

Texas Commission on Environmental Quality

Chapter 115 - Control of Air Pollution from Volatile Organic Compounds

Subchapter E : Solvent-Using Processes

DIVISION 4 : OFFSET LITHOGRAPHIC PRINTING

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SUBCHAPTER E: SOLVENT-USING PROCESSES

DIVISION 4: OFFSET LITHOGRAPHIC PRINTING

§§115.440, 115.441, 115.442, 115.443, 115.445, 115.446, 115.449

§115.440. Applicability and Definitions.

(a) **Applicability.** The provisions in this division (relating to Offset Lithographic Printing) apply to offset lithographic printing lines located in the Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, as defined in §115.10 of this title (relating to Definitions).

(b) **Definitions.** Unless specifically defined in the Texas Clean Air Act (Texas Health and Safety Code, Chapter 382) or in §§3.2, 101.1, and 115.10 of this title (relating to Definitions), the terms in this division have the meanings commonly used in the field of air pollution control. In addition, the following meanings apply unless the context clearly indicates otherwise.

(1) **Alcohol**--Any of the hydroxyl-containing organic compounds with a molecular weight equal to or less than 74.12, which includes methanol, ethanol, propanol, and butanol.

(2) **Alcohol substitutes**--Nonalcohol additives that contain volatile organic compounds and are used in the fountain solution to reduce the surface tension of water or prevent ink piling.

(3) **Batch**--A supply of fountain solution or cleaning solution that is prepared and used without alteration until completely used or removed from the printing process.

(4) **Cleaning solution**--Liquids used to remove ink and debris from the operating surfaces of the printing press and its parts.

(5) **Fountain solution**--A mixture of water, nonvolatile printing chemicals, and a liquid additive that reduces the surface tension of the water so that it spreads easily across the printing plate surface. The fountain solution wets the non-image areas so that the ink is maintained within the image areas.

(6) **Heatset**--Any operation where heat is required to evaporate ink oil from the printing ink.

(7) **Lithography**--A plane-o-graphic printing process where the image and non-image areas are on the same plane of the printing plate. The image and non-image areas are chemically differentiated so the image area is oil receptive and the non-image area is water receptive.

(8) **Major printing source**--All offset lithographic printing lines located on a property with combined uncontrolled emissions of volatile organic compounds (VOC) greater than or equal to:

(A) 50 tons of VOC per calendar year in the Dallas-Fort Worth area, as defined in §115.10 of this title (relating to Definitions); or

(B) 25 tons of VOC per calendar year in the Houston-Galveston-Brazoria area, as defined in §115.10 of this title.

(9) Minor printing source--All offset lithographic printing lines located on a property with combined uncontrolled emissions of volatile organic compounds (VOC) less than:

(A) 50 tons of VOC per calendar year in the Dallas-Fort Worth area, defined in §115.10 of this title (relating to Definitions); or

(B) 25 tons of VOC per calendar year in the Houston-Galveston-Brazoria area, as defined in §115.10 of this title.

(10) Non-heatset--Any operation where the printing inks are set without the use of heat. For the purposes of this division, ultraviolet-cured and electron beam-cured inks are considered non-heatset.

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

(12) Volatile organic compound (VOC) composite partial pressure--The sum of the partial pressures of the compounds that meet the definition of VOC in §101.1 of this title (relating to Definitions). The VOC composite partial pressure is calculated as follows.

Figure: 30 TAC §115.440(b)(12)

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

Where:

PP_C = the VOC composite partial pressure of a solution at 20 degrees Celsius, millimeters of mercury (mm Hg);

W_i = the weight of VOC i, grams (g);

MW_i = the molecular weight of VOC i, g/g-mole;

VP_i = the vapor pressure of VOC i at 20 degrees Celsius, mm Hg;

W_w = the weight of water, g;

MW_w = the molecular weight of water, g/g-mole;

W_e = the weight of non-water exempt compound e, g; and

MW_e = the molecular weight of non-water exempt compound e, g/g-mole.

§115.441. Exemptions.

(a) In the Dallas-Fort Worth and Houston-Galveston-Brazoria areas, as defined in §115.10 of this title (relating to Definitions), the owner or operator of all offset lithographic printing lines located on a property with combined emissions of volatile organic compounds (VOC) less than 3.0 tons per calendar year (tpy) when uncontrolled, is exempt from the requirements in this division (relating to Offset

Lithographic Printing) except as specified in §115.446 of this title (relating to Monitoring and Recordkeeping Requirements).

