



Flexible Packaging Association

RECEIVED
CLERK'S OFFICE

JUN 07 2010

STATE OF ILLINOIS
Pollution Control Board

June 4, 2010

Tim Fox, Attorney Assistant to Member Moore
Joint Committee on Administrative Rules
Illinois Pollution Control Board
700 Stratton Building
Springfield, IL 62706
foxt@ipcb.state.il.us

Ms. Vicki Thomas, Executive Director
Joint Committee on Administrative Rules
Illinois General Assembly
700 Stratton Building
Springfield, Illinois 62706
jcar@ilga.gov

PC#7

Re: In the Matter of: Reasonably Available Control Technology (RACT) for Volatile Organic Matter Emissions from Group II Consumer & Commercial Products: Proposed Amendments to ILL. Adm. Code 211, 218 and 219. R10-8 (Rulemaking – Air)

Dear Mr. Fox and Ms. Thomas,

Introduction - The Flexible Packaging Association (FPA) appreciates the opportunity to file comments on IPCB's Proposed Rulemaking concerning proposed amendments to VOM-RACT requirements for Group II Consumer & Commercial Products manufacturers. FPA's comments pertain specifically to proposed testing requirements applicable to owners or operators of flexographic or rotogravure printing lines that print flexible packaging and use a capture system and control device to meet emission limitations. FPA offers some alternative language to be considered in these comments.

FPA was established in 1950 and is a national trade association comprised of manufacturers and suppliers of flexible packaging. The industry's members are converters that produce packaging for food, healthcare, and industrial products using paper, film, foil, or any combination of these materials and include manufacturers in Illinois that would be subject to this rule if finalized. Examples of flexible packaging include rollstock, bags, pouches, labels, liners, wraps, and tamper-evident packaging for food and medicine. Flexible packaging, a \$25.6 billion industry, employs approximately



971 Corporate Boulevard • Suite 403 • Linthicum, Maryland 21090
phone: 410.694.0800 • fax: 410.694.0900 • e-mail: fpa@flexpack.org • web: www.flexpack.org

80,000 people in the United States and is now the second largest segment of the U.S. packaging market estimated at \$135 billion.

In FPA's review of the agency's file on the proposed rulemaking, we recognized that the proposal closely followed US EPA guidance per document EPA 453/R-06-006 "Control Techniques Guideline for Flexible Package Printing" dated September 2006. FPA supported US EPA's use of the CTG for guidance on RACT requirements and largely supported the 2006 CTG as drafted. The Association and its member companies were actively involved in the CTG development and acted as a technical resource to EPA officials throughout the development of the CTG guidance particularly with regard to operational complexities of flexible packaging processes, pollution control equipment, cost information and insights regarding the operations of the industry, its capabilities and limitations.

THE IPCB PROPOSAL - Notwithstanding the proposed rules reliance on the CTG, the proposed condition that concerns FPA relates to a condition that does not come from the CTG. Specifically FPA is concerned with the requirement under Part 218.401(c)(6) relating to capture system and control device requirements. Condition (c)(6) of this subsection states:

The owner or operator of a printing line subject to the requirements in Section 218.401(c)(3) shall perform testing in compliance with this subsection (c)(6), even if the owner or operator already performed such testing prior to August 1, 2010, unless the following conditions are met. Nothing in this subsection (c)(6), however, shall limit the Agency's ability to require that the owner or operator perform testing pursuant to Section 201.282:

- A) On or after May 1, 2000, the owner or operator of the subject printing line performed all testing necessary to demonstrate compliance with Section 218.401(c)(1)(B);
- B) Such testing also demonstrated an overall control efficiency equal to or greater than the applicable control efficiency requirements in Section 218.401(c)(3);
- C) The owner or operator submitted the results of such tests to the Agency, and the tests were not rejected by the Agency;
- D) The same capture and control device subject to the tests referenced in subsection (c)(6)(A) of this Section is still being used by the subject printing line; and
- E) The owner or operator complies with all recordkeeping and reporting requirements in Section 218.404(e)(1)(B);

While it is not totally clear if the intent of the condition was to include both capture and control device efficiency testing, it can certainly be inferred that both are included. FPA does support periodic retesting for control device efficiency (e.g. oxidizer destruction efficiency testing); however, FPA objects to retesting of capture system efficiency without cause. Although the CTG was silent as to testing requirements, US EPA

guidance on its position regarding the need for recurrent testing was fully defined in the “Technical Support Document (TSD) for Title V Permitting of Printing Facilities” issued January 2005 and revised June 2007. <http://www.epa.gov/ttnchie1/mkb/documents/TSD.pdf>.

