ILLINOIS POLLUTION CONTROL BOARD
April 20, 1995

IN THE MATTER OF:	)	
	)	
15% ROP PLAN CONTROL MEASURES	)	
FOR VOM EMISSIONS - PART V:	)	R94-31
CONTROL OF VOLATILE ORGANIC	)	(Rulemaking - Air)
COMPOUND EMISSIONS FROM	)	
LITHOGRAPHIC PRINTING:	)	
AMENDMENTS TO 35 ILL. ADM.	)	
CODE PARTS 211, 218, AND 219.	)	

Adopted Rule. Final Order.

OPINION AND ORDER OF THE BOARD (by M. McFawn):

On October 28, 1994, the Illinois Environmental Protection Agency (Agency) filed this proposal for rulemaking. Section 182(b)(1) of the Clean Air Act (CAA), as amended in 1990, requires all moderate and above ozone nonattainment areas to achieve a 15% reduction of 1990 emissions of volatile organic material (VOM) by 1996. In Illinois, the Chicago and Metro-East St. Louis (Metro-East) areas are classified as "severe" and "moderate" nonattainment for ozone, respectively, and as such are subject to the 15% reduction requirement. Also pursuant to Section 182(b) of the CAA, Illinois is to submit a 15% Rate of Progress Plan (ROP) within three years of the enactment of the CAA amendments. This rulemaking represents Part V of the rules proposed in the Illinois 15% ROP.

The Board's responsibility in this matter arises from the Environmental Protection Act (Act) (415 ILCS 5/1 et seq. (1992)). The Board is charged therein to "determine, define and implement the environmental control standards applicable in the State of Illinois" (415 ILCS 5/5(b)). This proposal was filed pursuant to Section 28.5 of the Act (415 ILCS 5/28.5 (1992)), commonly referred to as "Fast Track Rulemaking". Section 28.5 of the Act requires the Board to proceed with rulemaking under set time-frames. The Board has no discretion to adjust these time frames under any circumstances. Today the Board acts to adopt the proposed rules as final, adopted regulations.

PROCEDURAL HISTORY

Pursuant to Section 28.5 of the Act, the Board sent this proposal to first notice under the APA on November 3, 1994 without commenting on its merits. The proposal was published in the Illinois Register on December 2, 1994 as follows: Section 211 was published at 18 Ill. Reg. 17071; Section 218 was published at 18 Ill. Reg 17084; and Section 219 was published at 18 Ill. Reg. 17124. Hearings were held in this matter on December 15, 1994 and January 9, 1995, in Chicago, Illinois, before hearing officer Kevin Desharnais. The public comment period closed January 27,

1995. The Board received 6 public comments, which are discussed in detail below. On January 30, 1995, the Board received the final comments from the Agency, accompanied by a motion to correct the transcript, which the Board granted. The Board sent the proposal to second notice on February 23, 1995, and the Joint Committee on Administrative Rules (JCAR) issued statements of no objection on March 14, 1995. JCAR also suggested minor, typographical changes which have been incorporated into the final rules. The final rules are identical to the second notice proposal with the exception of these minor changes.

PROPOSAL

Section 182(b)(1) of the CAA, as amended in 1990, requires all moderate and above ozone nonattainment areas (NAAs) to achieve a 15% reduction of 1990 emissions of VOM by 1996. This rulemaking is Phase V of Illinois' 15% Rate of Progress (ROP) plan to achieve that reduction. The proposal represents a group of measures which are intended to reduce VOM emissions in the Metro-East area (moderate nonattainment) and the Chicago area (severe nonattainment).

The Agency expects control of VOM emissions from lithographic printing to reduce 1996 VOM emissions by 4.0 TPD in the Chicago NAA and by minimal amounts in the Metro-East NAA. The proposed rules are based on the draft Control Techniques Guideline (CTG) and the Alternate Control Techniques (ACT) document issued by USEPA to assist states in developing rules for controlling emissions from offset lithographic printing. The Agency modified the proposal in response to comments from affected sources prior to submitting it to the Board.

The regulations adopted today amend 35 Ill. Adm. Code 218 and 219 to include control measures for the control of VOM emissions from offset lithographic printing in Subpart H of both these Parts. They also amend 35 Ill. Adm. Code Part 211 to add definitions of non-heatset and sheet-fed types of lithographic printing, as-applied fountain solution, and alcohol for the purposes of lithographic printing. Finally, the adopted regulations include minor amendments to 35 Ill. Adm. Code Sections 218.480 and 219.480, which clarify amendments made to these sections in R93-14, In the Matter of: Reasonably Available Control Technology for Major Sources Emitting Volatile Organic Materials in the Chicago Ozone Nonattainment Area: 25 Tons: Amendments to 35 Ill. Adm. Code Parts 211 and 218.

The adopted regulations contain several different types of restrictions designed to reduce emissions from lithographic printing operations. These restrictions include limitations on VOM content of fountain solutions, limitations on VOM content of cleaning solutions, handling requirements for cleaning materials, and for heatset web offset lithographic printing operations, the

use of an afterburner or other emission control device.

Non-heatset web offset lithographic printing lines are offered two different options for meeting the restrictions on fountain solutions. Their as-applied fountain solution must either: 1) have no more than 5% VOM, or 2) have no more than 8% VOM if the fountain solution reservoir is refrigerated below 60°F. Heatset web offset lithographic printing lines are given three options. Their as-applied fountain solution must: 1) have a VOM content of 1.6% or less, by volume; or 2) a VOM content of 3% or less, by volume, if the fountain solution is refrigerated below 60°F; or 3) have a VOM content of 5% or less, by volume, if the fountain solution contains no alcohol.

Heatset web offset lithographic printing operations must also use an afterburner, or other approved control device that satisfies one of the following two conditions: 1) reduces VOM emissions from the press dryer exhaust vent by 90% by weight, or 2) has a maximum control device exhaust outlet VOM concentration of 20 parts per million by volume (ppmv) as carbon.

The adopted regulations also include emissions limitations for cleaning solutions used on lithographic printing lines, and certain handling or "housekeeping" requirements for cleaning materials. All cleaning solutions must have a VOM content of under 30%, unless the vapor pressure of the cleaning solution is less than 10 millimeters of mercury (mmHg) at 20°C. All cleaning materials and used towels must be kept in closed containers.

In addition to the control measures, the adopted rules also establish recordkeeping and reporting requirements. Facilities are required to record information regarding fountain solutions, cleaning operations, and for heatset web offset lithographic printing lines, information concerning control devices. These records must be kept for three years and must be made available to the Agency upon request.

APPLICABILITY

The adopted rules establish control measures for reduction of VOM which apply to all lithographic printing lines at a source (both heatset and non-heatset) if the VOM emissions from lithographic printing lines at the source ever exceed 45.5 kilograms per day (kg/day) or 100 pounds per day (lbs/day). The control requirements also apply to sources with heatset web offset lithographic printing lines at a source if the VOM emissions from these lines meet the applicability criteria specified in former Sections 218.405(a)(1)(A) or 219.405(a)(1)(A), which are renumbered in this rulemaking as Sections 218.405(a)(1) and 219.405(a)(1), respectively. These criteria specify that if the total Maximum Theoretical Emissions

(MTE) of VOM from heatset web offset lithographic printing lines at the source ever exceed 90.7 megagrams per year (Mg/yr), or 100 tons per year (TPY), the lines are subject to the control requirements and VOM content limitations for fountain solutions. The adopted regulations also impose certain recordkeeping and reporting requirements on all sources with lithographic printing lines, even if they are otherwise exempt from the other specified control requirements.

The Agency has identified 113 facilities with lithographic printing operations in the Chicago NAA, and 1 source in the Metro-East NAA, which are potentially affected by this rule. The minor amendment to Section 218.480 is expected to affect only one facility in the Chicago NAA, Abbott Laboratories. The amendment to Section 219.480 is being adopted in order to assure consistency between Parts 218 and 219.

TESTIMONY AND COMMENTS

The Board received the following six public comments in this rulemaking:

#1 Comments of the Illinois Department of Commerce and Community Affairs;

#2 Comments of Connie Bradway, Index Department, Administrative Code Division, Office of the Secretary of State;

#3 Comments of the American Lung Association of Metropolitan Chicago and the Citizens Commission for Clean Air in the Lake Michigan Basin;

#4 Comments of the City of Chicago;

#5 Comments of General Business Forms; and

#6 Agency Response to Comments.

In addition, the following individuals testified at the Board's January 9, 1995 hearing:

1) Mr. John Mudge, General Business Forms;
2) Mr. Hejmadi (Marty) Prabhu, Solar Press, Inc.;
3) Ms. Eva E. Kim, Printing Industry of Illinois and Indiana (PII); and
4) Mr. Mark A. Horne, R.R. Donnelley & Sons Co. (Donnelley).

The Board has considered all public comments, as well as all testimony and exhibits, in making its decisions in this matter. The following is a summary of the major issues raised in comments

and during the hearing process.

A. Issues Raised by PII and Donnelley

A number of issues were raised by PII and Donnelley during the hearings process and in discussions with the Agency. The Agency responded to these issues and proposed several changes to the rule based upon them in its response to comments.

1) Source-Wide Recordkeeping and Reporting for Exempt Sources

PII and Donnelley proposed that exempt sources be allowed to keep records on a source-wide basis, rather than a line-by-line basis. (Tr. 1 at 38, 46.) Additionally, PII proposed that exempt sources be allowed to use purchase and inventory records to determine total VOM emissions when determining applicability for exempt sources.

The Agency agreed with the changes proposed by PII and Donnelley, and proposed language which would allow exempt sources to keep records only on a source-wide basis. (Tr. 1 at 39; Comment #6 at 4 - 5.)

We accepted the Agency's proposed modifications and have incorporated them into the proposal. (See Sections 218.411(a)(2) and 219.411(a)(2).)

2) Use of Purchase and Inventory Records to Determine Applicability for Exempt Sources

PII proposed to the Agency that the rule be revised to allow the use of purchase and inventory records for calculating total VOM emissions when determining applicability. PII requested that this alternative be allowed for both exempt sources and regulated sources.

The Agency agreed that the proposal should be modified to allow exempt sources, only, to use purchase and inventory records to demonstrate that their daily emissions remain below the applicability threshold, and proposed language which would allow such use. However, the Agency asserted that these records do not demonstrate compliance for regulated facilities. The Agency asserted that these records do not provide the Agency with the type of information necessary to determine a regulated source's compliance, and would allow averaging of the fountain solution VOM content. The Agency asserted that, since this rule is based on VOM content limitations, records which verify the VOM content of each batch must be maintained.

PII also proposed that a specific equation be adopted for use in determining daily emissions. The Agency stated its belief

that the proposed changes address PII's concerns, and that the requested revision is no longer necessary. (Comment #6 at 5.)

The Board accepted the Agency's proposed modifications and incorporated them into the proposal. (*See* Sections 218.411(a)(2)(B) and 219.411(a)(2)(B).) The Board also found that there was insufficient technical support for the alternative equation proposed by PII.

3) Recordkeeping as an Option Equivalent to Monitoring of Fountain Solution VOM Content

PII and Donnelley both requested that, for monitoring the VOM content of fountain solution, recordkeeping be allowed as an option equivalent to measurement using such devices as a refractometer, hydrometer, or conductivity meter. The Agency proposal as originally written would have required sources to obtain USEPA and Agency approval before recordkeeping could be used as an equivalent option. The Agency agreed with PII and Donnelley that recordkeeping should be allowed as an equivalent option for monitoring the VOM content of a fountain solution, and proposed modified language to allow for such use. (Tr. 2 at 94; Comment #6 at 6.)

We accepted the Agency's proposed modifications and incorporated them into the proposal. (*See* Sections 218.410(b) and 219.410(b).)

4) Removing Section 218.412 and 219.412 - Modified Recordkeeping

Donnelley suggested deleting from the proposal Sections 218.412 and 219.412, which allow for modified recordkeeping. (Tr. 1 at 42 - 43.) Donnelley indicated that these sections would make compliance more complicated for the sources it was intended to benefit. The Agency stated that PII expressed agreement with Donnelley's position in phone conversations with the Agency. (Comment #6 at 13.)

The Agency stated that these sections were drafted with the intent of making recordkeeping easier for those sources which could maintain a VOM content for fountain solutions or cleaning solutions significantly lower than that required by the regulations. However, the Agency had no objection to removing these sections, since the regulated community indicated that these sections would not benefit the sources they were intended to aid. (Agency Final Response to Comments at 13.) The Agency proposed amended language removing from the rule these sections and all references thereto.

The Board accepted the Agency's proposed modifications and incorporated them into the proposal. (See Section 218.405(c),

218.405(d), 218.408(a), 218.410(e)(1)(B), 218.410(e)(2), 219.405(c), 219.405(d), 219.408(a), 219.410(e)(1)(B), 219.410(e)(2), 211.474, and the Table of Contents for Parts 218 and 219.)

5) Donnelley's Request to Omit USEPA Approval of Alternative Methods of Compliance

The Agency asserted that Donnelley requested that the regulation be modified to remove the requirement of USEPA approval for alternative methods of compliance with control, recordkeeping, reporting or monitoring requirements. (See Tr. 1 at 65 - 69; Tr. 2 at 172.) The Agency believed that by making recordkeeping an equal option for exempt sources and eliminating Sections 218.412 and 219.412, Donnelley's major concerns were addressed. In all other instances, USEPA approval is necessary to obtain approval for inclusion in the SIP.

The Board found that no additional modifications to address this concern were justified.

6) Batch Recordkeeping and Reporting for Fountain Solutions

PII and Donnelley both raised questions concerning batch recordkeeping and reporting on a fountain solution, rather than on a line-by-line basis. (Tr. 1 at 33-36, 57-59.) The Agency stated at the second hearing that its intention was always to require recordkeeping on a per batch basis for fountain solutions. (See Tr. 2 at 136-142.) However, the Agency proposed revisions to the initial proposal which were intended to make the proposal clearer on this point. (Comment #6 at 6.)

The Board accepted the Agency's proposed modifications and incorporated them into the proposal. (*See* Sections 218.411(c) and 219.411(c).)

7) 90-Day Time Period for Stack and Other Tests to Determine Compliance

The Agency stated that both PII and Donnelley requested that sources be given ninety days to perform a stack test or other test to determine compliance with the heatset web offset control device requirements upon request from the Agency. (Tr. 2 at 94; Comment #6 at 6 - 7.) The Agency had no objection to PII and Donnelley's request, and proposed revisions to allow for such a time period.

We accepted the Agency's proposed modifications and incorporated them into the proposal. (*See* 218.409(a) and 219.409(a).)

8) 30-Day Notification Period upon Changing Compliance Method

During the second hearing, Donnelley requested removal of those portions of the proposal requiring notification to the Agency thirty days prior to changing the fountain solution or cleaning solution VOM content limits. (Tr. 2 at 169 - 170.) The Agency responded that such information was necessary primarily for its air quality assessments. (Tr. 2 at 178.)

At hearing, Board Member McFawn questioned whether the Agency's need for quantification of emissions could be satisfied by subsequent reporting of changes in a facility's compliance method. (Tr. 2 at 181 - 182.) In its final comments, the Agency agreed that requiring notification within thirty days after such a change has been made would accomplish the same goal, and proposed revisions incorporating this suggestion. (Comment #6 at 7 - 8.)

We accepted the Agency's proposed modifications and incorporated them into the proposal. (*See* Sections 218.411(c)(4), 218.411(d)(4), 219.411(c)(4), and 218.411(d)(4).)

9) Calculating Emissions for 100 Pounds per Day Threshold

At the first hearing, PII requested that the Agency consider removing the word "actual" from those sections where it is used in conjunction with an applicability threshold. (Tr. 1 at 55.) PII was specifically concerned with the 100 pounds per day applicability threshold in Section 218.411. (Id.) PII stated that the method used to calculate emissions does not necessarily result in a computation of actual emissions. (Id.) This is because the method for calculating daily emissions in Section 218.411(a)(1)(B) specifies that daily emissions are calculated by dividing monthly emissions by the number of days during the calendar month that printing lines at the source were in operation. The result therefore may not equal any particular day's "actual" emissions.

The Agency stated that, since the word "actual" was originally included at the request of PII, the Agency had no objection to its removal. The Agency proposed revisions to all sections where "actual" was used in connection with an applicability threshold. (Tr. 1 at 55 - 56; Comment #6 at 8.)

We accepted the Agency's proposed modifications and incorporated them into the proposal. (*See* Sections 218.405(d)(2), 218.411(a), 219.405(d)(2), and 219.411(a).)

10) Only Lithographic Inks Included in Emissions Calculation for Determining Applicability

After the first hearing, Donnelley submitted several proposed language changes to the Agency, which were not submitted to the Board. The Agency agreed to recommend only one of the proposed changes: specifying that only lithographic inks be included in calculations of VOM emissions for purposes of determining applicability. (Comment #6 at 8 - 9.)

The Board found that this change clarified the purpose of the rule, and therefore included it in the proposal. (*See* 218.409(b)(6), 218.411(a), 219.409(b)(6), and 219.411(a).)

11) Using Method 25A to Calculate Add-On Control Equipment Emissions - Retesting and Emission Limitations

At hearing, both PII and Donnelley requested changes to limitations on the use of Method 25A in performing a stack test, so as to allow a retest using Method 25A if the test showed a VOM concentration over 50 ppmv. (Tr. 1 at 40 - 42; Tr. 2 at 201 - 202.) The first notice proposal required such a source to conduct a retest using Method 25. Furthermore, PII and Donnelley requested that the maximum exhaust outlet VOM concentration for afterburners on heatset web offset lithographic printing lines be raised from 20 ppmv to 50 ppmv.

After discussing the matter with USEPA, the Agency proposed changes to allow a source to retest using either Method 25 or Method 25A, provided that if the stack test again shows a VOM concentration over 50 ppmv, the source must retest using Method 25. (Comment #6 at 9.) This will allow a source which is only over the 50 ppmv cutoff by a small amount to correct any possible problems and possibly avoid a retest with Method 25. The Agency stated that USEPA has agreed to the proposed revision. (Id.)

The Agency opposes raising the maximum exhaust outlet VOM concentration for afterburners on heatset web offset lithographic printing lines from 20 ppmv to 50 ppmv. The Agency believes that the parties have not provided the technical justification to support such a change, and that such a change would not be approved by USEPA. Additionally, the Agency believes that the concerns causing the parties to request the change have been addressed in the proposed changes to the testing methodologies at Sections 218.409(b)(3)(C) and 219.409(b)(3)(C).

We accepted the Agency's proposed modifications and have incorporated them into the proposal. (*See* 218.409(b)(3)(C) and 219.409(b)(3)(C).)

12) Control Efficiency of Condensers

PII requested the creation of a special exemption allowing condensers used as control devices on heatset web offset lithographic printing lines to achieve a control efficiency less than 90%. (Tr. 1 at 51 - 52.) The Agency requested that PII provide supporting technical information, but PII has not done so. (Tr. 1 at 51 - 52; Comment #6 at 10 - 11.) The Agency stated that all available information indicates that no exemption is necessary.
(Id.)

The Board found that no change to the minimum control device efficiency previously found at Section 218.405(b)(1), and now found at Section 218.406(a)(1), was justified by the record in this proceeding.

13) Continuous Recording of Fountain Solution Temperature for Refrigerated Solutions

PII and Donnelley requested that the requirement for an automatic, continuous recording device attached to the temperature monitor of the fountain solution for refrigerated fountain reservoirs or trays be eliminated. (Tr. 2 at 170-172.) Donnelley stated at hearing that this requirement would require shutdown of a press during maintenance, repair, or malfunction of the recording device.

In its response to comments, the Agency stated that the Draft CTG clearly requires a continuous recording device, and this requirement has been confirmed in the ACT and in conversations with the USEPA. (Comment #6 at 11.) Furthermore, the Agency supports this requirement due to its reliability, and points out that similar recording devices are required elsewhere in Parts 218 and 219. (Id. at 11 - 12.) However, the Agency agreed that relief should be provided in the case of a recording device malfunction, and proposed a revision that would allow manual recording of the temperature every two operating hours until the device is back in service, provided the device is repaired or replaced as soon as practicable. (Id. at 12 - 13.) The Agency stated that Donnelley indicated agreement to the proposed changes in subsequent phone conversations with the Agency. (Comment #6 at 13.)