(b) In the Dallas-Fort Worth and Houston-Galveston-Brazoria areas, the owner or operator of a minor printing source, as defined in §115.440 of this title (relating to Applicability and Definitions):

(1) is exempt from the requirements in this division until March 1, 2012;

(2) may exempt up to 110 gallons of cleaning solution per calendar year from the content limits in §115.442(c)(1) of this title (relating to Control Requirements);

(3) may exempt any press with a total fountain solution reservoir less than 1.0 gallons from the fountain solution content limits in §115.442(c)(2) - (4) of this title; and

(4) may exempt any sheet-fed press with a maximum sheet size of 11.0 inches by 17.0 inches or less from the fountain solution content limits in §115.442(c)(2) of this title.

(c) Beginning March 1, 2011, the requirements in §115.442(a) of this title and §115.446(a) of this title no longer apply in the Dallas-Fort Worth and Houston-Galveston-Brazoria areas.

§115.442. Control Requirements.

(a) In the Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, as defined in §115.10 of this title (relating to Definitions), the following control requirements apply. Beginning March 1, 2011, this subsection no longer applies in the Dallas-Fort Worth and Houston-Galveston-Brazoria areas.

(1) The owner or operator of an offset lithographic printing line that uses solvent-containing ink shall limit emissions of volatile organic compounds (VOC) as follows.

(A) The owner or operator of a heatset web offset lithographic printing press that uses alcohol in the fountain solution shall maintain total fountain solution alcohol to 5.0% or less (by volume). Alternatively, a standard of 10.0% or less (by volume) alcohol may be used if the fountain solution containing alcohol is refrigerated to less than 60 degrees Fahrenheit (15.5 degrees Celsius).

(B) The owner or operator of a non-heatset web offset lithographic printing press that prints newspaper and that uses alcohol in the fountain solution shall eliminate the use of alcohol in the fountain solution. Nonalcohol additives or alcohol substitutes can be used to accomplish the total elimination of alcohol use.

(C) The owner or operator of a non-heatset web offset lithographic printing press that does not print newspaper and that uses alcohol in the fountain solution shall maintain the use of alcohol at 5.0% or less (by volume). Alternatively, a standard of 10.0% or less (by volume) alcohol may be used if the fountain solution is refrigerated to less than 60 degrees Fahrenheit (15.5 degrees Celsius).

(D) The owner or operator of a sheet-fed offset lithographic printing press shall maintain the use of alcohol at 10.0% or less (by volume). Alternatively, a standard of 12.0% or less (by

volume) alcohol may be used if the fountain solution is refrigerated to less than 60 degrees Fahrenheit (15.5 degrees Celsius).

(E) The owner or operator of any type of offset lithographic printing press shall be considered in compliance with the fountain solution limitations of this paragraph if the only VOC in the fountain solution are nonalcohol additives or alcohol substitutes, so that the concentration of VOC in the fountain solution is 3.0% or less (by weight). The fountain solution must not contain any isopropyl alcohol.

(F) The owner or operator of an offset lithographic printing press shall reduce VOC emissions from cleaning solutions by one of the following methods:

(i) using cleaning solutions with a VOC content of 50% or less (by volume, as used);

(ii) using cleaning solutions with a VOC content of 70% or less (by volume, as used) and incorporating a towel handling program that ensures that all waste ink, solvents, and cleanup rags are stored in closed containers until removed from the site by a licensed disposal/cleaning service; or

(iii) using cleaning solutions with a VOC composite partial vapor pressure less than or equal to 10.0 millimeters of mercury at 68 degrees Fahrenheit (20 degrees Celsius).

(2) The owner or operator of a heatset offset lithographic printing press shall operate a control device to reduce VOC emissions from the press dryer exhaust vent by 90% by weight or maintain a

maximum dryer exhaust outlet VOC concentration of 20 parts per million by volume (ppmv), whichever is less stringent when the press is in operation. The dryer air pressure must be lower than the pressroom air pressure at all times when the press is operating to ensure the dryer has a capture efficiency of 100%.

