent requirements.

AGAINST: An exemption for lithographic and letterpress printing operations from Section 2123 of the regulations is not necessary because they are not a soldering, painting, or dry cleaning operation.

RESPONSE 11: Industrial Organic Solvent Exemption — No changes will be made. Lithographic and letterpress printing operations are not listed in Subsection 2123.C because they are not a type of soldering, painting, or dry cleaning operation.

COMMENT 12: Industrial Organic Solvent Exemption — The department should provide a specific exception for lithographic printing from the paper coating VOC emissions limitations in item 11 of the table in §2123.C. This comment is supported by EPA in EPA's 2006 *CTG for Offset Lithographic Printing*. See the suggested language below.

*11. Paper, Film, Foil, Pressure Sensitive Tape, and Label Surface Coating**
** These coating operations do not include lithographic printing lines.*

FOR: A specific exemption for lithographic printing should be made from the paper coating VOC emissions limitations in item 11 of the table in Subsection 2123.C which is supported by EPA in the CTG.

AGAINST: Coating performed on or in-line with any offset lithographic, screen, letterpress, flexographic, rotogravure, or digital printing is part of a printing process and is not part of the paper, film, and foil coating category.

RESPONSE 12: Industrial Organic Solvent Exemption — No changes will be made. These are two different categories of processes; therefore, an exemption is not warranted.

COMMENT 13: Compliance Testing — The proposed regulations do not include a method to determine the VOC composite partial vapor pressure of cleaning solutions. Also, the proposed regulations should allow the use of a material balance calculation to demonstrate compliance with the VOC content and composite partial vapor pressure limits of the rule. The calculation is effective in determining compliance with the limits because the fountain solutions and cleaning solvents are prepared in the same manner each time. In some instances where no dilution occurs, the as-applied VOC content of the non-diluted solution is available from the product's supplier or the Material Safety Data Sheet (MSDS). Therefore, the proposed regulations should also include the use of supplier provided Method 24 data, to demonstrate compliance. See the suggested language below, for §2143.C.1.

a. For any offset lithographic printing press that is subject to the fountain solution and/or cleaning material VOC content requirements of section (A)(3)(c) or (A)(3)(d) of this rule, the VOC content of the as-applied material shall be determined by one of the following methods:

1. If diluted prior to use, a calculation that combines EPA Method 24 analytical data for the concentrated materials used in preparation of the as-applied fountain solution and the proportions in which they are mixed to make the as-applied material. The analysis of the concentrated materials may be performed by the supplier of those materials. Owners and/or operators may use formulation information provided with the concentrated materials used to prepare the fountain solution, such as the container label, the product data sheet, or the MSDS sheet to document the VOC content of the concentrated material; or

2. If not diluted prior to use, owners and/or operators shall use formulation information provided by the supplier, such as the container label, the product data sheet, or the product MSDS sheet; or

3. Analysis by EPA Method 24 of a sample of as-applied fountain solution.

b. For any offset lithographic printing press that is subject to the cleaning material VOC composite partial vapor pressure requirements of Section (A)(3)(d) of this rule, the VOC composite partial vapor pressure of the as-applied shall be determined by one of the following methods:

1. If diluted prior to use, calculate the VOC composite vapor pressure of the as-applied solvent by using the formula for "VOC composite vapor pressure" as follows:

Determine the identity and quantity of each compound or class of compounds in a blended organic solvent by using ASTM D2306, or by using ASTM E260 for organics and ASTM D3792 for water content, if applicable, or the manufacturer's product formulation data.

Determine the vapor pressure of each pure VOC component by using ASTM D2879 or publications such as Perry's Chemical Engineer's Handbook, CRC Handbook of Chemistry and Physics, or Lange's Handbook of Chemistry.

Calculate the VOC composite partial pressure of the solvent by using the formula for "VOC composite vapor pressure." For the purpose of this calculation, the blended solvent shall be assumed to be an ideal solution where Raoult's Law applies. The partial pressures of each compound at 20°Celsius (68°Fahrenheit) shall be used in the formula. The VOC composite vapor pressure shall be calculated as follows:

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

Where:
Wi = Weight of the "i"th VOC compound, in grams.
Ww = Weight of water, in grams.
We = Weight of exempt compound, in grams.
MWi = Molecular weight of the "i"th VOC compound, in grams per gram-mole.
MWw = Molecular weight of water, in grams per gram-mole.
MWe = Molecular weight of the "e"th exempt compound, in grams per gram-mole.
PPc = VOC composite vapor pressure at 20°Celsius (68°Fahrenheit), in mm Hg.
VPi = Vapor pressure of the "i"th VOC compound at 20°Celsius (68°Fahrenheit), in mm Hg; or

2. If not diluted prior to use owners and/or operators shall use formulation information provided by the supplier, such as the container label, the product data sheet, or the product MSDS sheet; or

3. Analysis by an appropriate method for VOC composite partial vapor pressure of a sample of the as-applied cleaning solution. The analysis may be performed by the supplier of those materials.

FOR/AGAINST -- No arguments necessary since the provision in question is not part of this rulemaking.

RESPONSE 13: Compliance Testing — Although this comment requests changes to a provision not included in this rulemaking, it has merit and the department will consider making changes in a future rulemaking.

COMMENT 14: Compliance Testing — Allow EPA Method 18 and 25A as acceptable test methods for determining total gaseous nonmethane organic emissions as carbon. There are problems with achieving consistent results with Method 25 and emissions from heatset web offset printing presses. This comment is supported in EPA's document, *CTG for Offset Lithographic Printing*. See the suggested revision to §2143.C.3 below.

3. Test Methods 18, 25, or 25A (40 CFR Part 60, Appendix A, as incorporated by reference at LAC 33:III:3003) for determining total gaseous nonmethane organic emissions as carbon;

a. If Method 25A is used the outlet readings from a thermal or catalytic oxidizer may be corrected by using Method 18 or 25 to determine non-VOC components (methane and ethane) and subtracting these from the Method 25A result.

FOR/AGAINST -- No arguments necessary since the provision in question is not part of this rulemaking.