The Board accepted the Agency's proposed modifications and incorporated them into the proposal. (Sections 218.410(a)(2) and 219.410(a)(2).)

14) Transitional Period

PII and Donnelley requested a transitional period for a facility to come into compliance after the applicability

threshold has been exceeded. (Tr. 1 at 36-38; Tr. 2 at 171 - 172, 200 - 201.) The Agency responded to this recommendation by pointing out that the regulations contain a compliance date of March 15, 1996, which allows sources to examine their operations to determine if they are subject to the regulations. (Agency Final Response to Comments at 14.) Furthermore, the Agency stated that the structure of the rules contemplates that changes which would cause an otherwise exempt source to exceed the applicability threshold can be foreseen, and planned for, by regulated sources. To the extent unforeseen circumstances do occur, temporary relief is available through a provisional variance or variance. (Id. at 14 - 15.)

The Board was persuaded by the Agency's arguments and found that no change to the rule was necessary to address this issue. The Board found that the March 15, 1996 effective date provides ample time for sources to determine which requirements are applicable to their facilities, and that the availability of variances and provisional variances provides adequate relief for those facilities which become subject to the regulations due to unforeseen circumstances.

15) PII's Suggested Change to MTE Calculation

At the first hearing, PII requested a modification to the method for calculating Maximum Theoretical Emissions (MTE). (Tr. 1 at 54 - 55; see also Exh. 6.) PII's modified equation was based on a formula from the Graphic Arts Technical Foundation. The Agency responded to this proposed change by stating that the equation for calculating MTE is already defined in the regulations. The Agency asserted that this equation, which was previously located at Section 218.405(c)(1)(A)(ii), and which is now located at Section 218.406(b)(1)(A)(ii), is based on USEPA's definition. The Agency asserted that, since Illinois' definition must be consistent with USEPA's in order for it to be included in the SIP, revising the method for calculating MTE would make the rule unapprovable by USEPA. (Tr. 1 at 55; Comment #6 at 15 - 16.)

Based on the information submitted in this rulemaking, the Board found that no change to the calculation of MTE was warranted. PII provided no technical justification for changing the method for calculating MTE, which was previously included in the Board's regulations and which has been approved by USEPA.

16) PII's Request for a De Minimis Exemption and Donnelley's Questions Concerning Costs for Exempt Sources

At hearing, PII requested that the proposed regulations exempt certain printers from recordkeeping requirements, or require only annual, rather than monthly, recordkeeping. (Tr. 1

at 53.) Donnelley also raised concerns about the cost of complying with recordkeeping requirements for exempt sources. (Tr. 1 at 32.) The Agency responded that, based on discussions with the regulated community, the Agency modified the proposal prior to filing its original proposal to allow for monthly, rather than daily, recordkeeping for exempt sources. (Tr. 1 at 32 - 33; Comment #6 at 17.) The Agency does not believe that the recordkeeping requirements can be further relaxed and still be approved by USEPA for inclusion in the SIP. (Tr. 1 at 53 - 54; Comment #6 at 16.)

The Board found that no change to the minimum recordkeeping requirements for exempt sources is justified.

B. Comments of General Business Forms

General Business Forms (GBF) participated in the hearings and submitted written comments into the record. GBF addressed two main issues in its comments and testimony: 1) changing the applicability scheme to treat heatset web offset and non-heatset web offset printing lines separately; and 2) changing the recordkeeping requirements to allow aggregated recordkeeping by type of line. The Agency responded to each of these issues, and each is discussed in detail below.

1) Establishing Separate Applicability Thresholds for Heatset and Non-Heatset Lines

GBF proposed that the applicability provisions of the proposal be modified to treat heatset web offset lithographic printing lines and non-heatset web offset lithographic printing lines as two separate categories, each with an applicability threshold of potential to emit (PTE) 25 tons of VOM. GBF asserted that the proposed combined threshold of 100 pounds per day would place a substantial economic burden on GBF and other similarly affected sources, by requiring the installation of control equipment. (*See* Comment #5 at 10.) GBF also argued that, since USEPA has recognized differences between different types of offset lithographic printing lines, it may support separate regulations for different types of lines. (Id. at 5.)

GBF asserted that the proposed applicability threshold of 100 pounds per day is not required by the CAA, and is inconsistent with the regulatory scheme. (Id. at 4.) GBF pointed out that the Agency did not analyze the economic effects of the proposed threshold for affected sources in Illinois. (Id. at 4 - 5.) Furthermore, GBF argued that, since the Agency has already raised the applicability threshold from 15 pounds per day to 100 pounds per day, there is no reason the threshold cannot be further raised to 25 TPY. (Id. at 8 - 9.)

The Agency disagreed with GBF's assertion that determining applicability levels based upon combined emissions from all heatset and non-heatset lines is inconsistent with the current regulations, since non-heatset web offset lithographic printing have not been addressed specifically in any Board regulations prior to this rulemaking. (Comment #6 at 19.) The Agency also noted that current Illinois regulations place flexographic and rotogravure printing in the same applicability category, despite the fact that the differences between them are greater than those between heatset and non-heatset web offset lithographic printing. (Id. at 19 - 20.) Furthermore, since USEPA considers all lithographic printing to be one source category, the Agency believes USEPA will disapprove a rule wherein applicability for lithographic printing is split. (Id. at 20.) The Agency also expressed concern that, under GBF's suggestion, a source could emit more than 25 TPY from its combined lithographic printing operations, and therefore have major source status under the CAA, but not be controlled by Illinois air regulations, which would be contrary to the CAA. (Id. at 20 - 21.)

The Agency also pointed out that GBF has not performed any studies to determine the effect that its suggestion would have on the emission reductions expected to be achieved through this rule. The Agency expressed concern that the effect could be substantial and could result in Illinois failing to achieve the necessary reductions to satisfy the 15% ROP Plan. (Id. at 21 - 22.) Furthermore, the Agency asserted that, when properly calculated, the control costs for GBF's facility are comparable to those incurred by other sources in the printing and coating industry. (Comment #6 at 25.)

As an alternative to modifying the applicability scheme, GBF suggested that facilities whose emissions are between 100 pounds per day and 50 tons per year be given until March, 1998 to comply. GBF asserted that this would provide additional incentive for these facilities to reduce emissions below the 100 pounds per day threshold. (Comment #5 at 12.)

The Agency opposed such an extension, and countered that such an extension would mean that these reductions could not be included in the 15% ROP Plan. (Comment #6 at 23.) The Agency stated that GBF could seek site-specific relief through a variance or an adjusted standard if it believes its situation is unique and merits special consideration. (Id.)

The Board found that no change to the applicability scheme was warranted based on GBF's suggested changes. As the Agency pointed out, USEPA considers all lithographic printing to be one source category, and there is no indication that it would accept a scheme which treats them differently. GBF provided no information on what impact its proposed applicability scheme would have on emissions from the industry as a whole, and what

effect that would have on emissions reductions to achieve the required 15% reduction. Furthermore, GBF did not show that the control costs are overly burdensome for the lithographic printing industry as a whole. If GBF believes that its situation is different from the industry as a whole, it can seek site-specific relief for its facility.

2) GBF's Request for Aggregated Recordkeeping

GBF requested that the proposed recordkeeping requirements be amended to allow monthly recordkeeping on a plant-wide basis for each category of printing lines. (Comment #5 at 13.) GBF supported the Agency's proposal to allow monthly recordkeeping for exempt sources, and asked that this type of recordkeeping be allowed for all lithographic printing operations. Alternatively, GBF requested that Section 218.411 be modified to allow monthly recordkeeping for each category of printing line, such as heatset web offset or non-heatset web offset, rather than for each line. (Id.) Within each category, monthly records would be maintained for each fountain solution used. GBF asserts that these alternatives present the most cost-effective means for it to comply with the recordkeeping requirements of the proposed rule. (Id.)

The Agency stated that the recordkeeping proposed by GBF would not provide the necessary compliance information about a specific batch of fountain solution. (Comment #6 at 27.) The Agency stated that, since the rules are based on VOM content limitations, rather than production limitations, it is necessary to maintain information on a source's compliance with those limits. (Id.)

However, the Agency pointed out that the batch recordkeeping was modified to addresses some of GBF's concerns. If a fountain solution batch is mixed and then manually brought to separate printing lines, it can still be considered one batch for recordkeeping purposes, as long as the destination of the solution is noted in the records. Any subsequent modifications to that batch, made either centrally or at each line, would have to be noted as well. (Id.)

The Board found that no additional changes to the recordkeeping requirements were warranted based on GBF's comment. As pointed out by the Agency, allowing monthly recordkeeping on a plant-wide basis for each category of printing line would not provide the information necessary to ensure that each batch of fountain solution meets the applicable VOM content limitations.

C. Comments of the American Lung Association of Metropolitan Chicago and the Citizens Commission for Clean Air in the Lake Michigan Basin

The American Lung Association of Metropolitan Chicago (ALAMC) and the Citizens Commission for Clean Air in the Lake Michigan Basin (CCCALMB) filed a joint comment. These commentators stated that they generally support the emissions limitations contained in the proposal. However, the parties did suggest several changes to the rule.

First, ALAMC and CCCALMB suggested that the Board consider two more stringent measures proposed by the State and Territorial Air Pollution Program Administrators/Association of Local Air Pollution Control Officials (STAPPA/ALAPCO): phasing out relatively volatile alcohols from offset lithographic printing operations, and requiring the use of currently available cleaning solutions with no or very low VOCs. Second, these commentators recommended that the applicability level be set at 15 pounds per day, instead of 100 pounds per day. They asserted that smaller lithographic printing operations may be required to further reduce emissions in the future in order to achieve ROP progress, and argued that such levels would be consistent with a rule soon to be adopted in Wisconsin. Finally, ALAMC and CCCALMB urged the Board to ensure that placing emissions limits on VOMs generally instead of on specific alcohols would not lead to unhealthy emissions of toxic VOMs in the workplace or nearby neighborhoods.

The Board found that, while these comments provide suggestions, no technical support is provided. Thus, the Board found that no change to the proposed rule was warranted based on these comments.

D. Comments of the City of Chicago

The City of Chicago generally supported the proposed regulations for lithographic printing operations as a necessary step towards reducing VOM emissions in the region. The City specifically stated its support for the 100 pounds per day applicability threshold, and the recordkeeping and reporting requirements. The City also stated that it reviewed the comments of the American Lung Association of Metropolitan Chicago and the Citizens Commission for Clean Air in the Lake Michigan Basin recommending changes consistent with those called for by STAPPA/ALAPCO, and asked that the Agency examine the emissions reductions and economic effects that would result from the implementation of the recommended measures. The Agency did not respond to the City's suggestion.

The Board found that the City's support and elaboration of the ALAMC and CCCALMB suggestions likewise did not provide sufficient justification to warrant the changes suggested.

E. Comments of the Illinois Department of Commerce and Community Affairs

The comment from Illinois Department of Commerce and Community Affairs (DCCA) stated that DCCA reviewed the proposal and determined that it will not significantly impact small businesses. DCCA deferred to the finding of the Board, based on hearings and written public comment to the Board.

F. Comments of the Index Department, Administrative Code Division

The comment of the Index Department, Administrative Code Division suggested various form and typographical corrections, which the Board accepted and incorporated into the proposal.

G. Minor RACT Amendment to 218.480 and 219.480

This amendment clarifies that pharmaceutical companies that produce both pharmaceutical and pharmaceutical-like products using the same equipment and same processes are only subject to the requirements of Subpart T rather than both Subpart T and Subpart RR of Parts 218 and 219. The only source known to be affected by this revision, Abbott Laboratories, expressed their support for this revision at the first hearing. (Tr. 1 at 69.) No other comments have been received on this issue, and the amendment has been incorporated into the proposal.

CONCLUSION

The Board finds that the proposed rules are technically feasible and economically reasonable, and that the rules are necessary to meet the requirements of the Clean Air Act. The Board therefore finds that the record supports final adoption of the proposed rules as amended.

ORDER

The Board hereby adopts the following amendments to 35 Ill. Adm. Code 211, 218, and 219. The Board directs the Clerk to submit the following amendments to the Secretary of State Administrative Code Division as final adopted rules:

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE B: AIR POLLUTION
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER c: EMISSION STANDARDS AND LIMITATIONS FOR STATIONARY SOURCES

PART 211
DEFINITIONS AND GENERAL PROVISIONS

SUBPART A: GENERAL PROVISIONS

Section
211.101 Incorporations by Reference
211.102 Abbreviations and Conversion Factors

SUBPART B: DEFINITIONS

Section
211.121 Other Definitions
211.122 Definitions (Repealed)
211.130 Accelacota
211.150 Accumulator
211.170 Acid Gases
211.210 Actual Heat Input
211.230 Adhesive
211.250 Aeration
211.270 Aerosol Can Filling Line
211.290 Afterburner
211.310 Air Contaminant
211.330 Air Dried Coatings
211.350 Air Oxidation Process
211.370 Air Pollutant
211.390 Air Pollution
211.410 Air Pollution Control Equipment
211.430 Air Suspension Coater/Dryer
211.450 Airless Spray
211.470 Air Assisted Airless Spray
<u>211.474 Alcohol</u>
211.490 Annual Grain Through-Put
211.510 Application Area
211.530 Architectural Coating
211.550 As-Applied
<u>211.560 As-Applied Fountain Solution</u>
211.570 Asphalt
211.590 Asphalt Prime Coat

211.1670 Daily-Weighted Average VOM Content
211.1690 Day
211.1710 Degreaser
211.1730 Delivery Vessel
211.1750 Dip Coating
211.1770 Distillate Fuel Oil
211.1790 Drum
211.1810 Dry Cleaning Operation or Dry Cleaning Facility
211.1830 Dump-Pit Area
211.1850 Effective Grate Area
211.1870 Effluent Water Separator
211.1890 Electrostatic Bell or Disc Spray
211.1910 Electrostatic Spray
211.1920 Emergency or Standby Unit
211.1930 Emission Rate
211.1950 Emission Unit
211.1970 Enamel
211.1990 Enclose
211.2010 End Sealing Compound Coat
211.2030 Enhanced Under-the-Cup Fill
211.2050 Ethanol Blend Gasoline
211.2070 Excess Air
211.2090 Excessive Release
211.2110 Existing Grain-Drying Operation
211.2130 Existing Grain-Handling Operation
211.2150 Exterior Base Coat
211.2170 Exterior End Coat
211.2190 External Floating Roof
211.2210 Extreme Performance Coating
211.2230 Fabric Coating
211.2250 Fabric Coating Line
211.2270 Federally Enforceable Limitations and Conditions
211.2300 Fill
211.2310 Final Repair Coat
211.2330 Firebox
211.2350 Fixed-Roof Tank
211.2370 Flexographic Printing
211.2390 Flexographic Printing Line
211.2410 Floating Roof
211.2430 Fountain Solution
211.2450 Freeboard Height
211.2470 Fuel Combustion Emission Unit or Fuel Combustion Emission Source
211.2490 Fugitive Particulate Matter
211.2510 Full Operating Flowrate
211.2530 Gas Service
211.2550 Gas/Gas Method
211.2570 Gasoline
211.2590 Gasoline Dispensing Operation or Gasoline Dispensing Facility
211.2610 Gel Coat
211.2650 Grain

211.3650 Marine Terminal
211.3660 Marine Vessel
211.3670 Material Recovery Section
211.3690 Maximum Theoretical Emissions
211.3695 Maximum True Vapor Pressure
211.3710 Metal Furniture
211.3730 Metal Furniture Coating
211.3750 Metal Furniture Coating Line
211.3770 Metallic Shoe-Type Seal
211.3790 Miscellaneous Fabricated Product Manufacturing Process
211.3810 Miscellaneous Formulation Manufacturing Process
211.3830 Miscellaneous Metal Parts and Products
211.3850 Miscellaneous Metal Parts and Products Coating
211.3870 Miscellaneous Metal Parts or Products Coating Line
211.3890 Miscellaneous Organic Chemical Manufacturing Process
211.3910 Mixing Operation
211.3930 Monitor
211.3950 Monomer
211.3970 Multiple Package Coating
211.3990 New Grain-Drying Operation
211.4010 New Grain-Handling Operation
211.4030 No Detectable Volatile Organic Material Emissions
211.4050 Non-contact Process Water Cooling Tower
211.4065 Non-Heatset
211.4070 Offset
211.4090 One Hundred Percent Acid
211.4110 One-Turn Storage Space
211.4130 Opacity
211.4150 Opaque Stains
211.4170 Open Top Vapor Degreasing
211.4190 Open-Ended Valve
211.4210 Operator of a Gasoline Dispensing Operation or Operator of a Gasoline Dispensing Facility
211.4230 Organic Compound
211.4250 Organic Material and Organic Materials
211.4260 Organic Solvent
211.4270 Organic Vapor
211.4290 Oven
211.4310 Overall Control
211.4330 Overvarnish
211.4350 Owner of a Gasoline Dispensing Operation or Owner of a Gasoline Dispensing Facility
211.4370 Owner or Operator
211.4390 Packaging Rotogravure Printing
211.4410 Packaging Rotogravure Printing Line
211.4430 Pail
211.4450 Paint Manufacturing Source or Paint Manufacturing Plant
211.4470 Paper Coating
211.4490 Paper Coating Line
211.4510 Particulate Matter
211.4530 Parts Per Million (Volume) or PPM (Vol)
211.4550 Person

211.4590 Petroleum
211.4610 Petroleum Liquid
211.4630 Petroleum Refinery
211.4650 Pharmaceutical
211.4670 Pharmaceutical Coating Operation
211.4690 Photochemically Reactive Material
211.4710 Pigmented Coatings
211.4730 Plant
211.4750 Plasticizers
211.4770 PM-10
211.4790 Pneumatic Rubber Tire Manufacture
211.4810 Polybasic Organic Acid Partial Oxidation Manufacturing Process
211.4830 Polyester Resin Material(s)
211.4850 Polyester Resin Products Manufacturing Process
211.4870 Polystyrene Plant
211.4890 Polystyrene Resin
211.4910 Portable Grain-Handling Equipment
211.4930 Portland Cement Manufacturing Process Emission Source
211.4950 Portland Cement Process or Portland Cement Manufacturing Plant
211.4970 Potential to Emit
211.4990 Power Driven Fastener Coating
211.5030 Pressure Release
211.5050 Pressure Tank
211.5060 Pressure/Vacuum Relief Valve
211.5070 Prime Coat
211.5090 Primer Surfacer Coat
211.5110 Primer Surfacer Operation
211.5130 Primers
211.5150 Printing
211.5170 Printing Line
211.5185 Process Emission Source
211.5190 Process Emission Unit
211.5210 Process Unit
211.5230 Process Unit Shutdown
211.5250 Process Weight Rate
211.5270 Production Equipment Exhaust System
211.5310 Publication Rotogravure Printing Line
211.5330 Purged Process Fluid
211.5340 Rated Heat Input Capacity
211.5350 Reactor
211.5370 Reasonably Available Control Technology (RACT)
211.5390 Reclamation System
211.5410 Refiner
211.5430 Refinery Fuel Gas
211.5450 Refinery Fuel Gas System
211.5470 Refinery Unit or Refinery Process Unit
211.5490 Refrigerated Condenser
211.5500 Regulated Air Pollutant
211.5510 Reid Vapor Pressure
211.5530 Repair

211.5550 Repair Coat
211.5570 Repaired
211.5590 Residual Fuel Oil
211.5610 Restricted Area
211.5630 Retail Outlet
211.5650 Ringelmann Chart
211.5670 Roadway
211.5690 Roll Coater
211.5710 Roll Coating
211.5730 Roll Printer
211.5750 Roll Printing
211.5770 Rotogravure Printing
211.5790 Rotogravure Printing Line
211.5810 Safety Relief Valve
211.5830 Sandblasting
211.5850 Sanding Sealers
211.5870 Screening
211.5890 Sealer
211.5910 Semi-Transparent Stains
211.5930 Sensor
211.5950 Set of Safety Relief Valves
211.5970 Sheet Basecoat
211.5980 Sheet-Fed
211.5990 Shotblasting
211.6010 Side-Seam Spray Coat
211.6030 Smoke
211.6050 Smokeless Flare
211.6070 Solvent
211.6090 Solvent Cleaning
211.6110 Solvent Recovery System
211.6130 Source
211.6150 Specialty High Gloss Catalyzed Coating
211.6170 Specialty Leather
211.6190 Specialty Soybean Crushing Source
211.6210 Splash Loading
211.6230 Stack
211.6250 Stain Coating
211.6270 Standard Conditions
211.6290 Standard Cubic Foot (scf)
211.6310 Start-Up
211.6330 Stationary Emission Source
211.6350 Stationary Emission Unit
211.6355 Stationary Gas Turbine
211.6360 Stationary Reciprocating Internal Combustion Engine
211.6370 Stationary Source
211.6390 Stationary Storage Tank
211.6410 Storage Tank or Storage Vessel
211.6430 Styrene Devolatilizer Unit
211.6450 Styrene Recovery Unit
211.6470 Submerged Loading Pipe
211.6490 Substrate
211.6510 Sulfuric Acid Mist

AUTHORITY: Implementing Sections 9, 9.1 and 10 and authorized by Sections 27 and 28.5 of the Environmental Protection Act [415 ILCS 5/9, 9.1, 10, 27 and 28.5].