(b) In the Dallas-Fort Worth and Houston-Galveston-Brazoria areas, the following control requirements apply to the owner or operator of a major printing source, as defined in §115.440 of this title (relating to Applicability and Definitions), in accordance with the appropriate compliance date specified in §115.449(e) and (g) of this title (relating to Compliance Schedules).

(1) The owner or operator of an offset lithographic printing press shall limit the VOC content of the cleaning solution, as applied, to:

(A) 50.0% VOC or less by volume;

(B) 70.0% VOC or less by volume if the facility has a towel handling program in place that ensures all waste ink, solvents, and cleanup rags are stored in closed containers until removed from the site by a licensed disposal or cleaning service; or

(C) a VOC composite partial vapor pressure less than or equal to 10.0 millimeters of mercury at 68 degrees Fahrenheit (20 degrees Celsius) if the facility has a towel handling program in place that ensures all waste ink, solvents, and cleanup rags are stored in closed containers until removed from the site by a licensed disposal or cleaning service.

(2) The owner or operator of a sheet-fed offset lithographic printing press shall limit the VOC content of the fountain solution, as applied, to:

(A) 5.0% alcohol or less by weight;

(B) 8.5% alcohol or less by weight if the fountain solution is refrigerated below 60 degrees Fahrenheit (15.5 degrees Celsius); or

(C) 3.0% alcohol substitutes or less by weight and no alcohol in the fountain solution.

(3) The owner or operator of a non-heatset web offset lithographic printing press shall limit the VOC content of the fountain solution, as applied, to 3.0% alcohol substitutes or less by weight and no alcohol in the fountain solution.

(4) The owner or operator of a heatset web offset lithographic printing press shall limit the VOC content of the fountain solution, as applied, to:

(A) 1.6% alcohol or less by weight;

(B) 3.0% alcohol or less by weight if the fountain solution is refrigerated below 60 degrees Fahrenheit (15.5 degrees Celsius); or

(C) 3.0% alcohol substitutes or less by weight and no alcohol in the fountain solution.

(5) The owner or operator of a heatset offset lithographic printing press shall operate a control device to reduce VOC emissions from the press dryer exhaust vent by at least 90% by weight or maintain a maximum dryer exhaust outlet VOC concentration of 20 ppmv or less, whichever is less stringent when the press is in operation. The dryer air pressure must be lower than the pressroom air pressure at all times when the press is operating to ensure the dryer has a capture efficiency of 100%.

(c) In the Dallas-Fort Worth and Houston-Galveston-Brazoria areas, the following control requirements apply to the owner or operator of a minor printing source, as defined in §115.440 of this title, in accordance with the appropriate compliance date specified in §115.449(f) and (g) of this title.

(1) The owner or operator of an offset lithographic printing press shall limit the VOC content of the cleaning solution, as applied, to:

(A) 50.0% VOC or less by volume;

(B) 70.0% VOC or less by volume if the facility has a towel handling program in place that ensures all waste ink, solvents, and cleanup rags are stored in closed containers until removed from the site by a licensed disposal or cleaning service; or

(C) a VOC composite partial vapor pressure less than or equal to 10.0 millimeters of mercury at 68 degrees Fahrenheit (20 degrees Celsius) if the facility has a towel handling program in

place that ensures all waste ink, solvents, and cleanup rags are stored in closed containers until removed from the site by a licensed disposal or cleaning service.

(2) The owner or operator of a sheet-fed offset lithographic printing press shall limit the VOC content of the fountain solution, as applied, to:

(A) 5.0% alcohol or less by weight;

(B) 8.5% alcohol or less by weight if the fountain solution is refrigerated below 60 degrees Fahrenheit (15.5 degrees Celsius); or

(C) 5.0% alcohol substitutes or less by weight and no alcohol in the fountain solution.

(3) The owner or operator of a non-heatset web offset lithographic printing press shall limit the VOC content of the fountain solution, as applied, to 5.0% alcohol substitutes or less by weight and no alcohol in the fountain solution.

(4) The owner or operator of a heatset web offset lithographic printing press shall limit the VOC content of the fountain solution, as applied, to:

(A) 1.6% alcohol or less by weight;

(B) 3.0% alcohol or less by weight if the fountain solution is refrigerated below 60 degrees Fahrenheit (15.5 degrees Celsius); or

(C) 5.0% alcohol substitutes or less by weight and no alcohol in the fountain solution.