RESPONSE 14: Compliance Testing — Although this comment requests changes to a provision not included in this rulemaking, the comment has merit and the department will consider making changes in a future rulemaking.

COMMENT 15: Monitoring and Recordkeeping Requirements — Add new language to §2143.D that would include fountain solution and cleaning material monitoring and recordkeeping requirements. The new language will streamline the requirements and minimize the economic burden associated with the regulations and also maintain the assurance that the requirements are being met. See the suggested language below.

4. Recordkeeping for Lithographic Fountain Solutions

a. The owner or operator of a subject lithographic printing press using alcohol containing fountain solution shall:

1. Measure the alcohol content of the as-applied fountain solution using a hydrometer with an accuracy of 0.5 percent and equipped with temperature correction or with readings adjusted for temperature at least once per shift or once per batch, whichever is longer.

2. Use a standard solution to calibrate the hydrometer for the type of alcohol used in the fountain solution.

3. If the owner or operator of a subject offset lithographic printing press uses refrigerated fountain solution to comply with the alcohol content limitations of paragraphs (A)(3)(c)(1)(a) or

(A)(3)(c)(2)(a) of this rule, the owner or operator shall measure the temperature of the fountain solution at the recirculating tank at least once per day, in degrees Fahrenheit.

b. The owner or operator of a subject offset lithographic printing press using fountain solution containing only alcohol substitutes shall maintain records of the calculation of the as-applied VOC content, the formulation information provided by the alcohol-substitute supplier, or the results of the Method 24 analysis as described in paragraph (C)(1)(a) of this rule. For fountain solutions containing alcohol-substitutes purchased with less than 5% VOC content before dilution and addition, the owner or operator need not keep records of VOC dilution and addition, and only need to maintain records of product MSDS sheets with VOC content determined by Method 24.

FOR/AGAINST -- No arguments necessary since the provision in question is not part of this rulemaking.

RESPONSE 15: Monitoring and Recordkeeping Requirements — This section of the rule was not part of this rulemaking; therefore, no changes will be made.

COMMENT 16: Monitoring and Recordkeeping Requirements — Revise §2143.D to include cleaning material monitoring and recordkeeping requirements. See the suggested revision below.

5. Recordkeeping for Lithographic Cleaning Materials

a. The owner or operator of a subject offset lithographic or letterpress printing facility shall maintain monthly records of the VOC content or VOC composite vapor pressure of all cleaning materials employed in all the lithographic and letterpress printing operations.

b. The owner or operator of a subject offset lithographic printing press using an automatic blanket wash system that mixes cleaning solution at the point of application shall document that flow meters or fixed volume spray systems result in the VOC content of the mixed solution that complies with paragraph (A)(3)(d)(1)(a).

c. The owner or operator of a subject heatset, non-heatset, or sheet-fed lithographic printing press or letterpress printing press shall maintain monthly records of the total amount, in gallons, of the clean-up materials employed that exceed the allowable VOC content or VOC composite vapor pressure limitations of paragraph (A)(3)(d)(1)(a) of this rule.

FOR/AGAINST -- No arguments necessary since the provision in question is not part of this rulemaking.

RESPONSE 16: Monitoring and Recordkeeping Requirements — See Response 15.

COMMENT 17: Emission Calculations — To guarantee that the proper emission and retention factors are applied for purposes of determining applicability and compliance, the appropriate factors need to be included in the regulations. This comment is supported in EPA's document, *CTG for Offset Lithographic Printing*. See the recommended language below for §2143.A.3.e.

e. Retention Factors and Capture Efficiencies

1. For purposes of determining VOC emissions from offset lithographic printing operations, the following retention factors and capture efficiencies shall be used:

i. A portion of the VOC contained in inks and cleaning solution is retained in the printed web or in the shop towels used for cleaning. The following retention factors shall be used:

(a) A 20% VOC retention factor shall be used for heatset inks printed on absorptive substrates, meaning 80% of the VOC in the ink is emitted during the printing process and is available for capture and control by an add-on pollution control device.

(b) A 95% VOC retention factor shall be used for sheet-fed and non-heatset web inks printed on absorptive substrates, meaning 5% of the VOC in the ink is emitted during the printing process.

(c) A 50% VOC retention factor shall be used for cleaning solution VOC in shop towels for cleaning solutions with a VOC composite vapor pressure of no more than 10 mm of mercury (Hg) at 20°C (68°F) if the contaminated shop towels are kept in closed containers, meaning 50% of the VOC used on the shop towels is emitted during the cleaning process.

ii. A portion of the VOC contained in inks, fountain solutions, and automatic blanket washes on heatset presses is captured in the press dryer for control by add-on pollution control devices. The following capture efficiencies are to be used:

(a) A 100% VOC carry over efficiency shall be used for inks. All the VOC in the ink that is not retained is assumed to be volatilized in the press dryer. Capture efficiency testing for heatset dryers is not required if it is demonstrated that pressure in the dryer is negative relative to the surrounding press room and the airflow is into the dryer.

(b) A 70% VOC carry over efficiency shall be used for fountain solutions containing alcohol substitutes.

(c) A 40% VOC carry over efficiency shall to be used for automatic blanket wash solutions with a VOC composite vapor pressure of no more than 10 mm of mercury (Hg) at 20°C (68°F).

FOR: The appropriate factors need to be included in the regulations to guarantee that the proper emission and retention factors are applied for

the purpose of determining applicability and compliance.

AGAINST: According to the CTG, these are factors that may be considered but are not required to determine applicability with the regulation.

RESPONSE 17: Emission Calculations — No changes will be made. The retention and emission factors listed in the CTG are options which facilities may use to determine whether or not they meet certain applicability thresholds in the regulations; however, they are not the only factors a facility may use. The department has decided not to restrict facilities to one particular factor for determining applicability and compliance with the regulations.

COMMENT 18: Definitions — It is recommended that the following definitions be added or amended to clarify the applicability and compliance requirements in regard to the lithographic printing industry.

Alcohol – Any of the following compounds, when used as a fountain solution additive for offset lithographic printing: ethanol, n-propanol, and isopropanol.