SOURCE: Adopted as Chapter 2: Air Pollution, Rule 201: Definitions, R71-23, 4 PCB 191, filed and effective April 14, 1972; amended in R74-2 and R75-5, 32 PCB 295, at 3 Ill. Reg. 5, p. 777, effective February 3, 1979; amended in R78-3 and 4, 35 PCB 75 and 243, at 3 Ill. Reg. 30, p. 124, effective July 28, 1979; amended in R80-5, at 7 Ill. Reg. 1244, effective January 21, 1983; codified at 7 Ill. Reg. 13590; amended in R82-1 (Docket A) at 10 Ill. Reg. 12624, effective July 7, 1986; amended in R85-21(A) at 11 Ill. Reg. 11747, effective June 29, 1987; amended in R86-34 at 11 Ill. Reg. 12267, effective July 10, 1987; amended in R86-39 at 11 Ill. Reg. 20804, effective December 14, 1987; amended in R82-14 and R86-37 at 12 Ill. Reg. 787, effective December 24, 1987; amended in R86-18 at 12 Ill. Reg. 7284, effective April 8, 1988; amended in R86-10 at 12 Ill. Reg. 7621, effective April 11, 1988; amended in R88-23 at 13 Ill. Reg. 10862, effective June 27, 1989; amended in R89-8 at 13 Ill. Reg. 17457, effective January 1, 1990; amended in R89-16(A) at 14 Ill. Reg. 9141, effective May 23, 1990; amended in R88-30(B) at 15 Ill. Reg. 5223, effective March 28, 1991; amended in R88-14 at 15 Ill. Reg. 7901, effective May 14, 1991; amended in R91-10 at 15 Ill. Reg. 15564, effective October 11, 1991; amended in R91-6 at 15 Ill. Reg. 15673, effective October 14, 1991; amended in R91-22 at 16 Ill. Reg. 7656, effective May 1, 1992; amended in R91-24 at 16 Ill. Reg. 13526, effective August 24, 1992; amended in R93-9 at 17 Ill. Reg. 16504, effective September 27, 1993; amended in R93-11 at 17 Ill. Reg. 21471, effective December 7, 1993; amended in R93-14 at 18 Ill. Reg. 1253, effective January 18, 1994; amended in R94-12 at 18 Ill. Reg. 14962, effective September 21, 1994; amended in R94-14 at 18 Ill. Reg. 15744, effective October 17, 1994; amended in R94-15 at 18 Ill. Reg. 16379, effective October 25, 1994; amended in R94-16 at 18 Ill. Reg. 16929, effective November 15, 1994; amended in R94-31 at _____ Ill. Reg._____, effective _____.

BOARD NOTE: This Part implements the Illinois Environmental Protection Act as of July 1, 1994.

SUBPART B: DEFINITIONS

Section 211.474 Alcohol

"Alcohol," for the purposes of 35 Ill. Adm. Code 218.405 through 218.411 and 219.405 through 219.411, means isopropyl alcohol, normal propyl alcohol, or ethanol used in a fountain solution in a lithographic printing operation.

(Source: Added at _____ Ill. Reg. _____, effective _____ _____)

Section 211.560 As-Applied Fountain Solution

"As-applied fountain solution" means the formulation of a fountain solution during application onto the image plate on a lithographic printing line, including any material added at the line before the application of the fountain solution.

(Source: Added at _____ Ill. Reg. _____, effective _____ _____)

Section 211.2850 Heatset Web Offset Lithographic Printing Line

"Heatset web offset lithographic printing line" means a lithographic printing line in which a blanket cylinder is used to transfer ink from a plate cylinder to a substrate continuously fed from a roll or an extension process and an oven is used to solidify the printing inks.

(Source: Amended at _____ Ill. Reg. _____, effective _____ _____)

Section 211.4065 Non-Heatset

"Non-heatset" means a class of lithography which does not require a heated dryer to solidify the printing inks. Ultraviolet-cured and electron beam-cured inks are considered non-heatset.

(Source: Added at _____ Ill. Reg. _____, effective _____ _____)

Section 211.5980 Sheet-Fed

"Sheet-fed" means a printing or coating line where individual sheets of substrate are fed to the line sequentially.

(Source: Added at _____ Ill. Reg. _____, effective _____ _____)

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE B: AIR POLLUTION
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER c: EMISSIONS STANDARDS AND LIMITATIONS FOR STATIONARY SOURCES

PART 218
ORGANIC MATERIAL EMISSION STANDARDS AND LIMITATIONS FOR THE CHICAGO AREA

SUBPART A: GENERAL PROVISIONS

SUBPART B: ORGANIC EMISSIONS FROM STORAGE AND LOADING OPERATIONS

SUBPART C: ORGANIC EMISSIONS FROM MISCELLANEOUS EQUIPMENT

SUBPART E: SOLVENT CLEANING

Section
218.181 Solvent Cleaning in General
218.182 Cold Cleaning
218.183 Open Top Vapor Degreasing
218.184 Conveyorized Degreasing
218.185 Compliance Schedule (Repealed)
218.186 Test Methods

SUBPART F: COATING OPERATIONS

Section
218.204 Emission Limitations
218.205 Daily-Weighted Average Limitations
218.206 Solids Basis Calculation
218.207 Alternative Emission Limitations
218.208 Exemptions from Emission Limitations
218.209 Exemption from General Rule on Use of Organic Material
218.210 Compliance Schedule
218.211 Recordkeeping and Reporting

SUBPART G: USE OF ORGANIC MATERIAL

Section
218.301 Use of Organic Material
218.302 Alternative Standard
218.303 Fuel Combustion Emission Units
218.304 Operations with Compliance Program

SUBPART H: PRINTING AND PUBLISHING

Section
218.401 Flexographic and Rotogravure Printing
218.402 Applicability
218.403 Compliance Schedule
218.404 Recordkeeping and Reporting
218.405 ~~Heatset-Web-Offset~~ Lithographic Printing: Applicability
218.406 Provisions Applying to Heatset Web Offset Lithographic Printing Prior to March 15, 1996
218.407 Emission Limitations and Control Requirements for Lithographic Printing Lines On and After March 15, 1996
218.408 Compliance Schedule for Lithographic Printing On and After March 15, 1996
218.409 Testing for Lithographic Printing On and After March 15, 1996
218.410 Monitoring Requirements for Lithographic Printing
218.411 Recordkeeping and Reporting for Lithographic Printing

SUBPART Q: LEAKS FROM SYNTHETIC ORGANIC CHEMICAL AND POLYMER MANUFACTURING PLANT

SUBPART R: PETROLEUM REFINING AND RELATED INDUSTRIES; ASPHALT MATERIALS

SUBPART S: RUBBER AND MISCELLANEOUS PLASTIC PRODUCTS

SUBPART T: PHARMACEUTICAL MANUFACTURING

SUBPART V: AIR OXIDATION PROCESSES

SUBPART W: AGRICULTURE

SUBPART X: CONSTRUCTION

SUBPART Y: GASOLINE DISTRIBUTION

SUBPART Z: DRY CLEANERS

SUBPART AA: PAINT AND INK MANUFACTURING

SUBPART BB: POLYSTYRENE PLANTS

SUBPART CC: POLYESTER RESIN PRODUCT MANUFACTURING PROCESS

SUBPART DD: AEROSOL CAN FILLING

SUBPART GG: MARINE TERMINALS

SUBPART PP: MISCELLANEOUS FABRICATED PRODUCT MANUFACTURING PROCESSES

SUBPART QQ: MISCELLANEOUS FORMULATION MANUFACTURING PROCESSES

SUBPART RR: MISCELLANEOUS ORGANIC CHEMICAL MANUFACTURING PROCESSES

SUBPART TT: OTHER EMISSION UNITS

SUBPART UU: RECORDKEEPING AND REPORTING

Section
218.990 Exempt Emission Units
218.991 Subject Emission Units

Section 218.APPENDIX A: List of Chemicals Defining Synthetic Organic Chemical and Polymer Manufacturing
Section 218.APPENDIX B: VOM Measurement Techniques for Capture Efficiency
Section 218.APPENDIX C: Reference Test Methods and Procedures
Section 218.APPENDIX D: Coefficients for the Total Resource Effectiveness Index (TRE) Equation
Section 218.APPENDIX E: List of Affected Marine Terminals

AUTHORITY: Implementing Section 10 and authorized by Section 28.5 of the Environmental Protection Act [415 ILCS 5/10 and 28.5].

SOURCE: Adopted at R91-7 at 15 Ill. Reg. 12231, effective August 16, 1991; amended in R91-23 at 16 Ill. Reg. 13564, effective August 24, 1992; amended in R91-28 and R91-30 at 16 Ill. Reg. 13864, effective August 24, 1992; amended in R93-9 at 17 Ill. Reg. 16636, effective September 27, 1993; amended in R93-14 at 18 Ill. Reg. at 1945, effective January 24, 1994; amended in R94-12 at 18 Ill. Reg. 14973, effective September 21, 1994; amended in R94-15 at 18 Ill. Reg 16392, effective October 25, 1994; amended in R94-16 at 18 Ill. Reg. 16950, effective November 15, 1994; amended in R94-31 at _____ Ill. Reg. _____, effective _____ _____.

BOARD NOTE: This Part implements the Illinois Environmental Protection Act as of July 1, 1994.

SUBPART H: PRINTING AND PUBLISHING

Section 218.405 ~~Heatset Web Offset~~ Lithographic Printing: Applicability

~~a)~~ ~~Applicability~~

~~1~~a) Until March 15, 1996, ~~The~~the limitations of ~~subsection (b) below~~Section 218.406 of this Subpart apply to all heatset web offset lithographic printing lines (including solvents used for cleanup operations associated with the heatset web offset lithographic printing line(s)) at a ~~subject~~ source subject to the requirements of this Subpart. All sources with heatset web offset lithographic printing lines are ~~subject~~ sources subject to the requirements of this Subpart unless:

~~A~~1) Total maximum theoretical emissions of VOM from all heatset web offset lithographic printing lines (including solvents used for cleanup operations associated with the heatset web offset lithographic printing line(s)) at the source never exceed 90.7 Mg (100 tons) per calendar year in the absence of air pollution control equipment; or

~~B~~2) A federally enforceable permit or SIP revision for all heatset web offset lithographic printing line(s) at a source requires the owner or operator to limit production or capacity of these printing line(s) to reduce total VOM emissions from all heatset web offset lithographic printing line(s) to 90.7 Mg (100 tons) per calendar year or less in the absence of air pollution control equipment.~~,~~ ~~and~~

~~2~~b) Any owner or operator of any heatset web offset lithographic printing line that is exempt from the limitations in ~~subsection (b) of this~~ Section 218.406 of this Subpart because of the criteria in subsection (a)~~(1)~~ of this Section shall be subject to the recordkeeping and reporting requirements in ~~subsection (c)(1) of this~~ Section 218.406(b)(1) of this Subpart.

~~b) Specific Provisions. No owner or operator of a subject heatset web offset printing line may cause or allow the operation of the subject heatset web offset printing line unless the owner or operator meets the requirements in subsections (b)(1) or (b)(2) and the requirements in subsections (b)(3) and (b)(4) below.~~

~~1) An afterburner system is installed and operated that reduces 90 percent of the VOM emissions from the dryer exhaust, or~~

~~2) The fountain solution contains no more than 8 percent, by weight, of VOM and a condensation recovery system is installed and operated that removes at least 75 percent of the non-isopropyl alcohol organic materials from the dryer exhaust, and~~

~~3) The control device is equipped with the applicable monitoring equipment specified in Section 218.105(d)(2) of this Part and the monitoring equipment is installed, calibrated, operated and maintained according to vendor specifications at all times the control device is in use, and~~

4) The control device is operated at all times when the subject printing line is in operation. The owner or operator shall demonstrate compliance with this Section by using the applicable test methods and procedures specified in Section 218.105(a), (d), and (f) of this Part and by complying with the recordkeeping and reporting requirements specified in subsection (c) below.

c) Recordkeeping and Reporting. The VOM content of each fountain solution and ink and the efficiency of each control device shall be determined by the applicable test methods and procedures specified in Section 218.105 of this Part to establish the records required under this subsection.

1) Any owner or operator of a printing line which is exempted from the limitations of subsection (b) of this Section because of the criteria in subsection (a) of this Section shall comply with the following:

A) By a date consistent with Section 218.106 of this Part, the owner or operator of a heatset web offset lithographic printing line to which subsection (c)(1) of this Section is applicable shall certify to the Agency that the heatset web offset lithographic printing line is exempt under the provisions of subsection (a) of this Section. Such certification shall include:

i) A declaration that the heatset web offset lithographic printing line is exempt from the limitations of subsection (b) of this Section because of the criteria in subsection (a) of this Section, and

ii) Calculations which demonstrate that total maximum theoretical emissions of VOM from all heatset web offset lithographic printing lines at the source never exceed 90.7 Mg (100 tons) per calendar year before the application of air pollution control equipment. Total maximum theoretical emissions of VOM for a heatset web offset lithographic printing source is the sum of maximum theoretical emissions of VOM from each heatset web offset lithographic printing line at the

~~source. The following equation shall be used to calculate total maximum theoretical emissions of VOM per calendar year in the absence of air pollution control equipment for each heatset web offset lithographic printing line at the source.~~

$$E_p = (A \times B) + \frac{(C \times D) + 1095\ (F \times G \times H)}{100}$$

~~where:~~

~~E_p = Total maximum theoretical emissions of VOM from one heatset web offset printing line in units of kg/year (lbs/year);~~

~~A = Weight of VOM per volume of solids of ink with the highest VOM content as applied each year on the printing line in units of kg VOM/l (lbs VOM/gal) of solids;~~

~~B = Total volume of solids for all inks that can potentially be applied each year on the printing line in units of l/year (gal/year). The instrument or method by which the owner or operator accurately measured or calculated the volume of each ink as applied and the amount that can potentially be applied each year on the printing line shall be described in the certification to the Agency;~~

~~C = The weight percent VOM of the fountain solution with the highest VOM content;~~

~~D = The total volume of fountain solution that can potentially be used each year on the printing line in units of l/year (gal/year). The~~

~~instrument and/or method by which the owner or operator accurately measured or calculated the volume of each fountain solution used and the amount that can potentially be used each year on the printing line shall be described in the certification to the Agency;~~

~~F = Weight of VOM per volume of material for the cleanup material or solvent with the highest VOM content as used each year on the printing line in units of Kg/l (lbs VOM/gal) of such material;~~

~~G = The greatest volume of cleanup material or solvent used in any 8-hour period and~~

~~H = The highest fraction of cleanup material or solvent which is not recycled or recovered for offsite disposal during any 8-hour period.~~

~~B) On and after a date consistent with Section 218.106 of this Part, the owner or operator of a heatset web offset lithographic printing line to which subsection (c)(1) of this Section is applicable shall collect and record all of the following information each year for each printing line and maintain the information at the source for a period of three years:~~

~~i) The name and identification of each fountain solution and ink as applied on each printing line.~~

~~ii) The VOM content and the volume of each fountain solution and ink as applied each year on each printing line.~~

~~C) On and after a date consistent with Section 218.106 of this Part, the owner or operator of a source exempted from the limitations of subsection (b) of this Section because of the criteria in subsection (a) of this Section shall notify the Agency of any record showing~~

that total maximum theoretical emissions of VOM from all printing lines exceed 90.7 Mg (100 tons) in any calendar year in the absence of air pollution control equipment by sending a copy of such record to the Agency within 30 days after the exceedance occurs.

2) Any owner or operator of a printing line subject to the limitations of subsection (b) of this Section and complying by means of subsection (b)(1) of this Section shall comply with the following:

A) By a date consistent with Section 218.106 of this Part, or upon initial start-up of a new printing line, or upon changing the method of compliance for an existing printing line from subsection (b)(2) to subsection (b)(1) of this Section; the owner or operator of the subject printing line shall perform all tests and submit to the Agency the results of all tests and calculations necessary to demonstrate that the subject printing line will be in compliance with subsection (b)(1) of this Section on and after a date consistent with Section 218.106 of this Part, or on and after the initial start-up date.

B) On and after a date consistent with Section 218.106 of this Part, or on and after the initial start-up date, the owner or operator of a printing line subject to the limitations of subsection (b) of this Section and complying by means of subsection (b)(1) of this Section shall collect and record the following information each day for each printing line and maintain the information at the source for a period of three years:

i) Control device monitoring data.

ii) A log of operating time for the control device, monitoring equipment and the associated printing line.

iii) A maintenance log for the control device and monitoring equipment detailing all routine and nonroutine maintenance performed including dates and duration of any outages.

C) On and after a date consistent with Section 218.106 of this Part, the owner or operator of a subject printing line shall notify the Agency in the following instances:

i) Any record showing violation of subsection (b)(1) of this Section shall be reported by sending a copy of such record to the Agency within 30 days following the occurrence of the violation.

ii) At least 30 calendar days before changing the method of compliance with subsection (b) of this Section from subsection (b)(1) to (b)(2) of this Section, the owner or operator shall comply with all requirements of subsection (c)(3)(A) of this Section. Upon changing the method of compliance with subsection (b) of this Section from subsection (b)(1) to (b)(2) of this Section, the owner or operator shall comply with all requirements of subsection (c)(3) of this Section.

3) Any owner or operator of a printing line subject to the limitations of subsection (b) of this Section and complying by means of subsection (b)(2) of this Section shall comply with the following:

A) By a date consistent with Section 218.106 of this Part, or upon initial start-up of a new printing line, or upon changing the method of compliance for an existing printing line from subsection (b)(1) to (b)(2) of this Section; the owner or operator of the subject printing line shall perform all tests and submit to the Agency and the USEPA the results of all tests and calculations necessary to demonstrate that the subject printing line will be in compliance with subsection (b)(2) of this Section on and after a date consistent with Section 218.106 of this Part, or on and after the initial start-up date.

B) On and after a date consistent with Section 218.106 of this Part, or on and after the initial start-up date, the owner or operator of a printing line subject to the limitations of subsection (b) of this Section and

complying by means of subsection (b)(2) of this Section shall collect and record the following information each day for each printing line and maintain the information at the source for a period of three years:

i) The VOM content of the fountain solution used each day on each printing line.

ii) A log of operating time for the control device and the associated printing line.

iii) A maintenance log for the control device detailing all routine and non-routine maintenance performed including dates and duration of any outages.