§115.443. Alternate Control Requirements.

In the Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, as defined in §115.10 of this title (relating to Definitions), alternate methods of demonstrating and documenting continuous compliance with the applicable control requirements or exemption criteria in this division (relating to Offset Lithographic Printing) may be approved by the executive director in accordance with §115.910 of this title (relating to Availability of Alternate Means of Control) if emission reductions are demonstrated to be substantially equivalent.

§115.445. Approved Test Methods.

In the Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, as defined in §115.10 of this title (relating to Definitions), compliance with the requirements in this division (relating to Offset Lithographic Printing) must be determined by applying the following test methods, as appropriate:

(1) Test Methods 1-4 (40 Code of Federal Regulations (CFR) Part 60, Appendix A) for determining flow rates;

(2) Test Method 24 (40 CFR Part 60, Appendix A) for determining the volatile organic compound content and density of printing inks and related coatings;

(3) Test Method 25 (40 CFR Part 60, Appendix A) for determining total gaseous nonmethane organic emissions as carbon with the modification that the probe and filter should be heated to the gas stream temperature, typically closer to 350 degrees Fahrenheit (177 degrees Celsius) to prevent condensation;

(4) Test Methods 25A or 25B (40 CFR Part 60, Appendix A) for determining total gaseous organic concentrations using flame ionization or nondispersive infrared analysis;

(5) the United States Environmental Protection Agency guidelines series document "Procedures for Certifying Quantity of Volatile Organic Compounds Emitted by Paint, Ink, and Other Coatings" (EPA-450/3-84-019, effective December 1984);

(6) additional performance test procedures described in 40 CFR §60.444 (effective October 18, 1983);

(7) minor modifications to these test methods if approved by the executive director; and

(8) test methods other than those specified in this section if validated by 40 CFR Part 63, Appendix A, Test Method 301 (effective December 29, 1992) and approved by the executive director.

§115.446. Monitoring and Recordkeeping Requirements.

(a) In the Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas, as defined in §115.10 of this title (relating to Definitions), the following monitoring and recordkeeping requirements apply. Beginning March 1, 2011, this subsection no longer applies in the Dallas-Fort Worth and Houston-Galveston-Brazoria areas.

(1) The owner or operator of a heatset offset lithographic printing press shall install, calibrate, maintain, and operate a temperature monitoring device, according to the manufacturer's instructions, at the outlet of the control device. The temperature monitoring device must be equipped with a continuous recorder and must have an accuracy of ± 0.5 degrees Fahrenheit, or alternatively $\pm 1.0\%$ of the temperature being monitored.

(2) The owner or operator of any offset lithographic printing press shall install and maintain monitors to continuously measure and record operational parameters of any emission control device installed to meet applicable control requirements on a regular basis. Such records must be sufficient to demonstrate proper functioning of those devices to design specifications, including:

(A) the exhaust gas temperature of direct-flame incinerators or the gas temperature immediately upstream and downstream of any catalyst bed;

(B) the total amount of volatile organic compounds (VOC) recovered by a carbon adsorption or other solvent recovery system during a calendar month; and

(C) the exhaust gas VOC concentration of any carbon adsorption system, as defined in §115.10 of this title, to determine if breakthrough has occurred.

(3) The dryer pressure must be maintained lower than the press room air pressure such that air flows into the dryer at all times when the offset lithographic printing press is operating. A 100% emissions capture efficiency for the dryer must be demonstrated using an air flow direction measuring device.

(4) The owner or operator of any offset lithographic printing press shall monitor fountain solution alcohol concentration with a refractometer or a hydrometer that is corrected for temperature at least once per eight-hour shift or once per batch, whichever is longer. The refractometer or hydrometer must have a visual, analog, or digital readout with an accuracy of 0.5% VOC. A standard solution must be used to calibrate the refractometer for the type of alcohol used in the fountain. The VOC content of the fountain solution may be monitored with a conductivity meter if it is determined that a refractometer or hydrometer cannot be used for the type of VOC in the fountain solution. The conductivity meter reading for the fountain solution must be referenced to the conductivity of the incoming water.