Alcohol Substitutes – Nonalcohol additives that contain VOCs and are used in the fountain solution. Some additives are used to reduce the surface tension of water; others are added to prevent piling (ink build-up).

Cleaning Material – With respect to a surface coating operation or graphic arts operation, a liquid solvent or solution used to clean the operating surfaces of a printing press and its parts. For purposes of this standard, cleaning solutions include, but are not limited to blanket wash, roller wash, metering roller cleaner, plate cleaner, impression cylinder washes, rubber rejuvenators, and other cleaners used for cleaning a press, press parts, or to remove dried ink or coating from areas around the press.

Dampening System – Equipment used to deliver the fountain solution to the lithographic plate.

Fountain Solution – A mixture of water and other volatile and non-volatile chemicals and additives used in lithographic printing operations that maintains the quality of the printing plate including preventing debris build up (e.g., spray power, paper fiber, coating particles, dried ink particles, and other materials), and increases viscosity and reduces the surface tension of the water so that it spreads easily across the printing plate surface. The fountain solution wets the nonimage area so that the ink is maintained within the image areas. Non-volatile additives include mineral salts and hydrophilic gums. Alcohol and alcohol

substitutes are the most common VOC additives used to reduce the surface tension of the fountain solution.

Fountain Solution Batch – A supply of fountain solution that is prepared and used without alteration until completely used or removed from the printing process. For the purposes of this rule, this term may apply to solutions prepared in either discrete batches or solutions that are continuously blended with automatic mixing units.

Fountain Solution Reservoir – The collection tank that accepts fountain solution recirculated from printing unit(s). In some cases, the tanks are equipped with cooling coils for refrigeration of the fountain solution.

Heatset – A lithographic printing process where the printing inks are set by the evaporation of the ink oils in a heatset dryer.

Heatset Dryer – A hot air dryer used in heatset lithography to heat the printed substrate and to promote the evaporation of ink oils.

Inking System – A series of rollers used to meter ink onto the lithographic plate. The system can include agitators, pumps, totes, and other types of ink containers.

Lithographic printing or lithographic printing operation – A planographic printing process where the image and nonimage areas are chemically differentiated; the image area is oil receptive and the nonimage area is water receptive. This method differs from other printing methods, where the image is typically printed from a raised or recessed surface. A lithographic printing operation includes, but is not limited to, a heatset web lithographic printing operation, a coldset web offset lithographic printing operation, and a sheet-fed offset lithographic printing operation.

Non-heatset Lithographic Printing – A lithographic printing process where the printing inks are set by absorption and/or oxidation of the ink oil, not by evaporation of the ink oils in a dryer. Use of an infrared heater or printing conducted using ultraviolet-cured or electron beam-cured inks is considered non-heatset.

Offset Lithography – A printing process that transfers the ink film from the lithographic plate to an intermediary surface (blanket), which, in turn, transfers the ink film to the substrate.

Press – A printing production assembly composed of one or more units used to produce a printed substrate including any associated coating, spray powder application, heatset web dryer, ultraviolet or electron

beam curing units, or infrared heating units.

Sheet-fed Lithographic Printing – means a non-heatset lithographic printing process where individual sheets of substrate are fed into the press sequentially.

Unit – The smallest complete printing component, composed of inking and dampening systems, of a printing press.

VOC Composite Partial Vapor Pressure – The sum of the partial pressure of the compounds defined as VOCs. VOC composite partial vapor pressure is calculated as follows:

$$PP_c = \sum_{i=1}^{n} \frac{(W_i)(VP_i)/MW_i}{\frac{W_w}{MW_w} + \frac{W_c}{MW_c} + \sum_{i=1}^{n} \frac{W_i}{MW_i}}$$

Where:
Wi = Weight of the "i"th VOC compound, in grams
Ww = Weight of water, in grams
Wc = Weight of exempt compound, in grams
MWi = Molecular weight of the "i"th VOC compound, in g/g-mole
MWw= Molecular weight of water, in g/g-mole
MWc= Molecular weight of exempt compound, in g/g-mole
PPc = VOC composite partial vapor pressure at 20°C (68°F), in mm Hg
VPi = Vapor pressure of the "i"th VOC compound at 20°C (68°F), in mm Hg

Web – A lithographic printing process where a continuous roll of substrate is fed into the press.

FOR: Definitions should be added to the proposed regulation to clarify the applicability and compliance requirements in regard to the lithographic printing industry.

AGAINST: There is no need for additional definitions because the definitions in the regulations are adequate.

RESPONSE 18: Definitions — The department agrees with the comment. Definitions pertaining to Control Technology Guidelines are currently being reviewed by the department and will be considered in a future rulemaking.

Comment Summary Response & Concise Statement Key – AQ296
Amendments to the Air Regulations
Control Technology Guidelines
LAC 33:III.111, 2123, and 2143

COMMENT #	SUGGESTED BY
1 — 18	Ed Chalifoux, President Printing Industry Association of the South (PIAS)

Final Rule AQ296 with Technical Amendments

and regarding the implementation of the Louisiana Science Education Act. The revisions to Section 337 are required by Acts 907 and 473 of the 2008 Louisiana Legislature.

Title 28
EDUCATION
Part CXV. Bulletin 741—Louisiana Handbook for School Administrators
Chapter 3. Operation and Administration
§337. Written Policies and Procedures

A. - B. ...

C. Each LEA shall have policies and procedures that address, but are not limited to, the following:

1. - 16. ...

17. the notification of the parent or legal guardian of every student, in writing, of the proper process and procedures to follow in order to make a complaint or request information from the school or the school's governing authority:

a. such information shall include, at a minimum, the name, address, phone number, and email address of the appropriate person to contact at each step of the prescribed process or procedure, and shall be updated, at least, on an annual basis;

b. such information shall be incorporated into any existing policy or policies, code of conduct, or student handbook of the LEA or of each school under its jurisdiction;

18. the implementation of §2304 Science Education.