C) On and after a date consistent with Section 218.106 of this Part, the owner or operator of a subject printing line shall notify the Agency in the following instances:

i) Any record showing violation of subsection (b)(2) shall be reported by sending a copy of such record to the Agency within 30 days following the occurrence of the violation.

ii) At least 30 calendar days before changing the method of compliance with subsection (b) of this Section from subsection (b)(2) to subsection(b)(1) of this Section, the owner or operator shall comply with all requirements of subsection (c)(2)(A) of this Section. Upon changing the method of compliance with subsection (b) of this Section from subsection (b)(2) to subsection (b)(1) of this Section, the owner or operator shall comply with all requirements of subsection (c)(2) of this Section.

d) Compliance Schedule. Every owner or operator of a heatset web offset lithographic printing line shall comply with the applicable requirements of subsections (b) and (c) of this Section in accordance with the applicable compliance schedule specified in subsections (d)(1), (d)(2), or (d)(3) below:

1) No owner or operator of a heatset web offset lithographic printing line which is exempt from the limitations of subsection (b) of this Section

~~because of the criteria in subsection (a) of this Section shall operate said printing line on or after a date consistent with Section 218.106 of this Part, unless the owner or operator has complied with, and continues to comply with, subsections (a)(1) and (c)(1) of this Part.~~

~~2) No owner or operator of a heatset web offset lithographic printing line complying by means of subsection (b)(1) of this Section shall operate said printing line on or after a date consistent with Section 218.106 of this Part, unless the owner or operator has complied with, and continues to comply with, subsections (b)(1), (b)(3), (b)(4) and (c)(2) of this Section.~~

~~3) No owner or operator of a heatset web offset lithographic printing line complying by means of subsection (b)(2) of this Section shall operate said printing line on or after a date consistent with Section 218.106 of this Part, unless the owner or operator has complied with, and continues to comply with, subsections (b)(2), (b)(3), (b)(4) and (c)(3) of this Section.~~

c) On and after March 15, 1996, every owner or operator of lithographic printing line(s) is subject to the recordkeeping and reporting requirements in Section 218.411 of this Subpart.

d) On and after March 15, 1996, Sections 218.407 through 218.411 of this Subpart shall apply to:

1) All owners or operators of heatset web offset lithographic printing line(s) unless:

A) Total maximum theoretical emissions of VOM from all heatset web offset lithographic printing lines (including solvents used for cleanup operations associated with heatset web offset lithographic printing lines) at the source never exceed 90.7 Mg (100 tons) per calendar year before the application of capture systems and control devices. To determine a source's total maximum theoretical emissions of VOM for the purposes of this subsection, the owner or operator shall use the calculations set forth in Section 218.406(b)(1)(A)(ii) of this Subpart; or

B) Federally enforceable permit conditions or

SIP revision for all heatset web offset lithographic printing line(s) at the source requires the owner or operator to limit production or capacity of these printing line(s) to total VOM emissions of 90.7 Mg/yr (100 TPY) or less, before the application of capture systems and control devices;

2) All owners or operators of heatset web offset, non-heatset web offset, or sheet-fed offset lithographic printing line(s), unless the combined ~~actual~~ emissions of VOM from all lithographic printing line(s) at the source (including solvents used for cleanup operations associated with the lithographic printing line(s)) never exceed 45.5 kg/day (100 lbs/day), as determined in accordance with Section 218.411(a)(1)(B), before the application of capture systems and control devices.

e) If a lithographic printing line at a source is or becomes subject to one or more of the limitations in Sections 218.406 or 218.407 of this Subpart, the lithographic printing line(s) at the source are always subject to the applicable provisions of this Subpart.

(Source: Amended at _____ Ill. Reg. _____, effective _____ _____).

Section 218.406 Provisions Applying to Heatset Web Offset Lithographic Printing Prior to March 15, 1996

a) Emission Standards and Limitations. No owner or operator of a heatset web offset printing line at a source that meets or exceeds the applicability levels in Section 218.405(a) of this Subpart may cause or allow the operation of such heatset web offset printing line(s) unless the owner or operator meets the requirements in subsections (a)(1) or (a)(2) of this Section and the requirements in subsections (a)(3) and (a)(4) of this Section. The owner or operator shall demonstrate compliance with this Section by using the applicable test methods and procedures specified in Section 218.105(a), (d), and (f) of this Part and by complying with the recordkeeping and reporting requirements specified in subsection (b) of this Section.

1) An afterburner system is installed and operated that reduces 90 percent of the VOM emissions (excluding methane and ethane) from the dryer exhaust; or

2) The fountain solution contains no more than 8 percent, by weight, of VOM and a condensation recovery system is installed and operated that removes at least 75 percent of the non-isopropyl alcohol organic materials from the dryer exhaust; and

3) The control device is equipped with the applicable monitoring equipment specified in Section 218.105(d)(2) of this Part and the monitoring equipment is installed, calibrated, operated and maintained according to manufacturer's specifications at all times when the control device is in use; and

4) The control device is operated at all times when the printing line is in operation.

b) Recordkeeping and Reporting. The VOM content of each fountain solution and ink and the efficiency of each control device shall be determined by the applicable test methods and procedures specified in Section 218.105 of this Part to establish the records required under this subsection.

1) Any owner or operator of a lithographic printing line which is exempted from the limitations of subsection (a) of this Section because of the criteria in 218.405(a) of this Subpart shall comply with the following:

A) By a date consistent with Section 218.106 of this Part, the owner or operator of a heatset web offset lithographic printing line to which subsection (b)(1) of this Section is applicable shall certify to the Agency that the heatset web offset lithographic printing line is exempt under the provisions of Section 218.405(a) of this Subpart. Such certification shall include:

i) A declaration that the heatset web offset lithographic printing line is exempt from the limitations of subsection (a) of this Section because of the criteria in Section 218.405(a) of this Subpart; and

ii) Calculations which demonstrate that total maximum theoretical emissions of VOM from all heatset web offset lithographic printing lines at the

source never exceed 90.7 Mg (100 tons) per calendar year before the application of air pollution control equipment. Total maximum theoretical emissions of VOM for a heatset web offset lithographic printing source is the sum of maximum theoretical emissions of VOM from each heatset web offset lithographic printing line at the source. The following equation shall be used to calculate total maximum theoretical emissions of VOM per calendar year in the absence of air pollution control equipment for each heatset web offset lithographic printing line at the source:

$$E_p = (A \times B) + \frac{(C \times D) + 1095\ (F \times G \times H)}{100}$$

where:

E_p = Total maximum theoretical emissions of VOM from one heatset web offset printing line in units of kg/yr (lb/yr);

A = Weight of VOM per volume of solids of ink with the highest VOM content as applied each year on the printing line in units of kg/l (lb/gal) of solids;

B = Total volume of solids for all inks that can potentially be applied each year on the printing line in units of l/yr (gal/yr). The instrument or method by which the owner or operator accurately measured or calculated the volume of each ink as applied and the amount that can potentially be applied each year on the printing line shall be described in the certification to the Agency;

C = The weight percent VOM of the

fountain solution with the highest VOM content;

D = The total volume of fountain solution that can potentially be used each year on the printing line in units of l/yr (gal/yr). The instrument and/or method by which the owner or operator accurately measured or calculated the volume of each fountain solution used and the amount that can potentially be used each year on the printing line shall be described in the certification to the Agency;

F = Weight of VOM per volume of material for the cleanup material or solvent with the highest VOM content as used each year on the printing line in units of Kg/l (lb/gal) of such material;

G = The greatest volume of cleanup material or solvent used in any 8-hour period; and

H = The highest fraction of cleanup material or solvent which is not recycled or recovered for offsite disposal during any 8-hour period.

B) On and after a date consistent with Section 218.106 of this Part, the owner or operator of a heatset web offset lithographic printing line to which subsection (b)(1) of this Section is applicable shall collect and record all of the following information each year for each printing line and maintain the information at the source for a period of three years:

i) The name and identification of each fountain solution and ink as applied on each printing line; and

ii) The VOM content and the volume of each fountain solution and ink as applied

each year on each printing line.

C) On and after a date consistent with Section 218.106 of this Part, the owner or operator of a source exempted from the limitations of subsection (a) of this Section because of the criteria in Section 218.405(a) of this Subpart shall notify the Agency of any record showing that total maximum theoretical emissions of VOM from all heatset web offset lithographic printing lines exceed 90.7 Mg (100 tons) in any calendar year in the absence of air pollution control equipment by sending a copy of such record to the Agency within 30 days after the exceedence occurs.

2) Any owner or operator of a printing line subject to the limitations of subsection (a) of this Section and complying by means of subsection (a)(1) of this Section shall comply with the following:

A) By a date consistent with Section 218.106 of this Part, or upon initial start-up of a new printing line, or upon changing the method of compliance for an existing printing line from subsection (a)(2) to (a)(1) of this Section, perform all tests and submit to the Agency the results of all tests and calculations necessary to demonstrate that the subject printing line will be in compliance with subsection (a)(1) of this Section on and after a date consistent with Section 218.106 of this Part, or on and after the initial start-up date;

B) On and after a date consistent with Section 218.106 of this Part, or on and after the initial start-up date, collect and record the following information each day for each printing line and maintain the information at the source for a period of three years:

i) Control device monitoring data;

ii) A log of operating time for the control device, monitoring equipment and the associated printing line; and

iii) A maintenance log for the control device and monitoring equipment detailing all

routine and nonroutine maintenance performed including dates and duration of any outages;

C) On and after a date consistent with Section 218.106 of this Part, notify the Agency in the following instances:

i) Any violation of subsection (a)(1) of this Section shall be reported to the Agency, in writing, within 30 days following the occurrence of the violation;

ii) Any record showing a violation of subsection (a)(1) of this Section shall be reported by sending a copy of such record to the Agency within 30 days following the occurrence of the violation; and

iii) At least 30 calendar days before changing the method of compliance with subsection (a) of this Section from subsection (a)(1) to (a)(2) of this Section, the owner or operator shall comply with all requirements of subsection (b)(3)(A) of this Section. Upon changing the method of compliance with subsection (a) of this Section from subsection (a)(1) to (a)(2) of this Section, the owner or operator shall comply with all requirements of subsection (b)(3) of this Section.

3) Any owner or operator of a printing line subject to the limitations of subsection (a) of this Section and complying by means of subsection (a)(2) of this Section shall:

A) By a date consistent with Section 218.106 of this Part, or upon initial start-up of a new printing line, or upon changing the method of compliance for an existing printing line from subsection (a)(1) to (a)(2) of this Section, perform all tests and submit to the Agency and the USEPA the results of all tests and calculations necessary to demonstrate that the subject printing line will be in compliance with subsection (a)(2) of this Section on and after a date consistent with Section 218.106 of this Part, or on and after

the initial start-up date;

B) On and after a date consistent with Section 218.106 of this Part, or on and after the initial start-up date, collect and record the following information each day for each printing line and maintain the information at the source for a period of three years:

i) The VOM content of the fountain solution used each day on each printing line;

ii) A log of operating time for the control device and the associated printing line; and

iii) A maintenance log for the control device detailing all routine and non-routine maintenance performed including dates and duration of any outages;

C) On and after a date consistent with Section 218.106 of this Part, notify the Agency in the following instances:

i) Any violation of subsection (a)(2) shall be reported to the Agency, in writing, within 30 days following the occurrence of the violation;

ii) Any record showing a violation of subsection (a)(2) of this Section shall be reported by sending a copy of such record to the Agency within 30 days following the occurrence of the violation; and

iii) At least 30 calendar days before changing the method of compliance with subsection (a) of this Section from subsection (a)(2) to (a)(1) of this Section, the owner or operator shall comply with all requirements of subsection (b)(2)(A) of this Section. Upon changing the method of compliance with subsection (a) of this Section from subsection (a)(2) to (a)(1) of this Section, the owner or operator shall comply with all requirements of subsection (b)(2) of this Section.

c) Compliance Schedule. Every owner or operator of a

heatset web offset lithographic printing line shall comply with the applicable requirements of subsections (a) and (b) of this Section in accordance with the applicable compliance schedule specified in subsections (c)(1), (c)(2), or (c)(3) of this Section:

1) No owner or operator of a heatset web offset lithographic printing line which is exempt from the limitations of subsection (a) of this Section because of the criteria in Section 218.405(a) of this Subpart shall operate said printing line on or after a date consistent with Section 218.106 of this Part, unless the owner or operator has complied with, and continues to comply with, Sections 218.405(a) and 218.406(b)(1) of this Subpart.

2) No owner or operator of a heatset web offset lithographic printing line complying by means of subsection (a)(1) of this Section shall operate said printing line on or after a date consistent with Section 218.106 of this Part, unless the owner or operator has complied with, and continues to comply with, subsections (a)(1), (a)(3), (a)(4) and (b)(2) of this Section.

3) No owner or operator of a heatset web offset lithographic printing line complying by means of subsection (a)(2) of this Section shall operate said printing line on or after a date consistent with Section 218.106 of this Part, unless the owner or operator has complied with, and continues to comply with, subsections (a)(2), (a)(3), (a)(4) and (b)(3) of this Section.

(Source: Added at _____ Ill. Reg. _____, effective _____ _____)

Section 218.407 Emission Limitations and Control Requirements for Lithographic Printing Lines On and After March 15, 1996

a) On and after March 15, 1996, no owner or operator of lithographic printing line(s) subject to the requirements of this Subpart shall:

1) Cause or allow the operation of any heatset web offset lithographic printing line unless:

A) The total VOM content in the as-applied fountain solution meets one of the following conditions:

i) 1.6 percent or less, by volume;

ii) 3 percent or less, by volume, and the temperature of the fountain solution is maintained below 15.6°C (60°F), measured at the reservoir or the fountain tray; or

iii) 5 percent or less, by volume, and the as-applied fountain solution contains no alcohol;

B) The air pressure in the dryer is maintained lower than the air pressure of the press room, such that air flow through all openings in the dryer, other than the exhaust, is into the dryer at all times when the printing line is operating;

C) An afterburner is installed and operated so that VOM emissions (excluding methane and ethane) from the press dryer exhaust(s) are reduced by 90 percent, by weight, or to a maximum afterburner exhaust outlet concentration of 20 ppmv (as carbon);

D) The afterburner is equipped with the applicable monitoring equipment specified in Section 218.105(d)(2) of this Part and the monitoring equipment is installed, calibrated, operated, and maintained according to manufacturer's specifications at all times when the afterburner is in use; and

E) The afterburner is operated at all times when the printing line is in operation;

2) Cause or allow the operation of any non-heatset web offset lithographic printing line unless the VOM content of the as-applied fountain solution is 5 percent or less, by volume, and the as-applied fountain solution contains no alcohol;

3) Cause or allow the operation of any sheet-fed offset lithographic printing line unless:

A) The VOM content of the as-applied fountain solution is 5 percent or less, by volume; or

B) The VOM content of the as-applied fountain solution is 8.5 percent or less, by volume,

and the temperature of the fountain solution is maintained below 15.6°C (60°F), measured at the reservoir or the fountain tray;

4) Cause or allow the use of a cleaning solution on any lithographic printing line unless:

A) The VOM content of the as-used cleaning solution is less than or equal to 30 percent, by weight; or

B) The VOM composite partial vapor pressure of the as-used cleaning solution is less than 10 mmHg at 20°C (68°F);

5) Cause or allow VOM containing cleaning materials, including used cleaning towels, associated with any lithographic printing line to be kept, stored or disposed of in any manner other than in closed containers.

b) An owner or operator of a heatset web offset lithographic printing line subject to the requirements of subsection (a)(1)(C) of this Section may use a control device other than an afterburner, if:

1) The control device reduces VOM emissions from the press dryer exhaust(s) by at least 90 percent, by weight, or to a maximum control device exhaust outlet concentration of 20 ppmv (as carbon);

2) The owner or operator submits a plan to the Agency detailing appropriate monitoring devices, test methods, recordkeeping requirements, and operating parameters for the control device; and

3) The use of the control device with testing, monitoring, and recordkeeping in accordance with this plan is approved by the Agency and USEPA as federally enforceable permit conditions.

(Source: Added at _____ Ill. Reg. _____, effective _____ _____)

Section 218.408 Compliance Schedule for Lithographic Printing On and After March 15, 1996

a) Every owner or operator of a lithographic printing line subject to one or more of the control requirements of Section 218.407 of this Subpart shall comply with the applicable requirements of Sections 218.407 through

218.411 of this Subpart on and after March 15, 1996, or upon initial start-up, whichever is later.

b) No owner or operator of a lithographic printing line which is exempt from the limitations of Section 218.407 of this Subpart because of the criteria in Section 218.405(d) of this Subpart, shall operate said printing line on or after March 15, 1996, unless the owner or operator has complied with, and continues to comply with, Sections 218.405(d) and 218.411(a) of this Subpart.

(Source: Added at _____Ill. Reg. _____, effective _____ _____)

Section 218.409 Testing for Lithographic Printing On and After March 15, 1996

a) Testing to demonstrate compliance with the requirements of Section 218.407 of this Subpart shall be conducted by the owner or operator within 90 days after a request by the Agency. Such testing shall be conducted at the expense of the owner or operator and the owner or operator shall notify the Agency in writing 30 days in advance of conducting such testing to allow the Agency to be present during such testing.

b) The methods and procedures of Section 218.105(d) and (f) shall be used for testing to demonstrate compliance with the requirements of Section 218.407(a)(1)(C) or (b)(1) of this Subpart, as follows:

1) To select the sampling sites, Method 1 or 1A, as appropriate, 40 CFR 60, Appendix A, incorporated by reference at Section 218.112 of this Part. The sampling sites for determining efficiency in reducing VOM from the dryer exhaust shall be located between the dryer exhaust and the control device inlet, and between the outlet of the control device and the exhaust to the atmosphere;

2) To determine the volumetric flow rate of the exhaust stream, Method 2, 2A, 2C, or 2D, as appropriate, 40 CFR 60, Appendix A, incorporated by reference at Section 218.112 of this Part;

3) To determine the VOM concentration of the exhaust stream entering and exiting the control device, Method 25 or 25A, as appropriate, 40 CFR 60, Appendix A, incorporated by reference at Section 218.112 of this Part. For thermal and catalytic afterburners, Method 25 must be used except under

the following circumstances, in which case Method 25A must be used:

A) The allowable outlet concentration of VOM from the control device is less than 50 ppmv, as carbon;

B) The VOM concentration at the inlet of the control device and the required level of control result in exhaust concentrations of VOM of 50 ppmv, or less, as carbon; and

C) Due to the high efficiency of the control device, the anticipated VOM concentration at the control device exhaust is 50 ppmv or less, as carbon, regardless of inlet concentration. If the source elects to use Method 25A under this option, the exhaust VOM concentration must be 50 ppmv or less, as carbon, and the required destruction efficiency must be met for the source to have demonstrated compliance. If the Method 25A test results show that the required destruction efficiency apparently has been met, but the exhaust concentration is above 50 ppmv, as carbon, a retest is required. The retest shall be conducted using either Method 25 or Method 25A. If the retest is conducted using Method 25A and the test results again show that the required destruction efficiency apparently has been met, but the exhaust concentration is above 50 ppmv, as carbon, the source must retest using Method 25;

4) Notwithstanding the criteria or requirements in Method 25 which specifies a minimum probe temperature of 129°C (265°F), the probe must be heated to at least the gas stream temperature of the dryer exhaust, typically close to 176.7°C (350°F);

5) During testing, the printing line(s) shall be operated at representative operating conditions and flow rates; and

6) During testing, an air flow direction indicating device, such as a smoke stick, shall be used to demonstrate 100 percent emissions capture efficiency for the dryer in accordance with Section 218.407(a)(1)(B) of this Subpart.

c) Testing to demonstrate compliance with the VOM content limitations in Section 218.407(a)(1)(A), (a)(2), (a)(3) and (a)(4)(A) of this Subpart, and to determine the VOM content of fountain solutions, fountain solution additives, cleaning solvents, cleaning solutions, and inks (pursuant to the requirements of Section 218.411(a)(1)(B) of this Subpart), shall be conducted upon request of the Agency, as follows:

1) The applicable test methods and procedures specified in Section 218.105(a) of this Part shall be used; provided, however, Method 24, incorporated by reference at Section 218.112 of this Part, shall be used to demonstrate compliance; or

2) The manufacturer's specifications for VOM content for fountain solution additives, cleaning solvents, and inks may be used if such manufacturer's specifications are based on results of tests of the VOM content conducted in accordance with methods specified in Section 218.105(a) of this Part; provided, however, Method 24 shall be used to determine compliance.

d) Testing to demonstrate compliance with the requirements of Section 218.407(b) of this Subpart shall be conducted as set forth in the owner or operator's plan approved by the Agency and USEPA as federally enforceable permit conditions pursuant to Section 218.407(b) of this Subpart.

e) Testing to determine the VOM composite partial vapor pressure of cleaning solvents, cleaning solvent concentrates, and as-used cleaning solutions shall be conducted in accordance with the applicable methods and procedures specified in Section 218.110 of this Part.

(Source: Added at _____ Ill. Reg. _____, effective _____ _____)

Section 218.410 Monitoring Requirements for Lithographic Printing

a) Fountain Solution Temperature.

1) The owner or operator of any lithographic printing line(s) relying on the temperature of the fountain solution to demonstrate compliance shall install, maintain, and continuously operate a temperature monitor of the fountain solution in the reservoir or fountain tray, as applicable.