(5) The owner or operator of any offset lithographic printing press using refrigeration equipment on the fountain solution in order to comply with §115.442(a)(1)(A), (C), or (D) of this title (relating to Control Requirements) shall monitor the temperature of the fountain solution reservoir at least once per hour. Alternatively, the owner or operator of any offset lithographic printing press using refrigeration equipment on the fountain solution shall install, maintain, and continuously operate a temperature monitor of the fountain solution reservoir. The temperature monitor must be attached to a continuous recording device such as a strip chart, recorder, or computer.

(6) For any offset lithographic printing press with automatic cleaning equipment, flow meters are required to monitor water and cleaning solution flow rates. The flow meters must be calibrated so that the VOC content of the mixed solution complies with the requirements of §115.442(a)(1) of this title.

(7) The owner or operator of any offset lithographic printing press shall maintain the results of any testing conducted at an affected facility in accordance with the provisions specified in §115.445 of this title (relating to Approved Test Methods).

(8) The owner or operator of any offset lithographic printing press shall maintain all records at the affected facility for at least two years and make such records available upon request to authorized representatives of the executive director, the United States Environmental Protection Agency, or any local air pollution agency with jurisdiction.

(b) In the Dallas-Fort Worth and Houston-Galveston-Brazoria areas, the following monitoring and recordkeeping requirements apply in accordance with the appropriate compliance date specified in §115.449(e) - (g) of this title (relating to Compliance Schedules).

(1) The owner or operator of an offset lithographic printing press claiming an exemption in §115.441 of this title (relating to Exemptions) shall maintain records sufficient to demonstrate continuous compliance with the applicable exemption criteria. For example, maintaining records of ink, cleaning solvent, and fountain solution usage may be sufficient to demonstrate compliance with the

exemption provided in §115.441(a) of this title for sources located on a property with combined VOC emissions less than 3.0 tpy when uncontrolled.

(2) The owner or operator of an offset lithographic printing press shall use one of the following options to demonstrate compliance with the cleaning solution content limits in §115.442(b)(1) or (c)(1) of this title.

(A) Flow meters must be used to monitor the water and cleaning solution flow rates on a press with automatic cleaning equipment. The flow meters must be installed, maintained, and operated according to the manufacturer's instructions. The flow meters must be calibrated so that the VOC concentration of the cleaning solution complies with the requirements of §115.442(b)(1) or (c)(1) of this title. Records must be sufficient to demonstrate continuous compliance with the cleaning solution content limits in §115.442(b)(1) or (c)(1) of this title.

(B) The VOC concentration of each batch of cleaning solution must be determined using analytical data derived from the material safety data sheet (MSDS) or equivalent information from the supplier that was derived using the approved test methods in §115.445 of this title. The concentration of all VOC used to prepare the batch and, if diluted prior to use, the proportions that each of these materials is used must be recorded for each batch of cleaning solution. Records must be sufficient to demonstrate continuous compliance with the cleaning solution content limits in §115.442(b)(1) or (c)(1) of this title.

(3) The owner or operator of an offset lithographic printing press shall use one of the following options to demonstrate compliance with the fountain solution content limits in §115.442(b)(2) - (4) or (c)(2) - (4) of this title.

(A) The VOC concentration of each batch of fountain solution must be monitored using a refractometer or a hydrometer that is corrected for temperature. The refractometer or hydrometer must have a visual, analog, or digital readout with an accuracy of 0.5% VOC. A standard solution must be used to calibrate the refractometer for the type of alcohol used in the fountain solution. The VOC content of the fountain solution may be monitored with a conductivity meter if it is determined that a refractometer or hydrometer cannot be used for the type of VOC in the fountain solution. The conductivity meter reading for the fountain solution must be referenced to the conductivity of the incoming water. Records must be sufficient to demonstrate continuous compliance with the fountain solution content limits in §115.442(b)(2) - (4) or (c)(2) - (4) of this title.

(B) The VOC concentration of each batch fountain solution must be determined using analytical data from the MSDS or equivalent information from the supplier that was derived using the approved test methods in §115.445 of this title. The concentration of all alcohols or alcohol substitutes used to prepare the batch and, if diluted prior to use, the proportions that each of these materials is used must be recorded for each batch of fountain solution. Records must be sufficient to demonstrate continuous compliance with the fountain solution content limits in §115.442(b)(2) - (4) or (c)(2) - (4) of this title.