AUTHORITY NOTE: Promulgated in accordance with R.S. 17:6; R.S. 17:81; R.S. 17:172; R.S.17:240; R.S. 17:285.1.

HISTORICAL NOTE: Promulgated by the Board of Elementary and Secondary Education, LR 31:1261 (June 2005), amended LR 33:429 (March 2007), LR 35:1101 (June 2009).

Jeanette Vosburg
Acting Executive Director

0906#022

RULE

Department of Environmental Quality
Office of the Secretary
Legal Affairs Division

Control Technology Guidelines
(LAC 33:III.111, 2123, and 2143) (AQ296)

Under the authority of the Environmental Quality Act, R.S. 30:2001 et seq., and in accordance with the provisions of the Administrative Procedure Act, R.S. 49:950 et seq., the secretary has amended the Air regulations, LAC 33:III.111, 2123, and 2143 (Log #AQ296).

This Rule reflects changes made to the lithographic printing materials and letterpress printing materials Control Technology Guidelines (CTG) and the flexible package printing materials CTG that were published in the *Federal Register*, Volume 71, on October 5, 2006, pages 58745-58753. In addition, based on public comment, EPA incorporated an option into the industrial cleaning solvents CTG. In the *Federal Register*, Volume 72, on October 9, 2007, pages 57215-57222, EPA made changes to the paper, film, and foil coatings CTG, and the metal furniture coatings and large appliance coatings CTG. The final CTG for paper, film, and foil coatings have been revised to provide separate applicability recommendations for coating operations and cleaning operations, and the final CTG for metal furniture coatings and large appliance coatings have been revised to reflect a lower volatile organic compound (VOC) content coatings recommendations. The Clean Air Act (CAA) Section 172(c)(1) provides that state implementation plans (SIPs) for nonattainment areas must include reasonably available control measures (RACM), including reasonably available control technology (RACT) for sources of emissions. CAA Section 182(b)(2)(A) provides that for certain nonattainment areas, states must revise their SIPs to include RACT for each category of VOC sources covered by a CTG document issued between November 15, 1990, and the date of attainment. EPA provides states with guidance concerning what types of controls could constitute RACT for a given source category through issuance of a CTG. States can follow the CTG and adopt state regulations to implement the recommendations contained therein, or they can adopt alternative approaches. The states must submit their RACT rules to EPA for review and approval as part of the SIP process. This rule amends the state air regulations to follow the CTG recommendations provided by EPA, which will then be included in the SIP to meet the requirements of the CAA. The basis and rationale for this rule are to meet the CAA requirements for SIP submittals. This proposed Rule meets an exception listed in R.S. 30:2019(D)(2) and R.S. 49:953(G)(3); therefore, no report regarding environmental/health benefits and social/economic costs is required.

Title 33
ENVIRONMENTAL QUALITY
Part III. Air
Chapter 1. General Provisions
§111. Definitions

A. When used in these rules and regulations, the following words and phrases shall have the meanings ascribed to them below.

* * *

Miscellaneous Metal Parts and Products Coating—the coating of miscellaneous metal parts and products in the following categories:

a. - f. ...

g. any other category of coated metal products except those on the specified list in LAC 33:III.2123.C.1-3, 5-7, and 10 of surface coating processes, which are included in the Standard Industrial Classification Code major group 33 (primary metal industries), major group 34 (fabricated metal products), major group 35 (nonelectrical machinery), major group 36 (electrical machinery), major group 37 (transportation equipment), major group 38 (miscellaneous instruments), and major group 39 (miscellaneous manufacturing industries).

* * *

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended LR 14:348 (June 1988), LR 15:1061 (December 1989), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 17:777 (August 1991), LR 21:1081 (October 1995),

LR 22:1212 (December 1996), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2444 (November 2000), amended by the Office of the Secretary, Legal Affairs Division, LR 32:808 (May 2006), LR 32:1599 (September 2006), LR 33:2082 (October 2007), LR 34:70 (January 2008), LR 35:1101 (June 2009).

Chapter 21. Control of Emission of Organic Compounds

Subchapter B. Organic Solvents

§2123. Organic Solvents

A. Except as provided in Subsections B and C of this Section, any emission source using organic solvents having an emission of organic solvents of more than 3 pounds (1.3 kilograms) per hour or 15 pounds (6.8 kilograms) per day shall reduce the emission, where feasible, by incorporating one or more of the following control methods:

1. incineration, provided 90 percent of the carbon in the organic compounds being incinerated is oxidized to carbon dioxide (except as provided in Subsection D of this Section);

2. carbon adsorption, with a control efficiency of at least 90 percent, of the organic compounds;

3. any other equivalent means as may be approved by the administrative authority. Once a source exceeds the emission cutoff specified in this Section that source shall be subject and shall remain subject to the requirements of this Subsection regardless of future emission rates.

B. Soldering operations, painting and coating operations not listed in Subsection C of this Section, and dry cleaning operations using organic solvents that are not considered photochemically reactive shall be considered for exemption from the requirements of this Section.

1. - 2. ...

C. Surface Coating Industries. No person may cause, suffer, allow, or permit volatile organic compound (VOC) emissions from the surface coating of any materials affected by this Subsection to exceed the emission limits as specified in this Section.