2) The temperature monitor must be capable of reading with an accuracy of 0.3°C or 0.5°F, and must be attached to an automatic, continuous recording device such as a strip chart, recorder, or computer, with at least the same accuracy, that is installed, calibrated and maintained in accordance with the manufacturer's specifications. If the automatic, continuous recording device malfunctions, the owner or operator shall record the temperature of the fountain solution at least once every two operating hours. The automatic, continuous recording device shall be repaired or replaced as soon as practicable.

b) Fountain Solution VOM Content. The owner or operator of any lithographic printing line(s) subject to Section 218.407(a)(1)(A), (a)(2) or (a)(3) of this Subpart shall:

1) For a fountain solution to which VOM is not added automatically:

A) Maintain records of the VOM content of the fountain solution in accordance with Section 218.411(c)(2)(C); or

B) Take a sample of the as-applied fountain solution from the fountain tray or reservoir, as applicable, each time a fresh batch of fountain solution is prepared or each time VOM is added to an existing batch of fountain solution in the fountain tray or reservoir, and shall determine compliance with the VOM content limitation of the as-applied fountain solution by using one of the following options:

i) With a refractometer or hydrometer with a visual, analog, or digital readout and with an accuracy of 0.5 percent. The refractometer or hydrometer must be calibrated with a standard solution for the type of VOM used in the fountain solution, in accordance with manufacturer's specifications, against measurements performed to determine compliance. The refractometer or hydrometer must be corrected for temperature at least once per 8-hour shift or once per batch of fountain

solution prepared or modified, whichever is longer; or

ii) With a conductivity meter if it is demonstrated that a refractometer and hydrometer cannot distinguish between compliant and noncompliant fountain solution for the type and amount of VOM in the fountain solution. A source may use a conductivity meter if it demonstrates that both hydrometers and refractometers fail to provide significantly different measurements for standard solutions containing 95 percent, 100 percent and 105 percent of the applicable VOM content limit. The conductivity meter reading for the fountain solution must be referenced to the conductivity of the incoming water. A standard solution shall be used to calibrate the conductivity meter for the type of VOM used in the fountain solution, in accordance with manufacturer's specifications;

2) For fountain solutions to which VOM is added at the source with automatic feed equipment, determine the VOM content of the as-applied fountain solution based on the setting of the automatic feed equipment which makes additions of VOM up to a pre-set level. The equipment used to make automatic additions must be installed, calibrated, operated and maintained in accordance with manufacturer's specifications.

c) Afterburners For Heatset Web Offset Lithographic Printing Line(s).

If an afterburner is used to demonstrate compliance, the owner or operator of a heatset web offset lithographic printing line subject to Section 218.407(a)(1)(C) of this Subpart shall:

1) Install, calibrate, maintain, and operate temperature monitoring device(s) with an accuracy of 3°C or 5°F on the afterburner in accordance with Section 218.105(d)(2) of this Part and in accordance with the manufacturer's specifications. Monitoring shall be performed at all times when the afterburner is operating; and

2) Install, calibrate, operate and maintain, in accordance with manufacturer's specifications, a continuous recorder on the temperature monitoring device(s), such as a strip chart, recorder or computer, with at least the same accuracy as the temperature monitor.

d) Other Control Devices for Heatset Web Offset Lithographic Printing Line(s).

If a control device other than an afterburner is used to demonstrate compliance, the owner or operator of a heatset web offset lithographic printing line subject to this Subpart shall install, maintain, calibrate and operate such monitoring equipment as set forth in the owner or operator's plan approved by the Agency and USEPA pursuant to Section 218.407(b) of this Subpart.

e) Cleaning Solution.

1) The owner or operator of any lithographic printing line relying on the VOM content of the cleaning solution to comply with Section 218.407(a)(4)(A) of this Subpart must:

A) For cleaning solutions that are prepared at the source with equipment that automatically mixes cleaning solvent and water (or other non-VOM):

i) Install, operate, maintain, and calibrate the automatic feed equipment in accordance with manufacturer's specifications to regulate the volume of each of the cleaning solvent and water (or other non-VOM), as mixed; and

ii) Pre-set the automatic feed equipment so that the consumption rates of the cleaning solvent and water (or other non-VOM), as applied, comply with Section 218.407(a)(4)(A) of this Subpart;

B) For cleaning solutions that are not prepared at the source with automatic feed equipment, keep records of the usage of cleaning solvent and water (or other non-VOM) as set forth in Section 218.411(d)(2) of this Subpart.

2) The owner or operator of any lithographic printing line relying on the vapor pressure of the cleaning

solution to comply with Section 218.407(a)(4)(B) of this Subpart must keep records for such cleaning solutions used on any such line(s) as set forth in Section 218.411(d)(2)(C) of this Subpart.

(Source: Added at _____ Ill. Reg. _____, effective _____ _____)

Section 218.411 Recordkeeping and Reporting for Lithographic Printing

a) An owner or operator of lithographic printing line(s) exempt from the limitations of Section 218.407 of this Subpart because of the criteria in Section 218.405(d) of this Subpart shall comply with the following:

1) By March 15, 1996, upon initial start-up of a new lithographic printing line, and upon modification of a lithographic printing line, submit a certification to the Agency that includes:

A) A declaration that the source is exempt from the control requirements in Section 218.407 of this Part because of the criteria in Section 218.405(d) of this Subpart;

B) Calculations which demonstrate that combined emissions of VOM from all lithographic printing lines (including inks, fountain solutions, and solvents used for cleanup operations associated with the lithographic printing lines) at the source never exceed 45.5 kg/day (100 lbs/day) before the use of capture systems and control devices, as follows:

i) To calculate daily emissions of VOM, the owner or operator shall determine the monthly emissions of VOM from all lithographic printing lines at the source (including solvents used for cleanup operations associated with the lithographic printing lines) and divide this amount by the number of days during that calendar month that printing lines at the source were in operation;

ii) To determine the VOM content of the inks, fountain solution additives and cleaning solvents, the tests methods and procedures set forth in Section

218.409(c) of this Subpart shall be used;

iii) To determine VOM emissions from inks used on lithographic printing line(s) at the source, an ink emission adjustment factor of 0.05 shall be used in calculating emissions from all non-heatset inks, and a factor of 0.80 shall be used in calculating emissions from all heatset inks to account for VOM retention in the substrate. The VOM content of the ink, as used, shall be multiplied by this factor to determine the amount of VOM emissions from the use of ink on the printing line(s); and

iv) To determine VOM emissions from fountain solutions and cleaning solvents used on lithographic printing line(s) at the source, no retention factor is used;

C) Either a declaration that the source, through federally enforceable permit conditions, has limited its maximum theoretical emissions of VOM from all heatset web offset lithographic printing lines (including solvents used for cleanup operations associated with heatset web offset printing lines) at the source to no more than 90.7 Mg (100 tons) per calendar year before the application of capture systems and control devices or calculations which demonstrate that the source's total maximum theoretical emissions of VOM do not exceed 90.7 Mg/yr (100 TPY). To determine the source's total maximum theoretical emissions for the purposes of this subsection, the owner or operator shall use the calculations set forth in Section 218.406(b)(1)(A)(ii) of this Subpart; and

D) A description and the results of all tests used to determine the VOM content of inks, fountain solution additives, and cleaning solvents, and a declaration that all such tests have been properly conducted in accordance with Section 218.409(c)(1) of this Subpart;

2) On and after March 15, 1996, collect and record either the information specified in subsection

(a)(2)(A) or (a)(2)(B) of this Section for all lithographic printing lines at the source:

A) Standard recordkeeping, including the following:

i) The name and identification of each fountain solution additive, lithographic ink, and cleaning solvent used on ~~each~~ any lithographic printing line, recorded each month;

ii) A daily record which shows whether a lithographic printing line at the source was in operation on that day;

iii) The VOM content and the volume of each fountain solution additive, lithographic ink, and cleaning solvent used on any lithographic printing line, recorded each month;

iv) The total VOM emissions at the source each month, determined as the sum of the product of usage and VOM content for each fountain solution additive, cleaning solvent, and lithographic ink (with the applicable ink VOM emission adjustment) used at the source, calculated each month; and

v) The VOM emissions in lbs/day for the month, calculated in accordance with Section 218.411(a)(1)(B) of this Subpart;

B) Purchase and inventory recordkeeping, including the following:

i) The name, identification, and VOM content of each fountain solution additive, lithographic ink, and cleaning solvent used on any lithographic printing line, recorded each month;

ii) Inventory records from the beginning and end of each month indicating the total volume of each fountain solution additive, lithographic ink, and cleaning solvent to be used on any lithographic printing line at the source;

iii) Monthly purchase records for each fountain solution additive, lithographic ink, and cleaning solvent used on any lithographic printing line at the source;

iv) A daily record which shows whether a lithographic printing line at the source was in operation on that day;

v) The total VOM emissions at the source each month, determined as the sum of the product of usage and VOM content for each fountain solution additive, cleaning solvent, and lithographic ink (with the applicable ink VOM emission adjustment) used at the source, calculated each month based on the monthly inventory and purchase records required to be maintained pursuant to subsections (a)(2)(B)(i), (a)(2)(B)(ii) and (a)(2)(B)(iii) of this Section; and

vi) The VOM emissions in lbs/day for the month, calculated in accordance with Section 218.411(a)(1)(B) of this Subpart;

3) On and after March 15, 1996, notify the Agency in writing if the combined emissions of VOM from all lithographic printing lines (including inks, fountain solutions, and solvents used for cleanup operations associated with the lithographic printing lines) at the source ever exceed 45.5 kg/day (100 lbs/day), before the use of capture systems and control devices, within 30 days after the event occurs. Such notification shall include a copy of all records of such event.

b) An owner or operator of a heatset web offset lithographic printing line(s) subject to the control requirements of Section 218.407(a)(1)(C) or (b)(1) of this Subpart shall comply with the following:

1) By March 15, 1996, upon initial start-up of a new printing line, and upon initial start-up of a new control device for a heatset web offset printing line, submit a certification to the Agency that includes the following:

A) An identification of each heatset web offset lithographic printing line at the source;

B) A declaration that each heatset web offset lithographic printing line is in compliance with the requirements of Section 218.407 (a)(1)(B), (a)(1)(C), (a)(1)(D) and (a)(1)(E) or (b) of this Subpart, as appropriate;

C) The type of afterburner or other approved control device used to comply with the requirements of Section 218.407(a)(1)(C) or (b)(1) of this Subpart;

D) The control requirements in Section 218.407(a)(1)(C) or (b)(1) of this Subpart with which the lithographic printing line is complying;

E) The results of all tests and calculations necessary to demonstrate compliance with the control requirements of Section 218.407(a)(1)(C) or (b)(1) of this Subpart, as applicable; and

F) A declaration that the monitoring equipment required under Section 218.407(a)(1)(D) or (b) of this Subpart, as applicable, has been properly installed and calibrated according to manufacturer's specifications;

2) If testing of the afterburner or other approved control device is conducted pursuant to Section 218.409(b) of this Subpart, the owner or operator shall, within 90 days after conducting such testing, submit a copy of all test results to the Agency and shall submit a certification to the Agency that includes the following:

A) A declaration that all tests and calculations necessary to demonstrate whether the lithographic printing line(s) is in compliance with Section 218.407(a)(1)(C) or (b)(1) of this Subpart, as applicable, have been properly performed;

B) A statement whether the lithographic printing line(s) is or is not in compliance with Section 218.407(a)(1)(C) or (b)(1) of this Subpart, as applicable; and

C) The operating parameters of the afterburner or other approved control device during testing, as monitored in accordance with

Section 218.410(c) or (d) of this Subpart, as applicable;

3) On and after March 15, 1996, collect and record daily the following information for each heatset web offset lithographic printing line subject to the requirements of Section 218.407(a)(1)(C) or (b)(1) of this Subpart:

A) Afterburner or other approved control device monitoring data in accordance with Section 218.410(c) or (d) of this Subpart, as applicable;

B) A log of operating time for the afterburner or other approved control device, monitoring equipment, and the associated printing line;

C) A maintenance log for the afterburner or other approved control device and monitoring equipment detailing all routine and non-routine maintenance performed, including dates and duration of any outages; and

D) A log detailing checks on the air flow direction or air pressure of the dryer and press room to insure compliance with the requirements of Section 218.407(a)(1)(B) of this Subpart at least once per 24-hour period while the line is operating;

4) On and after March 15, 1996, notify the Agency in writing of any violation of Section 218.407(a)(1)(C) or (b)(1) of this Subpart within 30 days after the occurrence of such violation. Such notification shall include a copy of all records of such violation;

5) If changing its method of compliance between subsections (a)(1)(C) and (b) of Section 218.407 of this Subpart, certify compliance for the new method of compliance in accordance with subsection (b)(1) of this Section at least 30 days before making such change, and perform all tests and calculations necessary to demonstrate that such printing line(s) will be in compliance with the requirements of Section 218.407(a)(1)(B), (a)(1)(C), (a)(1)(D) and (a)(1)(E) of this Subpart, or Section 218.407(b) of this Subpart, as applicable.

c) An owner or operator of a lithographic printing line subject to Section 218.407(a)(1)(A), (a)(2), or (a)(3) of this Subpart, shall:

1) By March 15, 1996, and upon initial start-up of a new lithographic printing line, certify to the Agency that fountain solutions used on each lithographic printing line will be in compliance with the applicable VOM content limitation. Such certification shall include:

A) Identification of each lithographic printing line at the source, by type, e.g., heatset web offset, non-heatset web offset, or sheet-fed offset;

B) Identification of each centralized fountain solution reservoir and each lithographic printing line that it serves;

C) The VOM content limitation with which each fountain solution will comply;

D) Initial documentation that each type of fountain solution will comply with the applicable VOM content limitation, including copies of manufacturer's specifications, test results, if any, formulation data and calculations;

E) Identification of the method that will be used to demonstrate continuing compliance with the applicable limitation, e.g., a refractometer, hydrometer, conductivity meter, or recordkeeping procedures with detailed description of the compliance methodology; and

F) A sample of the records that will be kept pursuant to Section 218.411(c)(2) of this Subpart.

2) On and after March 15, 1996, collect and record the following information for each fountain solution:

A) The name and identification of each batch of fountain solution prepared for use on one or more lithographic printing lines, the lithographic printing line(s) or centralized reservoir using such batch of fountain

solution, and the applicable VOM content limitation for the batch;

B) If an owner or operator uses a hydrometer, refractometer, or conductivity meter, pursuant to Section 218.410(b)(1)(B), to demonstrate compliance with the applicable VOM content limit in Section 218.407(a)(1)(A), (a)(2), or (a)(3) of this Subpart:

i) The date and time of preparation, and each subsequent modification, of the batch;

ii) The results of each measurement taken in accordance with Section 218.410(b) of this Subpart;

iii) Documentation of the periodic calibration of the meter in accordance with the manufacturer's specifications, including date and time of calibration, personnel conducting, identity of standard solution, and resultant reading; and

iv) Documentation of the periodic temperature adjustment of the meter, including date and time of adjustment, personnel conducting and results;

C) If the VOM content of the fountain solution is determined pursuant to Section 218.410(b)(1)(A) of this Subpart, for each batch of as-applied fountain solution:

i) Date and time of preparation and each subsequent modification of the batch;

ii) Volume and VOM content of each component used in, or subsequently added to, the fountain solution batch;

iii) Calculated VOM content of the as-applied fountain solution; and

iv) Any other information necessary to demonstrate compliance with the applicable VOM content limits in Section 218.407(a)(1)(A), (a)(2) and (a)(3) of

this Subpart, as specified in the source's operating permit;

D) If the owner or operator relies on the temperature of the fountain solution to comply with the requirements in Section 218.407(a)(1)(A)(ii) or (a)(3)(B) of this Subpart:

i) The temperature of the fountain solution at each printing line, as monitored in accordance with Section 218.410(a); and

ii) A maintenance log for the temperature monitoring devices and automatic, continuous temperature recorders detailing all routine and non-routine maintenance performed, including dates and duration of any outages;

3) Notify the Agency in writing of any violation of Section 218.407 of this Subpart within 30 days after the occurrence of such violation. Such notification shall include a copy of all records of such violation; and

4) If changing its method of demonstrating compliance with the applicable VOM content limitations in Section 218.407 of this Subpart, or changing the method of demonstrating compliance with the VOM content limitations for fountain solutions pursuant to Section 218.409 of this Subpart, certify compliance for such new method(s) in accordance with subsection (c)(1) of this Section within 30 days after making such change, and perform all tests and calculations necessary to demonstrate that such printing line(s) will be in compliance with the applicable requirements of Section 218.407 of this Subpart.

d) For lithographic printing line cleaning operations, an owner or operator of a lithographic printing line subject to the requirements of Section 218.407 of this Subpart shall:

1) By March 15, 1996, or upon initial start-up of a new lithographic printing line, certify to the Agency that all cleaning solutions, and the handling of cleaning materials, will be in compliance with the requirements of Section 218.407(a)(4)(A) or (a)(4)(B) and (a)(5) of this

Subpart, and such certification shall also include:

A) Identification of each VOM-containing cleaning solution used on each lithographic printing line;

B) The limitation with which each VOM-containing cleaning solution will comply, i.e., the VOM content or vapor pressure;

C) Initial documentation that each VOM-containing cleaning solution will comply with the applicable limitation, including copies of manufacturer's specifications, test results, if any, formulation data and calculations;

D) Identification of the method that will be used to demonstrate continuing compliance with the applicable limitations;

E) A sample of the records that will be kept pursuant to Section 218.411(d)(2) of this Subpart; and

F) A description of the practices that assure that VOM-containing cleaning materials are kept in closed containers.

2) On and after March 15, 1996, collect and record the following information for each cleaning solution used on each lithographic printing line:

A) For each cleaning solution for which the owner or operator relies on the VOM content to demonstrate compliance with Section 218.407(a)(4)(A) of this Subpart and which is prepared at the source with automatic equipment:

i) The name and identification of each cleaning solution;

ii) The VOM content of each cleaning solvent in the cleaning solution, as determined in accordance with Section 218.409(c) of this Subpart;

iii) Each change to the setting of the automatic equipment, with date, time, description of changes in the cleaning

solution constituents (e.g., cleaning solvents), and a description of changes to the proportion of cleaning solvent and water (or other non-VOM);

iv) The proportion of each cleaning solvent and water (or other non-VOM) used to prepare the as-used cleaning solution;

v) The VOM content of the as-used cleaning solution, with supporting calculations; and

vi) A calibration log for the automatic equipment, detailing periodic checks;

B) For each batch of cleaning solution for which the owner or operator relies on the VOM content to demonstrate compliance with Section 218.407(a)(4)(A) of this Subpart, and which is not prepared at the source with automatic equipment:

i) The name and identification of each cleaning solution;

ii) Date and time of preparation, and each subsequent modification, of the batch;

iii) The VOM content of each cleaning solvent in the cleaning solution, as determined in accordance with Section 218.409(c) of this Subpart;

iv) The total amount of each cleaning solvent and water (or other non-VOM) used to prepare the as-used cleaning solution; and

v) The VOM content of the as-used cleaning solution, with supporting calculations;

C) For each batch of cleaning solution for which the owner or operator relies on the vapor pressure of the cleaning solution to demonstrate compliance with Section 218.407(a)(4)(B) of this Subpart:

i) The name and identification of each cleaning solution;

ii) Date and time of preparation, and each subsequent modification, of the batch;

iii) The molecular weight, density, and VOM composite partial vapor pressure of each cleaning solvent, as determined in accordance with Section 218.409(e) of this Subpart;

iv) The total amount of each cleaning solvent used to prepare the as-used cleaning solution; and

v) The VOM composite partial vapor pressure of each as-used cleaning solution, as determined in accordance with Section 218.409(e) of this Subpart;

D) The date, time and duration of scheduled inspections performed to confirm the proper use of closed containers to control VOM emissions, and any instances of improper use of closed containers, with descriptions of actual practice and corrective action taken, if any;

3) On and after March 15, 1996, notify the Agency in writing of any violation of Section 218.407 of this Subpart within 30 days after the occurrence of such violation. Such notification shall include a copy of all records of such violation; and

4) If changing its method of demonstrating compliance with the requirements of Section 218.407(a)(4) of this Subpart, or changing between automatic and manual methods of preparing cleaning solutions, certify compliance for such new method in accordance with subsection (d)(1) of this Section, within 30 days after making such change, and perform all tests and calculations necessary to demonstrate that such printing line(s) will be in compliance with the applicable requirements of Section 218.407(a)(4) of this Subpart.

e) The owner or operator shall maintain all records required by this Section at the source for a minimum period of three years and shall make all records available to the Agency upon request.