(4) The owner or operator of an offset lithographic printing press using refrigeration equipment on the fountain solution reservoir shall monitor and record the fountain solution temperature at least once per hour. Temperature monitoring devices must be installed, maintained, and operated according

to the manufacturer's specifications. Records must be sufficient to demonstrate continuous compliance with the fountain solution content limits in §115.442(b)(2) and (4) or (c)(2) and (4) of this title.

(5) The owner or operator of a heatset web offset lithographic printing press shall comply with the following monitoring and recordkeeping requirements to demonstrate continuous compliance with the control requirements in §115.442(b)(5) of this title.

(A) Operational parameters of any emission control device installed to comply with the requirements in §115.442(b)(5) of this title must be continuously measured and recorded. Monitors must be installed, calibrated, maintained, and operated according to the manufacturer's instructions. Temperature monitors must be equipped with a continuous recorder and have an accuracy of ± 0.5 degrees Fahrenheit or $\pm 1.0\%$ of the temperature being monitored, whichever is less stringent. Measuring and recording the operational parameters of the control device at least once every 15 minutes is sufficient to demonstrate compliance with this subparagraph. Records must be sufficient to demonstrate proper functioning of the device to design specifications and must include:

(i) the exhaust gas temperature of direct-flame incinerators and/or the gas temperature immediately upstream and downstream of any catalyst bed;

(ii) the total amount of VOC recovered by a carbon adsorption system or other solvent recovery system per calendar month; and

(iii) the exhaust gas VOC concentration of any carbon adsorption system to determine if breakthrough has occurred.

(B) An air flow direction measuring device must be used to demonstrate the dryer meets the 100% capture efficiency required in §115.442(b)(5) of this title.

(6) The owner or operator of an offset lithographic printing press shall maintain the results of any tests conducted using the approved test methods in §115.445 of this title.

(7) The owner or operator of an offset lithographic printing press shall maintain all records for at least two years and make such records available upon request to authorized representatives of the executive director, the United States Environmental Protection Agency, or any local air pollution agency with jurisdiction.

§115.449. Compliance Schedules.

(a) In El Paso County, all offset lithographic printing presses must be in compliance with §§115.442, 115.443, 115.445, and 115.446 of this title (relating to Control Requirements; Alternate Control Requirements; Approved Test Methods; and Monitoring and Recordkeeping Requirements) as soon as practicable, but no later than November 15, 1996.

(b) In Collin, Dallas, Denton, and Tarrant Counties, all offset lithographic printing presses on a property that, when uncontrolled, emit a combined weight of volatile organic compounds (VOC) equal to or greater than 50 tons per calendar year, must be in compliance with §§115.442(a), 115.443, 115.445, and 115.446(a) of this title as soon as practicable, but no later than December 31, 2000.

(c) In Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties, all offset lithographic printing presses on a property that, when uncontrolled, emit a combined weight of VOC equal to or greater than 25 tons per calendar year, must be in compliance with §§115.442(a), 115.443, 115.445, and 115.446(a) of this title as soon as practicable, but no later than December 31, 2002.

(d) In Ellis, Johnson, Kaufman, Parker, and Rockwall Counties, the owner or operator of all offset lithographic printing presses on a property that, when uncontrolled, emit a combined weight of VOC equal to or greater than 50 tons per calendar year, shall comply with §§115.442(a), 115.443, 115.445, and 115.446(a) of this title as soon as practicable, but no later than March 1, 2009.

(e) The owner or operator of a major printing source, as defined in §115.440 of this title (relating to Applicability and Definitions), in the Dallas-Fort Worth or Houston-Galveston-Brazoria areas, as defined in §115.10 of this title (relating to Definitions), shall comply with the requirements in this division no later than March 1, 2011, except as specified in subsections (b), (c), and (d) of this section.

(f) The owner or operator of a minor printing source, as defined in §115.440 of this title, in the Dallas-Fort Worth or Houston-Galveston-Brazoria areas, shall comply with the requirements in this division no later than March 1, 2012.

(g) The owner or operator of an offset lithographic printing line in the Dallas-Fort Worth or Houston-Galveston-Brazoria areas that becomes subject to this division on or after the date specified in subsections (e) or (f) of this section, shall comply with the requirements in this division no later than 60 days after becoming subject.