	Daily Weighted Average VOC Emission Limitation	
Affected Facility	**Lbs. per Gal. of Coating as applied (minus water and exempt solvent)**	**Kgs. per Liter of Coating as applied (minus water and exempt solvent)**
1. Large Appliance Coating Industry		
General, One Component (Baked/Air Dried)	2.3 / 2.3	0.275 / 0.275
General, Multi-Component (Baked/Air Dried)	2.3 / 2.8	0.275 / 0.340
Extreme High Gloss (Baked/Air Dried)	3.0 / 2.8	0.360 / 0.340
Extreme Performance (Baked/Air Dried)	3.0 / 3.5	0.360 / 0.420
Heat Resistant (Baked/Air Dried)	3.0 / 3.5	0.360 / 0.420
Metallic (Baked/Air Dried)	3.5 / 3.5	0.420 / 0.420
Pretreatment Coatings (Baked/Air Dried)	3.5 / 3.5	0.420 / 0.420
Solar Absorbent (Baked/Air Dried)	3.0 / 3.5	0.360 / 0.420

	Daily Weighted Average VOC Emission Limitation	
Affected Facility	**Lbs. per Gal. of Coating as applied (minus water and exempt solvent)**	**Kgs. per Liter of Coating as applied (minus water and exempt solvent)**
2. Surface Coating of Cans		
Sheet Basecoat (exterior and interior) and over-varnish: Two-piece can exterior (basecoat and over-varnish)	2.8	0.34
Two and three-piece can interior body spray, two-piece can exterior end (spray or roll coat)	4.2	0.51
Three-piece can side-seam spray	5.5	0.66
End sealing compound	3.7	0.44
3. Surface Coating of Coils		
Prime and topcoat or single coat operation	2.6	0.31
4. Surface Coating of Fabrics		
Fabric Facility	2.9	0.35
Vinyl Coating Line (except Plasticol coatings)	3.8	0.45
5. Surface Coating of Assembly Line Automobiles and Light Duty Trucks		
Prime application, flashoff area and oven (determined on a monthly basis)	1.2	0.14
Primer surface application flashoff area and oven	2.8	0.34
Topcoat application, flashoff area and oven	2.8	0.34
Final repair application, flashoff area and oven	4.8	0.58
As an alternative to the emission limitation of 2.8 pounds of VOC per gallon of coating applied for the primer surfacer and/or topcoat application, compliance with these emission limitations may be demonstrated by meeting a standard of 15.1 pounds of VOC per gallon of solids deposited.		
6. Surface Coating–Magnet Wire Coating		
Coating Line	1.7	0.20
7. Surface Coating of Metal Furniture		
General, One Component (Baked/Air Dried)	2.3 / 2.3	0.275 / 0.275
General, Multi-Component (Baked/Air Dried)	2.3 / 2.8	0.275 / 0.340
Extreme High Gloss (Baked/Air Dried)	3.0 / 2.8	0.360 / 0.340
Extreme Performance (Baked/Air Dried)	3.0 / 3.5	0.360 / 0.420
Heat Resistant (Baked/Air Dried)	3.0 / 3.5	0.360 / 0.420
Metallic (Baked/Air Dried)	3.5 / 3.5	0.420 / 0.420
Pretreatment Coatings (Baked/Air Dried)	3.5 / 3.5	0.420 / 0.420
Solar Absorbent (Baked/Air Dried)	3.0 / 3.5	0.360 / 0.420
8. Surface Coating of Miscellaneous Metal Parts and Products		
Clear Coat	4.3	0.52
Air or force air dried items (not oven dried)	3.5	0.42
Frequent color change and/or large numbers of colors applied, or first coat on untreated ferrous substrate	3.0	0.36
Outdoor or harsh exposure or extreme performance characteristics	3.5	0.42

Affected Facility	Daily Weighted Average VOC Emission Limitation	
	Lbs. per Gal. of Coating as applied (minus water and exempt solvent)	Kgs. per Liter of Coating as applied (minus water and exempt solvent)
No or infrequent color change, or small number of colors applied:		
a. Powder Coating	0.4	0.05
b. Other	3.0	0.36
These limits do not apply to operations covered in 1-7 or 10 herein or exterior coating of fully assembled aircraft, auto refinishing, and auto customizing topcoating (processing less than 35 vehicles per day).		
9. Factory Surface Coating of Flat Wood Paneling with VOC Emissions Greater Than 15 Pounds Per Day Before Controls		
All Inks, Coatings, and Adhesives	2.1	0.25
10. Surface Coating for Marine Vessels and Oilfield Tubulars and Ancillary Oilfield Equipment		
a. Except as otherwise provided in this Section, a person shall not apply a marine coating with a VOC content in excess of the following limits:		
Baked Coatings	3.5	0.42
Air-Dried Single-Component Alkyd or Vinyl Flat or Semi Gloss Finish Coatings	3.5	0.42
Two Component Coatings	3.5	0.42
b. Except for the parishes of Ascension, Calcasieu, East Baton Rouge, Iberville, Livingston, Pointe Coupee, and West Baton Rouge, in which the VOC limitations in Subparagraph C.10.a of this Section may not be exceeded, specialty marine coatings and coatings on oilfield tubulars and ancillary oilfield equipment with a VOC content not in excess of the following limits may be applied:		
Heat Resistant	3.5	0.42
Metallic Heat Resistant	4.42	0.53
High Temperature (Fed. Spec. TT-P-28)	5.41	0.65
Pre-Treatment Wash Primer	6.5	0.78
Underwater Weapon	3.5	0.42
Elastomeric Adhesives With 15 Percent Weight Natural or Synthetic Rubber	6.08	0.73
Solvent-Based Inorganic Zinc Primer	5.41	0.65
Pre-Construction and Interior Primer	3.5	0.42
Exterior Epoxy Primer	3.5	0.42
Navigational Aids	3.5	0.42
Sealant for Wire-Sprayed Aluminum	5.4	0.648
Special Marking	4.08	0.49
Tack Coat (Epoxies)	5.08	0.61
Low Activation Interior Coating	4.08	0.49
Repair and Maintenance Thermoplastic	5.41	0.65
Extreme High Gloss Coating	4.08	0.49
Antenna Coating	4.42	0.53
Antifoulant	3.66	0.44
High Gloss Alkyd	3.5	0.42
Anchor Chain Asphalt Varnish (Fed. Spec. TT-V-51)	5.2	0.62
Wood Spar Varnish (Fed. Spec. TT-V-119)	4.1	0.492
Dull Black Finish Coating (DOD-P-15146)	3.7	0.444
Tank Coatings (DOD-P-23236)	3.5	0.42
Potable Water Tank Coating (DOD-P-23236)	3.7	0.444
Flight Deck Markings (DOD-C-24667)	4.2	0.504
Vinyl Acrylic Top Coats	5.4	0.648