(Source: Added at _____ Ill. Reg. _____, effective _____ _____)

SUBPART T: PHARMACEUTICAL MANUFACTURING

Section 218.480 Applicability

a) The rules of this Subpart, except for Sections 218.483 through 218.485 of this Part, apply to all emission units of VOM, including but not limited to reactors, distillation units, dryers, storage tanks for VOL, equipment for the transfer of VOL, filters, crystallizers, washers, laboratory hoods, pharmaceutical coating operations, mixing operations and centrifuges used in manufacturing, including packaging, of pharmaceuticals, and emitting more than 6.8 kg/day (15 lbs/day) and more than 2,268 kg/year (2.5 tons/year) of VOM. If such an emission unit emits less than 2,268 kg/year (2.5 tons/year) of VOM, the requirements of this Subpart still apply to the emission unit if VOM emissions from the emission unit exceed 45.4 kg/day (100 lbs/day).

b) Notwithstanding subsection (a) of this Section, the air suspension coater/dryer, fluid bed dryers, tunnel dryers, and Accelacotas located in Libertyville Township, Lake County, Illinois shall be exempt from the rules of this Subpart, except for Sections 218.483 through 218.485, if emissions of VOM not vented to air pollution control equipment do not exceed the following levels:

1) For the air suspension coater/dryer: 2,268 kg/year (2.5 tons/year);

2) For each fluid bed dryer: 4,535 kg/year (5.0 tons/year);

3) For each tunnel dryer: 6,803 kg/year (7.5 tons/year); and

4) For each Accelacota: 6,803 kg/year (7.5 tons/year).

c) Sections 218.483 through 218.485 of this Part apply to a source having one or more emission units that:

1) Are used to manufacture pharmaceuticals, and

2) Emit more than 6.8 kg/day (15 lbs/day) of VOM and more than 2,268 kg/year (2.5 tons/year) of VOM, or, if less than 2,268 kg/year (2.5 tons/year), these Sections still apply if emissions from one or more sources exceed 45.4 kg/day (100 lbs/day).

d) No owner or operator shall violate any condition in a permit when the condition results in exclusion of an emission unit from this Subpart.

e) Any pharmaceutical manufacturing source that becomes subject to the provisions of this Subpart at any time shall remain subject to the provisions of this Subpart at all times.

f) Emissions subject to this Subpart shall be controlled at all times consistent with the requirements set forth in this Subpart.

g) Any control device required pursuant to this Subpart shall be operated at all times when the source it is controlling is operated.

h) Determinations of daily and annual emissions for purposes of this Section shall be made using both data on the hourly emission rate (or the emissions per unit of throughput) and appropriate daily and annual data from records of emission unit operation (or material throughput or material consumption data). In the absence of representative test data pursuant to Section 218.487 of this Part for the hourly emission rate (or the emissions per unit of throughput) such items shall be calculated using engineering calculations, including the methods described in Appendix B of "Control of Volatile Organic Emissions from Manufacturing of Synthesized Pharmaceutical Products" (EPA-450/2-78-029), incorporated by reference in Section 218.112 of this Part.

(This subsection shall not affect the Agency's or the USEPA's authority to require emission tests to be performed pursuant to Section 218.487 of this Part.)

i) Equipment and operations emitting VOM at a source subject to subsection (a) or (c) of this Section and used to produce pharmaceutical products or a pharmaceutical-like product such as a hormone, enzyme, or antibiotic, shall be deemed to be engaged in the manufacture of pharmaceuticals for the purposes of this Subpart.

(Source: Amended at _____ Ill. Reg. _____, effective _____)

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE B: AIR POLLUTION
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER c: EMISSIONS STANDARDS AND LIMITATIONS FOR STATIONARY SOURCES

PART 219
ORGANIC MATERIAL EMISSION STANDARDS AND LIMITATIONS FOR THE METRO EAST AREA

SUBPART A: GENERAL PROVISIONS

SUBPART B: ORGANIC EMISSIONS FROM STORAGE AND LOADING OPERATIONS

SUBPART C: ORGANIC EMISSIONS FROM MISCELLANEOUS EQUIPMENT

SUBPART E: SOLVENT CLEANING

SUBPART F: COATING OPERATIONS

SUBPART G: USE OF ORGANIC MATERIAL

SUBPART H: PRINTING AND PUBLISHING

SUBPART Q: LEAKS FROM SYNTHETIC ORGANIC CHEMICAL AND POLYMER MANUFACTURING PLANT

SUBPART R: PETROLEUM REFINING AND RELATED INDUSTRIES; ASPHALT MATERIALS

SUBPART S: RUBBER AND MISCELLANEOUS PLASTIC PRODUCTS

SUBPART T: PHARMACEUTICAL MANUFACTURING

SUBPART V: AIR OXIDATION PROCESSES

SUBPART W: AGRICULTURE

SUBPART X: CONSTRUCTION

SUBPART Y: GASOLINE DISTRIBUTION

SUBPART Z: DRY CLEANERS

SUBPART AA: PAINT AND INK MANUFACTURING

SUBPART BB: POLYSTYRENE PLANTS

SUBPART GG: MARINE TERMINALS

SUBPART PP: MISCELLANEOUS FABRICATED PRODUCT MANUFACTURING PROCESSES

SUBPART QQ: MISCELLANEOUS FORMULATION MANUFACTURING PROCESSES

SUBPART RR: MISCELLANEOUS ORGANIC CHEMICAL MANUFACTURING PROCESSES

SUBPART TT: OTHER EMISSION UNITS

SUBPART UU: RECORDKEEPING AND REPORTING

Section 219.APPENDIX E: Effectiveness Index (TRE) Equation List of Affected Marine Terminals

AUTHORITY: Implementing Section 10 and authorized by Section 28.5 of the Environmental Protection Act [415 ILCS 5/10 and 28.5].

SOURCE: Adopted at R91-8 at 15 Ill. Reg. 12491, effective August 16, 1991; amended in R91-24 at 16 Ill. Reg. 13597, effective August 24, 1992; amended in R91-30 at 16 Ill. Reg. 13883, effective August 24, 1992; emergency amendment in R93-12 at 17 Ill. Reg. 8295, effective May 24, 1993, for a maximum of 150 days; amended in R93-9 at 17 Ill. Reg. 16918, effective September 27, 1993 and October 21, 1993; amended in R93-28 at 18 Ill. Reg. 4242, effective March 3, 1994; amended in R94-12 at 18 Ill. Reg. 14987 effective September 21, 1994; amended in R94-15 at 18 Ill. Reg. 16415, effective October 25, 1994; amended in R94-16 at 18 Ill. Reg. 16980, effective November 15, 1994; amended in R94-31 at ____ Ill.Reg. _____, effective _____; emergency amendment in R95-10 at ____ Ill.Reg. _____, effective _____ _____ for a maximum of 150 days.

BOARD NOTE: This Part implements the Illinois Environmental Protection Act as of July 1, 1994.

SUBPART H: PRINTING AND PUBLISHING

Section 219.405 ~~Heatset Web Offset~~ Lithographic Printing: Applicability

~~a)~~ ~~Applicability~~

~~1~~a) Until March 15, 1996, ~~The~~ the limitations of ~~subsection (b) below~~Section 219.406 of this Subpart apply to all heatset web offset lithographic printing lines (including solvents used for cleanup operations associated with the heatset web offset lithographic printing line(s)) at a ~~subject~~ source subject to the requirements of this Subpart. All sources with heatset web offset lithographic printing lines are ~~subject~~ sources subject to the requirements of this Subpart unless:

~~A~~1) Total maximum theoretical emissions of VOM from all heatset web offset lithographic printing lines (including solvents used for cleanup operations associated with the heatset web offset lithographic printing line(s)) at the source never exceed 90.7 Mg (100 tons) per calendar year in the absence of air pollution control equipment; or

~~B~~2) A federally enforceable permit or SIP revision for all heatset web offset lithographic printing line(s) at a source requires the owner or operator to limit production or capacity of these printing line(s) to reduce total VOM emissions from all heatset web offset lithographic printing line(s) to 90.7 Mg (100 tons) per calendar year or less in the absence of air pollution control equipment.~~,~~ ~~and~~

~~2~~b) Any owner or operator of any heatset web offset lithographic printing line that is exempt from the limitations in ~~subsection (b) of this~~ Section 219.406 of this Subpart because of the criteria in subsection (a)~~(1)~~ of this Section shall be subject to the recordkeeping and reporting requirements in ~~subsection (c)(1) of this~~ Section 219.406(b)(1) of this Subpart.

~~b) Specific Provisions. No owner or operator of a subject heatset web offset printing line may cause or allow the operation of the subject heatset web offset printing line unless the owner or operator meets the requirements in subsections (b)(1) or (b)(2) and the requirements in subsections (b)(3) and (b)(4) below.~~

~~1) An afterburner system is installed and operated that reduces 90 percent of the VOM emissions from the dryer exhaust, or~~

~~2) The fountain solution contains no more than 8 percent, by weight, of VOM and a condensation recovery system is installed and operated that removes at least 75 percent of the non-isopropyl alcohol organic materials from the dryer exhaust, and~~

~~3) The control device is equipped with the applicable monitoring equipment specified in Section 219.105(d)(2) of this Part and the monitoring equipment is installed, calibrated, operated and maintained according to vendor specifications at all times the control device is in use, and~~

~~4) The control device is operated at all times when the subject printing line is in operation. The owner or operator shall demonstrate compliance with this Section by using the applicable test methods and procedures specified in Section 219.105(a), (d), and (f) of this Part and by complying with the recordkeeping and reporting requirements specified in subsection (c) below.~~

~~c) Recordkeeping and Reporting. The VOM content of each fountain solution and ink and the efficiency of each control device shall be determined by the applicable test methods and procedures specified in Section 219.105 of this Part to establish the records required under this subsection.~~

~~1) Any owner or operator of a printing line which is exempted from the limitations of subsection (b) of this Section because of the criteria in subsection (a) of this Section shall comply with the following:~~

~~A) By a date consistent with Section 219.106 of this Part, the owner or operator of a heatset web offset lithographic printing line to which subsection (c)(1) of this Section is applicable shall certify to the Agency that the heatset web offset lithographic printing line is exempt under the provisions of subsection (a) of this Section. Such certification shall include:~~

~~i) A declaration that the heatset web offset lithographic printing line is exempt from the limitations of subsection (b) of this Section because of the criteria in subsection (a) of this Section, and~~

~~ii) Calculations which demonstrate that total maximum theoretical emissions of VOM from all heatset web offset lithographic printing lines at the source never exceed 90.7 Mg (100 tons) per calendar year before the application of air pollution control equipment. Total maximum theoretical emissions of VOM for a heatset web offset lithographic printing source is the sum of maximum theoretical emissions of VOM from each heatset web offset lithographic printing line at the source. The following equation shall be used to calculate total maximum theoretical emissions of VOM per calendar year in the absence of air pollution control equipment for each heatset web offset lithographic printing line at the source.~~

~~$E_p = (A \times B) + \frac{(C \times D) + 1095 (F \times G \times H)}{100}$~~

~~where:~~

~~E_p = Total maximum theoretical emissions of VOM from one heatset web offset printing line in units of kg/year (lbs/year);~~

~~A = Weight of VOM per volume of solids of ink with the highest VOM content as applied each year on the printing line in units of kg VOM/l (lbs VOM/gal) of solids;~~

~~B = Total volume of solids for all inks that can potentially be applied each year on the printing line in units of l/year (gal/year). The instrument or method by which the owner or operator accurately measured or calculated the volume of each ink as applied and the amount that can potentially be applied each year on the printing line shall be described in the certification to the Agency;~~

~~C = The weight percent VOM of the fountain solution with the highest VOM content;~~

~~D = The total volume of fountain solution that can potentially be used each year on the printing line in units of l/year (gal/year). The instrument and/or method by which the owner or operator accurately measured or calculated the volume of each fountain solution used and the amount that can potentially be used each year on the printing line shall be described in the~~

certification to the Agency;

F = Weight of VOM per volume of material for the cleanup material or solvent with the highest VOM content as used each year on the printing line in units of Kg/l (lbs VOM/gal) of such material;

G = The greatest volume of cleanup material or solvent used in any 8-hour period and

H = The highest fraction of cleanup material or solvent which is not recycled or recovered for offsite disposal during any 8-hour period.

B) On and after a date consistent with Section 219.106 of this Part, the owner or operator of a heatset web offset lithographic printing line to which subsection (c)(1) of this Section is applicable shall collect and record all of the following information each year for each printing line and maintain the information at the source for a period of three years:

i) The name and identification of each fountain solution and ink as applied on each printing line.

ii) The VOM content and the volume of each fountain solution and ink as applied each year on each printing line.

C) On and after a date consistent with Section 219.106 of this Part, the owner or operator of a source exempted from the limitations of subsection (b) of this Section because of the criteria in subsection (a) of this Section shall notify the Agency of any record showing that total maximum theoretical emissions of VOM from all printing lines exceed 90.7 Mg (100 tons) in any calendar year in the absence of air pollution control equipment by sending a copy of such record to the Agency within 30 days after the exceedance occurs.

2) Any owner or operator of a printing line subject to the limitations of subsection (b) of this Section and complying by means of subsection (b)(1) of this Section shall comply with the following:

A) By a date consistent with Section 219.106 of this Part, or upon initial start-up of a new printing line, or upon changing the method of compliance for an existing printing line from subsection (b)(2) to subsection (b)(1) of this Section; the owner or operator of the subject printing line shall perform all tests and submit to the Agency the results of all tests and calculations necessary to demonstrate that the subject printing line will be in compliance with subsection (b)(1) of this Section on and after a date consistent with Section 219.106 of this Part, or on and after the initial start-up date.

B) On and after a date consistent with Section 219.106 of this Part, or on and after the initial start-up date, the owner or operator of a printing line subject to the limitations of subsection (b) of this Section and complying by means of subsection (b)(1) of this Section shall collect and record the following information each day for each printing line and maintain the information at the source for a period of three years:

i) Control device monitoring data.

ii) A log of operating time for the control device, monitoring equipment and the associated printing line.

iii) A maintenance log for the control device and monitoring equipment detailing all routine and nonroutine maintenance performed including dates and duration of any outages.

C) On and after a date consistent with Section 219.106 of this Part, the owner or operator of a subject printing line shall notify the Agency in the following instances:

i) Any record showing violation of subsection (b)(1) of this Section shall be reported by sending a copy of such

~~record to the Agency within 30 days following the occurrence of the violation.~~

~~ii) At least 30 calendar days before changing the method of compliance with subsection (b) of this Section from subsection (b)(1) to (b)(2) of this Section, the owner or operator shall comply with all requirements of subsection (c)(3)(A) of this Section. Upon changing the method of compliance with subsection (b) of this Section from subsection (b)(1) to (b)(2) of this Section, the owner or operator shall comply with all requirements of subsection (c)(3) of this Section.~~

~~3) Any owner or operator of a printing line subject to the limitations of subsection (b) of this Section and complying by means of subsection (b)(2) of this Section shall comply with the following:~~

~~A) By a date consistent with Section 219.106 of this Part, or upon initial start-up of a new printing line, or upon changing the method of compliance for an existing printing line from subsection (b)(1) to (b)(2) of this Section, the owner or operator of the subject printing line shall perform all tests and submit to the Agency and the USEPA the results of all tests and calculations necessary to demonstrate that the subject printing line will be in compliance with subsection (b)(2) of this Section on and after a date consistent with Section 219.106 of this Part, or on and after the initial start-up date.~~

~~B) On and after a date consistent with Section 219.106 of this Part, or on and after the initial start-up date, the owner or operator of a printing line subject to the limitations of subsection (b) of this Section and complying by means of subsection (b)(2) of this Section shall collect and record the following information each day for each printing line and maintain the information at the source for a period of three years:~~

~~i) The VOM content of the fountain solution used each day on each printing line.~~

ii) A log of operating time for the control device and the associated printing line.

iii) A maintenance log for the control device detailing all routine and non-routine maintenance performed including dates and duration of any outages.

C) On and after a date consistent with Section 219.106 of this Part, the owner or operator of a subject printing line shall notify the Agency in the following instances:

i) Any record showing violation of subsection (b)(2) shall be reported by sending a copy of such record to the Agency within 30 days following the occurrence of the violation.

ii) At least 30 calendar days before changing the method of compliance with subsection (b) of this Section from subsection (b)(2) to subsection(b)(1) of this Section, the owner or operator shall comply with all requirements of subsection (c)(2)(A) of this Section. Upon changing the method of compliance with subsection (b) of this Section from subsection (b)(2) to subsection (b)(1) of this Section, the owner or operator shall comply with all requirements of subsection (c)(2) of this Section.

d) Compliance Schedule. Every owner or operator of a heatset web offset lithographic printing line shall comply with the applicable requirements of subsections (b) and (c) of this Section in accordance with the applicable compliance schedule specified in subsections (d)(1), (d)(2), or (d)(3) below:

1) No owner or operator of a heatset web offset lithographic printing line which is exempt from the limitations of subsection (b) of this Section because of the criteria in subsection (a) of this Section shall operate said printing line on or after a date consistent with Section 219.106 of this Part, unless the owner or operator has complied with, and continues to comply with, subsections (a)(1) and (c)(1) of this Part.

2) No owner or operator of a heatset web offset lithographic printing line complying by means of

~~subsection (b)(1) of this Section shall operate said printing line on or after a date consistent with Section 219.106 of this Part, unless the owner or operator has complied with, and continues to comply with, subsections (b)(1), (b)(3), (b)(4) and (c)(2) of this Section.~~

~~3) No owner or operator of a heatset web offset lithographic printing line complying by means of subsection (b)(2) of this Section shall operate said printing line on or after a date consistent with Section 219.106 of this Part, unless the owner or operator has complied with, and continues to comply with, subsections (b)(2), (b)(3), (b)(4) and (c)(3) of this Section.~~

c) On and after March 15, 1996, every owner or operator of lithographic printing line(s) is subject to the recordkeeping and reporting requirements in Section 219.411 of this Subpart.

d) On and after March 15, 1996, Sections 219.407 through 219.411 of this Subpart shall apply to:

1) All owners or operators of heatset web offset lithographic printing line(s) unless:

A) Total maximum theoretical emissions of VOM from all heatset web offset lithographic printing lines (including solvents used for cleanup operations associated with heatset web offset lithographic printing lines) at the source never exceed 90.7 Mg (100 tons) per calendar year before the application of capture systems and control devices. To determine a source's total maximum theoretical emissions of VOM for the purposes of this subsection, the owner or operator shall use the calculations set forth in Section 219.406(b)(1)(A)(ii) of this Subpart; or

B) Federally enforceable permit conditions or SIP revision for all heatset web offset lithographic printing line(s) at the source requires the owner or operator to limit production or capacity of these printing line(s) to total VOM emissions of 90.7 Mg/yr (100 TPY) or less, before the application of capture systems and control devices;

2) All owners or operators of heatset web offset, non-heatset web offset, or sheet-fed offset lithographic printing line(s), unless the combined emissions of VOM from all lithographic printing line(s) at the source (including solvents used for cleanup operations associated with the lithographic printing line(s)) never exceed 45.5 kg/day (100 lbs/day), as determined in accordance with Section 219.411(a)(1)(B), before the application of capture systems and control devices.

e) If a lithographic printing line at a source is or becomes subject to one or more of the limitations in Sections 219.406 or 219.407 of this Subpart, the lithographic printing line(s) at the source are always subject to the applicable provisions of this Subpart.

(Source: Amended at 18 Ill. Reg. _____, effective _____ _____).

Section 219.406 Provisions Applying to Heatset Web Offset Lithographic Printing Prior to March 15, 1996

a) Emission Standards and Limitations. No owner or operator of a heatset web offset printing line at a source that meets or exceeds the applicability levels in Section 219.405(a) of this Subpart may cause or allow the operation of such heatset web offset printing line(s) unless the owner or operator meets the requirements in subsections (a)(1) or (a)(2) of this Section and the requirements in subsections (a)(3) and (a)(4) of this Section. The owner or operator shall demonstrate compliance with this Section by using the applicable test methods and procedures specified in Section 219.105(a), (d), and (f) of this Part and by complying with the recordkeeping and reporting requirements specified in subsection (b) of this Section.