Affected Facility	Daily Weighted Average VOC Emission Limitation	
	Lbs. per Gal. of Coating as applied (minus water and exempt solvent)	Kgs. per Liter of Coating as applied (minus water and exempt solvent)
Antifoulant Applied to Aluminum Hulls	4.5	0.55
11. Paper, Film, Foil, Pressure Sensitive Tape, and Label Surface Coating	Daily Weighted Average VOC Emission Limitation	
	kg VOC/kg Solids (lb VOC/lb Solids)	kg VOC/kg Coating (lb VOC/lb Coating)
Paper, Film, and Foil	0.40	0.08
Pressure Sensitive Tape and Label	0.20	0.067

D. Control Techniques

1. If add-on controls such as incinerators or vapor recovery systems are used to comply with the emission limitation requirements, in terms of pounds per gallon of solids as applied (determined in accordance with Paragraph D.8 of this Section), the volatile organic compound capture and abatement system shall be at least 80 percent efficient overall (90 percent for factory surface coating of flat wood paneling). All surface coating facilities shall submit to the Office of Environmental Services, for approval, design data for each capture system and emission control device that is proposed for use. The effectiveness of the capture system (i.e., capture efficiency) shall be determined using the procedure specified in Paragraph E.6 of this Section.

2. If a person wishes to use low solvent technology to meet any of the emission limits specified in Subsection C of this Section and if the technology to be used for any particular application is not now proven but is expected to be proven in a reasonable length of time, he may request a compliance date extension from the administrative authority*. Compliance date extensions will require progress reports every 90 days, or as directed, to show reasonable progress, as determined by the administrative authority, toward technology to meet the specified emission limitation.

3. ...

4. Compliance with the alternative emission limit established in Paragraph C.5 of this Section of 15.1 pounds of VOC per gallon of solids deposited shall be determined in accordance with EPA's "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light Duty Truck Topcoat Operations", EPA 450/3-88-018, December, 1988.

5. ...

6. Surface coating facilities on any property in Ascension, Calcasieu, East Baton Rouge, Iberville, Livingston, Pointe Coupee, and West Baton Rouge parishes that when controlled have a potential to emit, at maximum production, a combined weight (total from the property) of VOCs less than 10 tons in any consecutive 12 calendar months are exempt from the provisions of Subsection C of this Section. Surface coating facilities on any property in parishes other than Ascension, Calcasieu, East Baton Rouge, Iberville, Livingston, Pointe Coupee, and West Baton Rouge that when uncontrolled have a potential to emit a combined

weight of VOCs less than 100 pounds (45 kilograms) in any consecutive 24-hour period are exempt from the provisions of Subsection C of this Section. Any surface coating facility with VOC emissions of less than or equal to 15 pounds (6.8 kilograms) per day is exempt from the provisions of Paragraphs C.1, 8, and 11 of this Section.

7. Soldering and surface coating facilities or portions thereof, may request from the administrative authority* exemption from the requirements of Subsection C of this Section if all of the following conditions are met:

7.a. - 9....

E. Testing. Compliance with Subsections A, C, and D of this Section shall be determined by applying the following test methods, as appropriate.

1. - 7. ...

F. Recordkeeping. The owner/operator of any surface coating facility shall maintain records at the facility to verify compliance with or exemption from this Section. The records shall be maintained for at least two years and shall include, but not be limited to, the following:

1. records of any testing done in accordance with Subsection E of this Section;

2. records of the installation and maintenance of monitors to accurately measure and record operational parameters of all required control devices as necessary to ensure the proper functioning of those devices in accordance with the design specifications, including but not limited to:

2.a. - 4....

G. Mandatory Work Practices for Surface Coating of Flat Wood Paneling. The owner/operator of any facility performing factory surface coating of flat wood paneling shall comply with the following mandatory work practices:

1. store all VOC coatings, thinners, and cleaning materials in closed containers;

2. minimize spills and clean up spills immediately;

3. convey any coatings, thinners, and cleaning material in closed containers or pipes; and

4. close mixing vessels containing VOC coatings and other material except when specifically in use.

H. Definitions

Air Dried Coating—any coating that is cured at a temperature below 90°C (194°F).

Baked Coating—any coating that is cured at a temperature at or above 90°C (194°F).

Extreme High Gloss Coating—any coating that achieves at least 95 percent reflectance on a 60° meter when tested by ASTM Method D-523.

Heat Resistant Coating—any coating that during normal use must withstand temperatures of at least 204°C (400°F).

High Gloss Coating—any coating that achieves at least 85 percent reflectance on a 60° meter when tested by ASTM Method D-523.

High Temperature Coating—any coating that must withstand temperatures of at least 426°C (800°F).

Marine Coating—any coating, except unsaturated polyester resin (fiberglass) coatings, containing volatile organic materials and applied by brush, spray, roller, or other means to ships, boats, and their appurtenances, and to buoys and oil drilling rigs intended for the marine environment.

Metallic Heat Resistant Coating—any coating that contains more than 5 grams of metal particles per liter as applied and that must withstand temperatures over 80°C (175°F).

Repair and Maintenance Thermoplastic Coating—a resin-bearing coating in which the resin becomes pliable with the application of heat, such as vinyl, chlorinated rubber, or bituminous coatings.

I. Timing. A facility that has become subject to this regulation as a result of a revision of the regulation shall comply with the requirements of this Section as soon as practicable, but in no event later than one year from promulgation of the regulation revision.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended LR 16:119 (February 1990), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 17:654 (July 1991), LR 18:1122 (October 1992), LR 22:340 (May 1996), LR 22:1212 (December 1996), LR 23:1678 (December 1997), LR 24:23 (January 1998), LR 24:1285 (July 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 25:1240 (July 1999), LR 26:2453 (November 2000), LR 28:1765 (August 2002), LR 30:746 (April 2004), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2440 (October 2005), LR 33:2086 (October 2007), LR 35:1102 (June 2009).