1) An afterburner system is installed and operated that reduces 90 percent of the VOM emissions (excluding methane and ethane) from the dryer exhaust; or

2) The fountain solution contains no more than 8 percent, by weight, of VOM and a condensation recovery system is installed and operated that removes at least 75 percent of the non-isopropyl alcohol organic materials from the dryer exhaust; and

3) The control device is equipped with the applicable monitoring equipment specified in Section 219.105(d)(2) of this Part and the monitoring equipment is installed, calibrated, operated and maintained according to manufacturer's specifications at all times when the control device is in use; and

4) The control device is operated at all times when the printing line is in operation.

b) Recordkeeping and Reporting. The VOM content of each fountain solution and ink and the efficiency of each control device shall be determined by the applicable test methods and procedures specified in Section 219.105 of this Part to establish the records required under this subsection.

1) Any owner or operator of a lithographic printing line which is exempted from the limitations of subsection (a) of this Section because of the criteria in 219.405(a) of this Subpart shall comply with the following:

A) By a date consistent with Section 219.106 of this Part, the owner or operator of a heatset web offset lithographic printing line to which subsection (b)(1) of this Section is applicable shall certify to the Agency that the heatset web offset lithographic printing line is exempt under the provisions of Section 219.405(a) of this Subpart. Such certification shall include:

i) A declaration that the heatset web offset lithographic printing line is exempt from the limitations of subsection (a) of this Section because of the criteria in Section 219.405(a) of this Subpart; and

ii) Calculations which demonstrate that total maximum theoretical emissions of VOM from all heatset web offset lithographic printing lines at the source never exceed 90.7 Mg (100 tons) per calendar year before the application of air pollution control equipment. Total maximum theoretical emissions of VOM for a heatset web offset lithographic printing source is the sum of maximum theoretical emissions of VOM

from each heatset web offset lithographic printing line at the source. The following equation shall be used to calculate total maximum theoretical emissions of VOM per calendar year in the absence of air pollution control equipment for each heatset web offset lithographic printing line at the source:

$$E_p = (A \times B) + \frac{(C \times D) + 1095\ (F \times G \times H)}{100}$$

where:

E_p = Total maximum theoretical emissions of VOM from one heatset web offset printing line in units of kg/yr (lb/yr);

A = Weight of VOM per volume of solids of ink with the highest VOM content as applied each year on the printing line in units of kg/l (lb/gal) of solids;

B = Total volume of solids for all inks that can potentially be applied each year on the printing line in units of l/yr (gal/yr). The instrument or method by which the owner or operator accurately measured or calculated the volume of each ink as applied and the amount that can potentially be applied each year on the printing line shall be described in the certification to the Agency;

C = The weight percent VOM of the fountain solution with the highest VOM content;

D = The total volume of fountain solution that can potentially be used each year on the printing line in units of l/yr

(gal/yr). The instrument and/or method by which the owner or operator accurately measured or calculated the volume of each fountain solution used and the amount that can potentially be used each year on the printing line shall be described in the certification to the Agency;

F = Weight of VOM per volume of material for the cleanup material or solvent with the highest VOM content as used each year on the printing line in units of kg/l (lb/gal) of such material;

G = The greatest volume of cleanup material or solvent used in any 8-hour period; and

H = The highest fraction of cleanup material or solvent which is not recycled or recovered for offsite disposal during any 8-hour period.

B) On and after a date consistent with Section 219.106 of this Part, the owner or operator of a heatset web offset lithographic printing line to which subsection (b)(1) of this Section is applicable shall collect and record all of the following information each year for each printing line and maintain the information at the source for a period of three years:

i) The name and identification of each fountain solution and ink as applied on each printing line; and

ii) The VOM content and the volume of each fountain solution and ink as applied each year on each printing line.

C) On and after a date consistent with Section 219.106 of this Part, the owner or operator of a source exempted from the limitations of subsection (a) of this Section because of the criteria in Section 219.405(a) of this

Subpart shall notify the Agency of any record showing that total maximum theoretical emissions of VOM from all heatset web offset lithographic printing lines exceed 90.7 Mg (100 tons) in any calendar year in the absence of air pollution control equipment by sending a copy of such record to the Agency within 30 days after the exceedence occurs.

2) Any owner or operator of a printing line subject to the limitations of subsection (a) of this Section and complying by means of subsection (a)(1) of this Section shall comply with the following:

A) By a date consistent with Section 219.106 of this Part, or upon initial start-up of a new printing line, or upon changing the method of compliance for an existing printing line from subsection (a)(2) to (a)(1) of this Section, perform all tests and submit to the Agency the results of all tests and calculations necessary to demonstrate that the subject printing line will be in compliance with subsection (a)(1) of this Section on and after a date consistent with Section 219.106 of this Part, or on and after the initial start-up date;

B) On and after a date consistent with Section 219.106 of this Part, or on and after the initial start-up date, collect and record the following information each day for each printing line and maintain the information at the source for a period of three years:

i) Control device monitoring data;

ii) A log of operating time for the control device, monitoring equipment and the associated printing line; and

iii) A maintenance log for the control device and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages;

C) On and after a date consistent with Section 219.106 of this Part, notify the Agency in the following instances:

i) Any violation of subsection (a)(1) of this Section shall be reported to the Agency, in writing, within 30 days following the occurrence of the violation;

ii) Any record showing a violation of subsection (a)(1) of this Section shall be reported by sending a copy of such record to the Agency within 30 days following the occurrence of the violation; and

iii) At least 30 calendar days before changing the method of compliance with subsection (a) of this Section from subsection (a)(1) to (a)(2) of this Section, the owner or operator shall comply with all requirements of subsection (b)(3)(A) of this Section. Upon changing the method of compliance with subsection (a) of this Section from subsection (a)(1) to (a)(2) of this Section, the owner or operator shall comply with all requirements of subsection (b)(3) of this Section.

3) Any owner or operator of a printing line subject to the limitations of subsection (a) of this Section and complying by means of subsection (a)(2) of this Section shall:

A) By a date consistent with Section 219.106 of this Part, or upon initial start-up of a new printing line, or upon changing the method of compliance for an existing printing line from subsection (a)(1) to (a)(2) of this Section, perform all tests and submit to the Agency and the USEPA the results of all tests and calculations necessary to demonstrate that the subject printing line will be in compliance with subsection (a)(2) of this Section on and after a date consistent with Section 219.106 of this Part, or on and after the initial start-up date;

B) On and after a date consistent with Section 219.106 of this Part, or on and after the initial start-up date, collect and record the following information each day for each printing line and maintain the information at the source for a period of three years:

i) The VOM content of the fountain solution used each day on each printing line;

ii) A log of operating time for the control device and the associated printing line; and

iii) A maintenance log for the control device detailing all routine and non-routine maintenance performed including dates and duration of any outages;

C) On and after a date consistent with Section 219.106 of this Part, notify the Agency in the following instances:

i) Any violation of subsection (a)(2) shall be reported to the Agency, in writing, within 30 days following the occurrence of the violation;

ii) Any record showing a violation of subsection (a)(2) of this Section shall be reported by sending a copy of such record to the Agency within 30 days following the occurrence of the violation; and

iii) At least 30 calendar days before changing the method of compliance with subsection (a) of this Section from subsection (a)(2) to (a)(1) of this Section, the owner or operator shall comply with all requirements of subsection (b)(2)(A) of this Section. Upon changing the method of compliance with subsection (a) of this Section from subsection (a)(2) to (a)(1) of this Section, the owner or operator shall comply with all requirements of subsection (b)(2) of this Section.

c) Compliance Schedule. Every owner or operator of a heatset web offset lithographic printing line shall comply with the applicable requirements of subsections (a) and (b) of this Section in accordance with the applicable compliance schedule specified in subsections (c)(1), (c)(2), or (c)(3) of this Section:

1) No owner or operator of a heatset web offset lithographic printing line which is exempt from

the limitations of subsection (a) of this Section because of the criteria in Section 219.405(a) of this Subpart shall operate said printing line on or after a date consistent with Section 219.106 of this Part, unless the owner or operator has complied with, and continues to comply with, Sections 219.405(a) and 219.406(b)(1) of this Subpart.

2) No owner or operator of a heatset web offset lithographic printing line complying by means of subsection (a)(1) of this Section shall operate said printing line on or after a date consistent with Section 219.106 of this Part, unless the owner or operator has complied with, and continues to comply with, subsections (a)(1), (a)(3), (a)(4) and (b)(2) of this Section.

3) No owner or operator of a heatset web offset lithographic printing line complying by means of subsection (a)(2) of this Section shall operate said printing line on or after a date consistent with Section 219.106 of this Part, unless the owner or operator has complied with, and continues to comply with, subsections (a)(2), (a)(3), (a)(4) and (b)(3) of this Section.

(Source: Added at _____ Ill. Reg. _____, effective _____ _____)

Section 219.407 Emission Limitations and Control Requirements for Lithographic Printing Lines On and After March 15, 1996

a) On and after March 15, 1996, no owner or operator of lithographic printing line(s) subject to the requirements of this Subpart shall:

1) Cause or allow the operation of any heatset web offset lithographic printing line unless:

A) The total VOM content in the as-applied fountain solution meets one of the following conditions:

i) 1.6 percent or less, by volume;

ii) 3 percent or less, by volume, and the temperature of the fountain solution is maintained below 15.6°C (60°F), measured at the reservoir or the fountain tray;

or

iii) 5 percent or less, by volume, and the as-applied fountain solution contains no alcohol;

B) The air pressure in the dryer is maintained lower than the air pressure of the press room, such that air flow through all openings in the dryer, other than the exhaust, is into the dryer at all times when the printing line is operating;

C) An afterburner is installed and operated so that VOM emissions (excluding methane and ethane) from the press dryer exhaust(s) are reduced by 90 percent, by weight, or to a maximum afterburner exhaust outlet concentration of 20 ppmv (as carbon);

D) The afterburner is equipped with the applicable monitoring equipment specified in Section 219.105(d)(2) of this Part and the monitoring equipment is installed, calibrated, operated, and maintained according to manufacturer's specifications at all times when the afterburner is in use; and

E) The afterburner is operated at all times when the printing line is in operation;

2) Cause or allow the operation of any non-heatset web offset lithographic printing line unless the VOM content of the as-applied fountain solution is 5 percent or less, by volume, and the as-applied fountain solution contains no alcohol;

3) Cause or allow the operation of any sheet-fed offset lithographic printing line unless:

A) The VOM content of the as-applied fountain solution is 5 percent or less, by volume; or

B) The VOM content of the as-applied fountain solution is 8.5 percent or less, by volume, and the temperature of the fountain solution is maintained below 15.6°C (60°F), measured at the reservoir or the fountain tray;

4) Cause or allow the use of a cleaning solution on any lithographic printing line unless:

A) The VOM content of the as-used cleaning solution is less than or equal to 30 percent, by weight; or

B) The VOM composite partial vapor pressure of the as-used cleaning solution is less than 10 mmHg at 20°C (68°F);

5) Cause or allow VOM containing cleaning materials, including used cleaning towels, associated with any lithographic printing line to be kept, stored or disposed of in any manner other than in closed containers.

b) An owner or operator of a heatset web offset lithographic printing line subject to the requirements of Section 219.407(a)(1)(C) of this Subpart may use a control device other than an afterburner, if:

1) The control device reduces VOM emissions from the press dryer exhaust(s) by at least 90 percent, by weight, or to a maximum control device exhaust outlet concentration of 20 ppmv (as carbon);

2) The owner or operator submits a plan to the Agency detailing appropriate monitoring devices, test methods, recordkeeping requirements, and operating parameters for the control device; and

3) The use of the control device with testing, monitoring, and recordkeeping in accordance with this plan is approved by the Agency and USEPA as federally enforceable permit conditions.

(Source: Added at _____ Ill. Reg. _____, effective _____ _____)

Section 219.408 Compliance Schedule for Lithographic Printing On and After March 15, 1996

a) Every owner or operator of a lithographic printing line subject to one or more of the control requirements of Section 219.407 of this Subpart shall comply with the applicable requirements of Sections 219.407 through 219.411 of this Subpart on and after March 15, 1996, or upon initial start-up, whichever is later.

b) No owner or operator of a lithographic printing line which is exempt from the limitations of Section 219.407 of this Subpart because of the criteria in Section

219.405(d) of this Subpart, shall operate said printing line on or after March 15, 1996, unless the owner or operator has complied with, and continues to comply with, Sections 219.405(d) and 219.411(a) of this Subpart.

(Source: Added at _____Ill. Reg. _____, effective _____ _____)

Section 219.409 Testing for Lithographic Printing On and After March 15, 1996

a) Testing to demonstrate compliance with the requirements of Section 219.407 of this Subpart shall be conducted by the owner or operator within 90 days after a request by the Agency. Such testing shall be conducted at the expense of the owner or operator and the owner or operator shall notify the Agency in writing 30 days in advance of conducting such testing to allow the Agency to be present during such testing.

b) The methods and procedures of Section 219.105(d) and (f) shall be used for testing to demonstrate compliance with the requirements of Section 219.407(a)(1)(C) or (b)(1) of this Subpart, as follows:

1) To select the sampling sites, Method 1 or 1A, as appropriate, 40 CFR 60, Appendix A, incorporated by reference at Section 219.112 of this Part. The sampling sites for determining efficiency in reducing VOM from the dryer exhaust shall be located between the dryer exhaust and the control device inlet, and between the outlet of the control device and the exhaust to the atmosphere;

2) To determine the volumetric flow rate of the exhaust stream, Method 2, 2A, 2C, or 2D, as appropriate, 40 CFR 60, Appendix A, incorporated by reference at Section 219.112 of this Part;

3) To determine the VOM concentration of the exhaust stream entering and exiting the control device, Method 25 or 25A, as appropriate, 40 CFR 60, Appendix A, incorporated by reference at Section 219.112 of this Part. For thermal and catalytic afterburners, Method 25 must be used except under the following circumstances, in which case Method 25A must be used:

A) The allowable outlet concentration of VOM from the control device is less than 50 ppmv, as carbon;

B) The VOM concentration at the inlet of the control device and the required level of control result in exhaust concentrations of VOM of 50 ppmv, or less, as carbon; and

C) Due to the high efficiency of the control device, the anticipated VOM concentration at the control device exhaust is 50 ppmv or less, as carbon, regardless of inlet concentration. If the source elects to use Method 25A under this option, the exhaust VOM concentration must be 50 ppmv or less, as carbon, and the required destruction efficiency must be met for the source to have demonstrated compliance. If the Method 25A test results show that the required destruction efficiency apparently has been met, but the exhaust concentration is above 50 ppmv, as carbon, a retest is required. The retest shall be conducted using either Method 25 or Method 25A. If the retest is conducted using Method 25A and the test results again show that the required destruction efficiency apparently has been met, but the exhaust concentration is above 50 ppmv, as carbon, the source must retest using Method 25;

4) Notwithstanding the criteria or requirements in Method 25 which specifies a minimum probe temperature of 129°C (265°F), the probe must be heated to at least the gas stream temperature of the dryer exhaust, typically close to 176.7°C (350°F);

5) During testing, the printing line(s) shall be operated at representative operating conditions and flow rates; and

6) During testing, an air flow direction indicating device, such as a smoke stick, shall be used to demonstrate 100 percent emissions capture efficiency for the dryer in accordance with Section 219.407(a)(1)(B) of this Subpart.

c) Testing to demonstrate compliance with the VOM content limitations in Section 219.407(a)(1)(A), (a)(2), (a)(3) and (a)(4)(A) of this Subpart, and to determine the VOM content of fountain solutions, fountain solution additives, cleaning solvents, cleaning solutions, and inks (pursuant to the requirements of Section

219.411(a)(1)(B) of this Subpart), shall be conducted upon request of the Agency, as follows:

1) The applicable test methods and procedures specified in Section 219.105(a) of this Part shall be used; provided, however, Method 24, incorporated by reference at Section 219.112 of this Part, shall be used to demonstrate compliance; or

2) The manufacturer's specifications for VOM content for fountain solution additives, cleaning solvents, and inks may be used if such manufacturer's specifications are based on results of tests of the VOM content conducted in accordance with methods specified in Section 219.105(a) of this Part; provided, however, Method 24 shall be used to determine compliance.

d) Testing to demonstrate compliance with the requirements of Section 219.407(b) of this Subpart shall be conducted as set forth in the owner or operator's plan approved by the Agency and USEPA as federally enforceable permit conditions pursuant to Section 219.407(b) of this Subpart.

e) Testing to determine the VOM composite partial vapor pressure of cleaning solvents, cleaning solvent concentrates, and as-used cleaning solutions shall be conducted in accordance with the applicable methods and procedures specified in Section 219.110 of this Part.

(Source: Added at _____ Ill. Reg. _____, effective _____ _____)

Section 219.410 Monitoring Requirements for Lithographic Printing

a) Fountain Solution Temperature.

1) The owner or operator of any lithographic printing line(s) relying on the temperature of the fountain solution to demonstrate compliance shall install, maintain, and continuously operate a temperature monitor of the fountain solution in the reservoir or fountain tray, as applicable.

2) The temperature monitor must be capable of reading with an accuracy of 0.3°C or 0.5°F, and must be attached to an automatic, continuous recording device such as a strip chart, recorder, or

computer, with at least the same accuracy, that is installed, calibrated and maintained in accordance with the manufacturer's specifications. If the automatic, continuous recording device malfunctions, the owner or operator shall record the temperature of the fountain solution at least once every two operating hours. The automatic, continuous recording device shall be repaired or replaced as soon as practicable.

b) Fountain Solution VOM Content. The owner or operator of any lithographic printing line(s) subject to Section 218.407(a)(1)(A), (a)(2) or (a)(3) of this Subpart shall:

1) For a fountain solution to which VOM is not added automatically:

A) Maintain records of the VOM content of the fountain solution in accordance with Section 218.411(c)(2)(C); or

B) Take a sample of the as-applied fountain solution from the fountain tray or reservoir, as applicable, each time a fresh batch of fountain solution is prepared or each time VOM is added to an existing batch of fountain solution in the fountain tray or reservoir, and shall determine compliance with the VOM content limitation of the as-applied fountain solution by using one of the following options:

i) With a refractometer or hydrometer with a visual, analog, or digital readout and with an accuracy of 0.5 percent. The refractometer or hydrometer must be calibrated with a standard solution for the type of VOM used in the fountain solution, in accordance with manufacturer's specifications, against measurements performed to determine compliance. The refractometer or hydrometer must be corrected for temperature at least once per 8-hour shift or once per batch of fountain solution prepared or modified, whichever is longer; or

ii) With a conductivity meter if it is demonstrated that a refractometer and hydrometer cannot distinguish between compliant and noncompliant fountain

solution for the type and amount of VOM in the fountain solution. A source may use a conductivity meter if it demonstrates that both hydrometers and refractometers fail to provide significantly different measurements for standard solutions containing 95 percent, 100 percent and 105 percent of the applicable VOM content limit. The conductivity meter reading for the fountain solution must be referenced to the conductivity of the incoming water. A standard solution shall be used to calibrate the conductivity meter for the type of VOM used in the fountain solution, in accordance with manufacturer's specifications;

2) For fountain solutions to which VOM is added at the source with automatic feed equipment, determine the VOM content of the as-applied fountain solution based on the setting of the automatic feed equipment which makes additions of VOM up to a pre-set level. The equipment used to make automatic additions must be installed, calibrated, operated and maintained in accordance with manufacturer's specifications.

c) Afterburners For Heatset Web Offset Lithographic Printing Line(s)

If an afterburner is used to demonstrate compliance, the owner or operator of a heatset web offset lithographic printing line subject to Section 219.407(a)(1)(C) of this Subpart shall:

1) Install, calibrate, maintain, and operate temperature monitoring device(s) with an accuracy of 3°C or 5°F on the afterburner in accordance with Section 219.105(d)(2) of this Part and in accordance with the manufacturer's specifications. Monitoring shall be performed at all times when the afterburner is operating; and

2) Install, calibrate, operate and maintain, in accordance with manufacturer's specifications, a continuous recorder on the temperature monitoring device(s), such as a strip chart, recorder or computer, with at least the same accuracy as the temperature monitor.

d) Other Control Devices for Heatset Web Offset Lithographic Printing Line(s)

If a control device other than an afterburner is used to demonstrate compliance, the owner or operator of a heatset web offset lithographic printing line subject to this Subpart shall install, maintain, calibrate and operate such monitoring equipment as set forth in the owner or operator's plan approved by the Agency and USEPA pursuant to Section 219.407(b) of this Subpart.

e) Cleaning Solution.