Subchapter H. Graphic Arts

§2143. Graphic Arts (Printing) by Rotogravure, Flexographic, Offset Lithographic, Letterpress, and Flexible Package Printing Processes

A. Control Requirements

1. After June 20, 2010, no person shall operate or allow the operation of a packaging rotogravure, publication rotogravure, or flexographic printing facility having a potential to emit 25 TPY or more of VOC in the parishes of Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge; having a potential to emit 50 TPY or more of VOC in the parishes of Calcasieu and Pointe Coupee; or having a potential to emit 100 TPY or more of VOC in any other parish, unless VOC emissions are controlled by one of the methods in Subparagraphs A.1.a-d of this Section. This requirement applies to affected machines on which both surface coating and printing operations are performed. Line-by-line compliance with these emission limits or control requirements is required. Any cross-line averaging or bubbling must receive approval from the administrative authority*. Once a facility is subject to the provisions of this Section, it remains so regardless of future variations in production.

a. The solvent fraction of ink, as it is applied to the substrate, less exempt solvent, shall contain 25 volume percent or less of organic solvent and 75 volume percent or more of water. Also acceptable as an alternative limit is ink containing no more than 0.5 pounds of volatile organic compounds per pound of solids. Exempt solvents are those compounds listed in LAC 33:III.2117.

b. A volatile organic compound adsorption or incineration system shall have at least 95 percent (by weight) control efficiency across the control device, which can be demonstrated to have an overall capture and abatement reduction of at least 85 percent.

c. The ink as it is applied to the substrate, less water and exempt solvent, shall contain 60 percent by volume or more of nonvolatile material.

d. Another control method approved by the administrative authority* may be employed.

2. After June 20, 2010, no person shall operate or allow the operation of a flexible package printing facility having a potential to emit 25 TPY or more of VOC in the parishes of Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge; having a potential to emit 50 TPY or more of VOC in the parishes of Calcasieu and Pointe Coupee; or having a potential to emit 100 TPY or more of VOC in any other parish, unless VOC emissions are controlled to the applicable control efficiency specified in Subparagraphs A.2.a-d or e of this Section. Once a piece of equipment is subject to the provisions of this Section, it remains so regardless of future variations in production or transfers to different locations.

a. A press that was first installed prior to March 14, 1995, and that is controlled by an add-on air pollution control device (APCD) whose first installation was prior to December 20, 1987, shall have 65 percent control efficiency.

b. A press that was first installed prior to March 14, 1995, and that is controlled by an add-on APCD whose first installation was on or after December 20, 1987, shall have 70 percent control efficiency.

c. A press that was first installed on or after March 14, 1995, and that is controlled by an APCD whose first installation was prior to December 20, 1987, shall have 75 percent control efficiency.

d. A press that was first installed on or after March 14, 1995, and that is controlled by an add-on APCD whose first installation was on or after December 20, 1987, shall have 80 percent control efficiency.

e. As an alternative to Subparagraph A.2.a, b, c, or d, a facility shall meet the average VOC content limit on a single press of 0.8 kg VOC/kg solids applied or 0.16 kg VOC/kg materials applied.

3. After June 20, 2010, no person shall operate or allow the operation of an offset lithographic or letterpress printing facility having a potential to emit 25 TPY or more of VOC in the parish of Ascension, East Baton Rouge, Iberville, Livingston, or West Baton Rouge; having a potential to emit 50 TPY or more of VOC in the parish of Calcasieu or Pointe Coupee; or having a potential to emit 100 TPY or more of VOC in any other parish, unless VOC emissions are controlled by one of the methods in Subparagraphs A.3.a-c of this Section. Once a facility is subject to the provisions of this Section, it remains so regardless of future variations in production. Determination of potential to emit, for the purposes of applicability, shall be made without respect to any VOC control device.

a. Control for heatset web offset lithographic processes, letterpress dryers, and the volatilization of inks in a letterpress dryer shall be accomplished by:

i. a control device with at least 90 percent control efficiency for control devices installed prior to June 20, 2009. The installation date does not change if the control device is later used to control a new or different press;

ii a control device with at least 95 percent control efficiency for control devices installed on or after June 20, 2009; or

iii a control device that limits the control device outlet concentration to 20 ppmv or less as hexane on a dry basis.

b. Control for offset lithographic fountain solution emitting more than 15 pounds per day shall be accomplished as follows:

i. heatset printing—limit the amount of alcohol by weight to 1.6 percent or less as applied;

ii. sheet-fed printing—limit the amount of alcohol by weight to 5 percent or less as applied. Sheet-fed presses with sheet size of 11 x 17 inches or smaller or any press with a total fountain solution reservoir of less than 1 gallon are exempt;

iii. coldset printing—limit the amount of alcohol by weight to 5 percent or less as applied.

c. Another control method approved by the administrative authority* may be employed.

4. Control for cleaning materials for those facilities where actual emissions from lithographic and letterpress printing operations are greater than 15 pounds per day (before consideration of controls) shall be accomplished by one of the following methods.

a. Cleaning materials shall contain a VOC composite with a vapor pressure of less than 10 mm Hg (0.19 psi) at 20°C or contain less than 70 percent VOC by weight.

b. Cleaning materials and used shop towels shall be kept in closed containers except when actually in use.

c. For blanket washing, roller washing, plate cleaners, metering roller cleaners, impression cylinder cleaners, rubber rejuvenators, and other cleaners used for cleaning a press or press parts, or to remove dried ink around a press, any amount greater than 110 gallons of cleaning materials per year shall meet either the low VOC composite vapor pressure requirement or the lower VOC requirement.

5. Control for cleaning materials for those facilities where actual emissions from flexible package printing operations are greater than 15 pounds per day (before consideration of controls) shall be accomplished by one of the following methods.

a. Cleaning materials and used shop towels shall be kept in closed containers except when actually in use.

b. Cleaning materials shall be conveyed from one location to another in closed containers or pipes.

6. Control for cleaning materials for those facilities where actual emissions from printing operations are greater than 15 pounds per day (before consideration of controls) shall be accomplished by one of the following methods.

a. Cleaning materials and used shop towels shall be kept in closed containers except when actually in use.

b. For blanket washing, roller washing, plate cleaners, metering roller cleaners, impression cylinder cleaners, rubber rejuvenators, and other cleaners used for cleaning a press or press parts, or to remove dried ink around a press, any amount greater than 110 gallons of cleaning materials per year shall meet either the low VOC composite vapor pressure requirement or the lower VOC requirement.

B. Exemptions

1. For those facilities where actual emissions from packaging rotogravure and publication rotogravure printing operations are greater than 15 pounds per day (before consideration of controls) and where the potential to emit is

less than 25 TPY of VOC on a per press basis before controls, only the cleaning materials control requirements in Paragraph A.6 of this Section are applicable.

2. The following equipment or processes are exempt from meeting the requirements of Paragraph A.6 of this Section:

a. heatset web offset lithographic printing operations and heatset web letterpress printing operations with the potential to emit from the dryer, prior to controls, an amount equal to or less than 25 tons VOC (petroleum ink oil) per year, provided that an enforceable limit on potential emissions is obtained to keep an individual heatset press below the 25 TPY potential to emit threshold;

b. heatset presses used for book printing and presses with a maximum web width of less than or equal to 22 inches; and

c. operations with emissions from sheet-fed or coldset webinks, sheet-fed or coldset varnishes, waterborne coatings, and radiation cured materials.

C. - E. ...

F. Operating, Monitoring, and Maintenance Procedures. Operating, monitoring, and maintenance procedures for the facilities and equipment subject to the requirements of this Section shall be incorporated into the housekeeping plan required by LAC 33:III.2113.A.4.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 16:964 (November 1990), LR 18:1123 (October 1992), LR 22:1212 (December 1996), LR 24:25 (January 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 25:1796 (October 1999), LR 28:1765 (August 2002), LR 30:746 (April 2004), amended by the Office of the Secretary, Legal Affairs Division, LR 34:1892 (September 2008), LR 35:11074 (June 2009).

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0906#015

RULE

Department of Environmental Quality
Office of the Secretary
Legal Affairs Division

Incorporation by Reference for 2008
(LAC 33:I.3931; III.506, 507, 2160, 3003, 5116, 5122, 5311, and 5901; V.3099; IX.2301, 4901, and 4903; and XV.1599)
(MM011ft)

Under the authority of the Environmental Quality Act, R.S. 30:2001 et seq., and in accordance with the provisions of the Administrative Procedure Act, R.S. 49:950 et seq., the secretary has amended the Environmental Quality regulations, LAC 33:I.3931; III.506, 507, 2160, 3003, 5116, 5122, 5311, and 5901; V.3099; IX.2301, 4901, and 4903; and XV.1599 (Log #MM011ft).

This rule is identical to federal regulations found in 10 CFR 71, App. A, 1/1/2008; 40 CFR 51, App. M, 60-61, 63, 68, 70.6(a), 117.3, 136, 266, App. I-IX and XI-XIII, 302.4, 302.6(e), 355.40(a)(2)(vii), 401, and 405-471, 7/1/2008; and subsequent revisions to 40 CFR 60 and 63 in the *Federal Register* (see rule text), which are applicable in Louisiana. For more information regarding the federal requirement, contact the Regulation Development Section at (225) 219-3985 or Box 4302, Baton Rouge, LA 70821-4302. No fiscal or economic impact will result from the Rule. This Rule will be promulgated in accordance with the procedures in R.S. 49:953(F)(3) and (4).

The date of publication for the Code of Federal Regulations (CFR) volumes as contained in the various parts of the Title 33, Environmental Quality, regulations is being updated to reflect that the CFR volumes incorporated by reference into the state regulations are the volumes published in 2008. This rule incorporates by reference (IBR) into LAC 33:I, III, V, IX, and XV the corresponding federal reportable quantity list of hazardous substances in 40 CFR 117.3 and 302.4, July 1, 2008; administrative reporting exemptions for certain air releases of NO_x in 40 CFR 302.6(e) and 355.40(a)(2)(vii), July 1, 2008; Capture Efficiency Test Procedures in 40 CFR Part 51, Appendix M, July 1, 2008; Standards of Performance for New Stationary Sources in 40 CFR Part 60, July 1, 2008; National Emission Standards for Hazardous Air Pollutants (NESHAP) in 40 CFR Part 61, July 1, 2008; NESHAP for Source Categories in 40 CFR Part 63, July 1, 2008; Chemical Accident Prevention and Minimization of Consequences in 40 CFR Part 68, July 1, 2008; Part 70 Operating Permits Program in 40 CFR 70.6(a), July 1, 2008; Federal SO_2 Model Rule in 40 CFR Part 96, July 1, 2008; hazardous waste regulations in 40 CFR Part 266, Appendices I-IX and XI-XIII, July 1, 2008; National Pollutant Discharge Elimination System regulations in 40 CFR Parts 136, 401, 405-471, July 1, 2008; and radiation regulations in 10 CFR Part 71, Appendix A, January 1, 2008. Also incorporated are subsequent revisions to 40 CFR Parts 60 and 63 promulgated in the *Federal Register*. In order for Louisiana to maintain equivalency with federal regulations, the most current CFR volumes must be adopted into the LAC. This rulemaking is necessary to maintain delegation, authorization, etc., granted to Louisiana by EPA. This incorporation by reference rule will keep Louisiana's regulations current with their federal counterparts. The basis and rationale for this rule are to mirror the federal regulations in order to maintain equivalency. This Rule meets an exception listed in R.S. 30:2019(D)(2) and R.S. 49:953(G)(3); therefore, no report regarding environmental/health benefits and social/economic costs is required.

Title 33
ENVIRONMENTAL QUALITY
Part I. Office of the Secretary
Subpart 2. Notification

Chapter 39. Notification Regulations and Procedures for Unauthorized Discharges

Subchapter E. Reportable Quantities for Notification of Unauthorized Discharges

§3931. Reportable Quantity List for Pollutants

A. Incorporation by Reference of Federal Regulations

1. Except as provided in Subsection B of this Section, the following federal reportable quantity lists are incorporated by reference:

a. 40 CFR 117.3, July 1, 2008, Table 117.3—Reportable Quantities of Hazardous Substances