1) The owner or operator of any lithographic printing line relying on the VOM content of the cleaning solution to comply with Section 219.407(a)(4)(A) of this Subpart must:

A) For cleaning solutions that are prepared at the source with equipment that automatically mixes cleaning solvent and water (or other non-VOM):

i) Install, operate, maintain, and calibrate the automatic feed equipment in accordance with manufacturer's specifications to regulate the volume of each of the cleaning solvent and water (or other non-VOM), as mixed; and

ii) Pre-set the automatic feed equipment so that the consumption rates of the cleaning solvent and water (or other non-VOM), as applied, comply with Section 219.407(a)(4)(A) of this Subpart;

B) For cleaning solutions that are not prepared at the source with automatic feed equipment, keep records of the usage of cleaning solvent and water (or other non-VOM) as set forth in Section 219.411(d)(2) of this Subpart.

2) The owner or operator of any lithographic printing line relying on the vapor pressure of the cleaning solution to comply with Section 219.407(a)(4)(B) of this Subpart must keep records for such cleaning solutions used on any such line(s) as set forth in Section 219.411(d)(2)(C) of this Subpart.

(Source: Added at _____ Ill. Reg. _____, effective _____ _____)

Section 219.411 Recordkeeping and Reporting for Lithographic Printing

a) An owner or operator of lithographic printing line(s) exempt from the limitations of Section 219.407 of this Subpart because of the criteria in Section 219.405(d) of this Subpart shall comply with the following:

1) By March 15, 1996, upon initial start-up of a new lithographic printing line, and upon modification of a lithographic printing line, submit a certification to the Agency that includes:

A) A declaration that the source is exempt from the control requirements in Section 219.407 of this Part because of the criteria in Section 219.405(d) of this Subpart;

B) Calculations which demonstrate that combined emissions of VOM from all lithographic printing lines (including inks, fountain solutions, and solvents used for cleanup operations associated with the lithographic printing lines) at the source never exceed 45.5 kg/day (100 lbs/day) before the use of capture systems and control devices, as follows:

i) To calculate daily emissions of VOM, the owner or operator shall determine the monthly emissions of VOM from all lithographic printing lines at the source (including solvents used for cleanup operations associated with the lithographic printing lines) and divide this amount by the number of days during that calendar month that printing lines at the source were in operation;

ii) To determine the VOM content of the inks, fountain solution additives and cleaning solvents, the tests methods and procedures set forth in Section 219.409(c) of this Subpart shall be used;

iii) To determine VOM emissions from inks used on lithographic printing line(s) at the source, an ink emission adjustment factor of 0.05 shall be used in calculating emissions from all non-heatset inks, and a factor of 0.80 shall

be used in calculating emissions from all heatset inks to account for VOM retention in the substrate. The VOM content of the ink, as used, shall be multiplied by this factor to determine the amount of VOM emissions from the use of ink on the printing line(s); and

iv) To determine VOM emissions from fountain solutions and cleaning solvents used on lithographic printing line(s) at the source, no retention factor is used;

C) Either a declaration that the source, through federally enforceable permit conditions, has limited its maximum theoretical emissions of VOM from all heatset web offset lithographic printing lines (including solvents used for cleanup operations associated with heatset web offset printing lines) at the source to no more than 90.7 Mg (100 tons) per calendar year before the application of capture systems and control devices or calculations which demonstrate that the source's total maximum theoretical emissions of VOM do not exceed 90.7 Mg/yr (100 TPY). To determine the source's total maximum theoretical emissions for the purposes of this subsection, the owner or operator shall use the calculations set forth in Section 219.406(b)(1)(A)(ii) of this Subpart; and

D) A description and the results of all tests used to determine the VOM content of inks, fountain solution additives, and cleaning solvents, and a declaration that all such tests have been properly conducted in accordance with Section 219.409(c)(1) of this Subpart;

2) On and after March 15, 1996, collect and record either the information specified in subsection (a)(2)(A) or (a)(2)(B) of this Section for all lithographic printing lines at the source:

A) Standard recordkeeping, including the following:

i) The name and identification of each fountain solution additive, lithographic ink, and cleaning solvent used on any lithographic printing line, recorded

each month;

ii) A daily record which shows whether a lithographic printing line at the source was in operation on that day;

iii) The VOM content and the volume of each fountain solution additive, lithographic ink, and cleaning solvent used on any lithographic printing line, recorded each month;

iv) The total VOM emissions at the source each month, determined as the sum of the product of usage and VOM content for each fountain solution additive, cleaning solvent, and lithographic ink (with the applicable ink VOM emission adjustment) used at the source, calculated each month; and

v) The VOM emissions in lbs/day for the month, calculated in accordance with Section 219.411(a)(1)(B) of this Subpart;

B) Purchase and inventory recordkeeping, including the following:

i) The name, identification, and VOM content of each fountain solution additive, lithographic ink, and cleaning solvent used on any lithographic printing line, recorded each month;

ii) Inventory records from the beginning and end of each month indicating the total volume of each fountain solution additive, lithographic ink, and cleaning solvent to be used on any lithographic printing line at the source;

iii) Monthly purchase records for each fountain solution additive, lithographic ink, and cleaning solvent used on any lithographic printing line at the source;

iv) A daily record which shows whether a lithographic printing line at the source was in operation on that day;

v) The total VOM emissions at the source each month, determined as the sum of the product of usage and VOM content for each fountain solution additive, cleaning solvent, and lithographic ink (with the applicable ink VOM emission adjustment) used at the source, calculated each month based on the monthly inventory and purchase records required to be maintained pursuant to subsections (a)(2)(B)(i), (a)(2)(B)(ii) and (a)(2)(B)(iii) of this Section; and

vi) The VOM emissions in lbs/day for the month, calculated in accordance with Section 218.411(a)(1)(B) of this Subpart;

3) On and after March 15, 1996, notify the Agency in writing if the combined emissions of VOM from all lithographic printing lines (including inks, fountain solutions, and solvents used for cleanup operations associated with the lithographic printing lines) at the source ever exceed 45.5 kg/day (100 lbs/day), before the use of capture systems and control devices, within 30 days after the event occurs. Such notification shall include a copy of all records of such event.

b) An owner or operator of a heatset web offset lithographic printing line(s) subject to the control requirements of Section 219.407(a)(1)(C) or (b)(1) of this Subpart shall comply with the following:

1) By March 15, 1996, upon initial start-up of a new printing line, and upon initial start-up of a new control device for a heatset web offset printing line, submit a certification to the Agency that includes the following:

A) An identification of each heatset web offset lithographic printing line at the source;

B) A declaration that each heatset web offset lithographic printing line is in compliance with the requirements of Section 219.407 (a)(1)(B), (a)(1)(C), (a)(1)(D) and (a)(1)(E) or (b) of this Subpart, as appropriate;

C) The type of afterburner or other approved control device used to comply with the requirements of Section 219.407(a)(1)(C) or

(b)(1) of this Subpart;

D) The control requirements in Section 219.407(a)(1)(C) or (b)(1) of this Subpart with which the lithographic printing line is complying;

E) The results of all tests and calculations necessary to demonstrate compliance with the control requirements of Section 219.407(a)(1)(C) or (b)(1) of this Subpart, as applicable; and

F) A declaration that the monitoring equipment required under Section 219.407(a)(1)(D) or (b) of this Subpart, as applicable, has been properly installed and calibrated according to manufacturer's specifications;

2) If testing of the afterburner or other approved control device is conducted pursuant to Section 219.409(b) of this Subpart, the owner or operator shall, within 90 days after conducting such testing, submit a copy of all test results to the Agency and shall submit a certification to the Agency that includes the following:

A) A declaration that all tests and calculations necessary to demonstrate whether the lithographic printing line(s) is in compliance with Section 219.407(a)(1)(C) or (b)(1) of this Subpart, as applicable, have been properly performed;

B) A statement whether the lithographic printing line(s) is or is not in compliance with Section 219.407(a)(1)(C) or (b)(1) of this Subpart, as applicable; and

C) The operating parameters of the afterburner or other approved control device during testing, as monitored in accordance with Section 219.410(c) or (d) of this Subpart, as applicable;

3) On and after March 15, 1996, collect and record daily the following information for each heatset web offset lithographic printing line subject to the requirements of Section 219.407(a)(1)(C) or (b)(1) of this Subpart:

A) Afterburner or other approved control device monitoring data in accordance with Section 219.410(c) or (d) of this Subpart, as applicable;

B) A log of operating time for the afterburner or other approved control device, monitoring equipment, and the associated printing line;

C) A maintenance log for the afterburner or other approved control device and monitoring equipment detailing all routine and non-routine maintenance performed, including dates and duration of any outages; and

D) A log detailing checks on the air flow direction or air pressure of the dryer and press room to insure compliance with the requirements of Section 219.407(a)(1)(B) of this Subpart at least once per 24-hour period while the line is operating;

4) On and after March 15, 1996, notify the Agency in writing of any violation of Section 219.407(a)(1)(C) or (b)(1) of this Subpart within 30 days after the occurrence of such violation. Such notification shall include a copy of all records of such violation;

5) If changing its method of compliance between subsections (a)(1)(C) and (b) of Section 219.407 of this Subpart, certify compliance for the new method of compliance in accordance with subsection (b)(1) of this Section at least 30 days before making such change, and perform all tests and calculations necessary to demonstrate that such printing line(s) will be in compliance with the requirements of Section 219.407(a)(1)(B), (a)(1)(C), (a)(1)(D) and (a)(1)(E) of this Subpart, or Section 219.407(b) of this Subpart, as applicable.

c) An owner or operator of a lithographic printing line subject to Section 219.407(a)(1)(A), (a)(2), or (a)(3) of this Subpart, shall:

1) By March 15, 1996, and upon initial start-up of a new lithographic printing line, certify to the Agency that fountain solutions used on each lithographic printing line will be in compliance with the applicable VOM content limitation. Such certification shall include:

A) Identification of each lithographic printing line at the source, by type, e.g., heatset web offset, non-heatset web offset, or sheet-fed offset;

B) Identification of each centralized fountain solution reservoir and each lithographic printing line that it serves;

C) The VOM content limitation with which each fountain solution will comply;

D) Initial documentation that each type of fountain solution will comply with the applicable VOM content limitation, including copies of manufacturer's specifications, test results, if any, formulation data and calculations;

E) Identification of the method that will be used to demonstrate continuing compliance with the applicable limitation, e.g., a refractometer, hydrometer, conductivity meter, or recordkeeping procedures with detailed description of the compliance methodology; and

F) A sample of the records that will be kept pursuant to Section 219.411(c)(2) of this Subpart.

2) On and after March 15, 1996, collect and record the following information for each fountain solution:

A) The name and identification of each batch of fountain solution prepared for use on one or more lithographic printing lines, the lithographic printing line(s) or centralized reservoir using such batch of fountain solution, and the applicable VOM content limitation for the batch;

B) If an owner or operator uses a hydrometer, refractometer, or conductivity meter, pursuant to Section 219.410(b)(1)(B), to demonstrate compliance with the applicable VOM content limit in Section 219.407(a)(1)(A), (a)(2), or (a)(3) of this Subpart:

i) The date and time of preparation, and each subsequent modification, of the batch;

ii) The results of each measurement taken in accordance with Section 219.410(b) of this Subpart;

iii) Documentation of the periodic calibration of the meter in accordance with the manufacturer's specifications, including date and time of calibration, personnel conducting, identity of standard solution, and resultant reading; and

iv) Documentation of the periodic temperature adjustment of the meter, including date and time of adjustment, personnel conducting and results;

C) If the VOM content of the fountain solution is determined pursuant to Section 219.410(b)(1)(A) of this Subpart, for each batch of as-applied fountain solution:

i) Date and time of preparation and each subsequent modification of the batch;

ii) Volume and VOM content of each component used in, or subsequently added to, the fountain solution batch;

iii) Calculated VOM content of the as-applied fountain solution; and

iv) Any other information necessary to demonstrate compliance with the applicable VOM content limits in Section 219.407(a)(1)(A), (a)(2) and (a)(3) of this Subpart, as specified in the source's operating permit;

D) If the owner or operator relies on the temperature of the fountain solution to comply with the requirements in Section 219.407(a)(1)(A)(ii) or (a)(3)(B) of this Subpart:

i) The temperature of the fountain solution at each printing line, as monitored in accordance with Section 219.410(a); and

ii) A maintenance log for the temperature monitoring devices and automatic, continuous temperature recorders detailing all routine and non-routine maintenance performed, including dates and duration of any outages;

3) Notify the Agency in writing of any violation of Section 219.407 of this Subpart within 30 days after the occurrence of such violation. Such notification shall include a copy of all records of such violation; and

4) If changing its method of demonstrating compliance with the applicable VOM content limitations in Section 219.407 of this Subpart, or changing the method of demonstrating compliance with the VOM content limitations for fountain solutions pursuant to Section 219.409 of this Subpart, certify compliance for such new method(s) in accordance with subsection (c)(1) of this Section within 30 days after making such change, and perform all tests and calculations necessary to demonstrate that such printing line(s) will be in compliance with the applicable requirements of Section 219.407 of this Subpart.

d) For lithographic printing line cleaning operations, an owner or operator of a lithographic printing line subject to the requirements of Section 219.407 of this Subpart shall:

1) By March 15, 1996, or upon initial start-up of a new lithographic printing line, certify to the Agency that all cleaning solutions, and the handling of cleaning materials, will be in compliance with the requirements of Section 219.407(a)(4)(A) or (a)(4)(B) and (a)(5) of this Subpart, and such certification shall also include:

A) Identification of each VOM-containing cleaning solution used on each lithographic printing line;

B) The limitation with which each VOM-containing cleaning solution will comply, i.e., the VOM content or vapor pressure;

C) Initial documentation that each VOM-containing cleaning solution will comply with the applicable limitation, including copies

of manufacturer's specifications, test results, if any, formulation data and calculations;

D) Identification of the method that will be used to demonstrate continuing compliance with the applicable limitations;

E) A sample of the records that will be kept pursuant to Section 219.411(d)(2) of this Subpart; and

F) A description of the practices that assure that VOM-containing cleaning materials are kept in closed containers;

2) On and after March 15, 1996, collect and record the following information for each cleaning solution used on each lithographic printing line:

A) For each cleaning solution for which the owner or operator relies on the VOM content to demonstrate compliance with Section 219.407(a)(4)(A) of this Subpart and which is prepared at the source with automatic equipment:

i) The name and identification of each cleaning solution;

ii) The VOM content of each cleaning solvent in the cleaning solution, as determined in accordance with Section 219.409(c) of this Subpart;

iii) Each change to the setting of the automatic equipment, with date, time, description of changes in the cleaning solution constituents (e.g., cleaning solvents), and a description of changes to the proportion of cleaning solvent and water (or other non-VOM);

iv) The proportion of each cleaning solvent and water (or other non-VOM) used to prepare the as-used cleaning solution;

v) The VOM content of the as-used cleaning solution, with supporting calculations; and

vi) A calibration log for the automatic equipment, detailing periodic checks;

B) For each batch of cleaning solution for which the owner or operator relies on the VOM content to demonstrate compliance with Section 219.407(a)(4)(A) of this Subpart, and which is not prepared at the source with automatic equipment:

i) The name and identification of each cleaning solution;

ii) Date and time of preparation, and each subsequent modification, of the batch;

iii) The VOM content of each cleaning solvent in the cleaning solution, as determined in accordance with Section 219.409(c) of this Subpart;

iv) The total amount of each cleaning solvent and water (or other non-VOM) used to prepare the as-used cleaning solution; and

v) The VOM content of the as-used cleaning solution, with supporting calculations;

C) For each batch of cleaning solution for which the owner or operator relies on the vapor pressure of the cleaning solution to demonstrate compliance with Section 219.407(a)(4)(B) of this Subpart:

i) The name and identification of each cleaning solution;

ii) Date and time of preparation, and each subsequent modification, of the batch;

iii) The molecular weight, density, and VOM composite partial vapor pressure of each cleaning solvent, as determined in accordance with Section 219.409(e) of this Subpart;

iv) The total amount of each cleaning solvent used to prepare the as-used cleaning solution; and

v) The VOM composite partial vapor pressure of each as-used cleaning solution, as determined in accordance with Section 219.409(e) of this Subpart;

D) The date, time and duration of scheduled inspections performed to confirm the proper use of closed containers to control VOM emissions, and any instances of improper use of closed containers, with descriptions of actual practice and corrective action taken, if any;

3) On and after March 15, 1996, notify the Agency in writing of any violation of Section 219.407 of this Subpart within 30 days after the occurrence of such violation. Such notification shall include a copy of all records of such violation; and

4) If changing its method of demonstrating compliance with the requirements of Section 219.407(a)(4) of this Subpart, or changing between automatic and manual methods of preparing cleaning solutions, certify compliance for such new method in accordance with subsection (d)(1) of this Section, within 30 days after making such change, and perform all tests and calculations necessary to demonstrate that such printing line(s) will be in compliance with the applicable requirements of Section 219.407(a)(4) of this Subpart.

e) The owner or operator shall maintain all records required by this Section at the source for a minimum period of three years and shall make all records available to the Agency upon request.

(Source: Added at _____ Ill. Reg. _____, effective _____ _____)

SUBPART T: PHARMACEUTICAL MANUFACTURING

Section 219.480 Applicability

a) The rules of this Subpart, except for Sections 219.483 through 219.485 of this Part, apply to all emission units of VOM, including but not limited to reactors, distillation units, dryers, storage tanks for VOL, equipment for the transfer of VOL, filters, crystallizers, washers, laboratory hoods, pharmaceutical coating operations, mixing operations and centrifuges used in manufacturing, including

packaging, of pharmaceuticals, and emitting more than 6.8 kg/day (15 lbs/day) and more than 2,268 kg/year (2.5 tons/year) of VOM. If such emission unit emits less than 2,268 kg/year (2.5 tons/year) of VOM, the requirements of this Subpart still apply to the emission unit if VOM emissions from the emission unit exceed 45.4 kg/day (100 lbs/day).

b) Sections 219.483 through 219.485 of this Part apply to a source having one or more emission units that:

1) Are used to manufacture pharmaceuticals, and

2) Emit more than 6.8 kg/day (15 lbs/day) of VOM and more than 2,268 kg/year (2.5 tons/year) of VOM, or, if less than 2,268 kg/year (2.5 tons/year), these Sections still apply if emissions from one or more sources exceed 45.4 kg/day (100 lbs/day).

c) No owner or operator shall violate any condition in a permit when the condition results in exclusion of an emission unit from this Subpart.

d) Any pharmaceutical manufacturing source that becomes subject to the provisions of this Subpart at any time shall remain subject to the provisions of this Subpart at all times.

e) Emissions subject to this Subpart shall be controlled at all times consistent with the requirements set forth in this Subpart.

f) Any control device required pursuant to this Subpart shall be operated at all times when the source it is controlling is operated.

g) Determinations of daily and annual emissions for purposes of this Section shall be made using both data on the hourly emission rate (or the emissions per unit of throughput) and appropriate daily and annual data from records of emission unit operation (or material throughput or material consumption data). In the absence of representative test data pursuant to Section 219.487 of this Part for the hourly emission rate (or the emissions per unit of throughput), such items shall be calculated using engineering calculations, including the methods described in Appendix B of "Control of Volatile Organic Emissions from Manufacturing of Synthesized Pharmaceutical Products" (EPA-450/2-78-029), incorporated by reference in Section 219.112 of this Part.

(This subsection shall not affect the Agency's or the USEPA's authority to require emission tests to be performed pursuant to Section 219.487 of this Part.)

h) Equipment and operations emitting VOM at a source subject to subsection (a) or (c) of this Section and used to produce pharmaceutical products or a pharmaceutical-like product such as a hormone, enzyme, or antibiotic, shall be deemed to be engaged in the manufacture of pharmaceuticals for the purposes of this Subpart.

(Source: Amended at _____ Ill. Reg. _____, effective _____)

IT IS SO ORDERED.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above opinion and order was adopted on the 20th day of April 1995, by a vote of 7-0.

Dorothy M. Gunn

Dorothy M. Gunn, Clerk
Illinois Pollution Control Board