With respect to Control Device Efficiency Testing, Section 5.5.1 of the TSD states:

- 5.5.1.2. As long as a printer does not change operations in a way that could affect control device efficiency. It is likely that the ongoing parameter monitoring, together with good operating, maintenance, and QA/QC procedures will generate data in the operating range(s) that assure compliance with applicable requirements. Therefore, we believe that periodic retesting for control device efficiency – typically once per title V permit term may be sufficient, but this would depend on the applicable requirement at issue.

With respect to Ongoing Capture Efficiency Testing, Section 5.5.3 of the TSD states:

5.5.3.1. Permanent Total Enclosure

Provided that the conditions of M204 are shown by ongoing monitoring to continue to be met, the capture efficiency of a permanent total enclosure is assumed to be 100 percent (see M204 at 40 CFR 51, appendix M).

5.5.3.2. Other than Permanent Total Enclosure

For capture systems that are not permanent total enclosures, as long as the operating parameters continue to be maintained in appropriate ranges, and as long as physical changes to the air distribution system do not occur, we would expect any new capture efficiency testing would show similar results to the initial testing. Accordingly, we suggest that you consider reserving retesting for capture efficiency for those instances where operating parameters indicate that a fundamental change has taken place in the operation or design of the equipment, unless more frequent retesting is required under an applicable requirement. A fundamental change may include any of the following;

- Adding print stations to a press;
- Increasing or decreasing the volumetric flow rate from the dryer (e.g. by changing the size of press fans/motors or removal or de-rating of dryers); or
- Changing the static duct pressure.

The proposed rule does offer an exception to the testing requirement under subsection (c)(6)(A), if a source had performed an applicable test on or after May 1, 2000. FPA is uncertain of the rationale for this date, which appears to be arbitrarily selected at 10 years prior to the originally proposed effective date of the rule. If IPCB were to establish a sunset date for applicability of prior test, FPA would suggest the date of issuance of the US EPA policy memorandum from J. Seitz (EPA, 1995e) and the "Guidelines for Determining Capture Efficiency" (EMC GD-035) (EPA, 1995f), which include recommended procedures for capture testing. The documents represent EPA's last significant change to capture testing recommendations.

In addition, it would appear that the rule, if adopted, would require any mandated testing/retesting and certification be completed by August 1, 2010. Where additional testing is needed, we do not think it would be feasible to accomplish the testing by August 1, 2010 and receive the testing report back from a stack-testing consultant in order to make the necessary certification. To address this issue, we have proposed in the attached "FPA Proposed Changes" a 120 day period in which such testing and certification could be reasonably completed.

COSTS OF TESTING - Aside from the technical relevancy considerations of retesting, capture efficiency testing is very costly and highly disruptive to facility operations. Thus it should be reserved only for those instances where baseline data is required or where the base capture design has been changed. These costs were not identified or examined in IPCB's Technical Support Document identifying projected costs for the proposed rule.

Data is readily available on the substantial costs of conducting these tests. EPA's Method 204 Temporary Total Enclosure (TTE) capture test protocol costs would range \$100,000 to \$250,000 to perform at a moderate sized site with multiple presses. One member company, performing TTE testing on three flexographic presses at a single site, experienced \$135,000 in direct and indirect cost for the week long testing exercise. Another company performing TTE testing on two laminating/coating machines experienced (in 1998 dollars) direct costs of \$68,500 *for each* machine. In this respect, IPCB should note that even an average size facility would have four (4)-to- seven (7) process lines subject to this rule, including presses, coaters and laminators. Therefore, the cumulative costs of testing under the proposed rule will be SUBSTANTIAL.

In addition to the expense associated with repeat capture testing, the disruption to manufacturing during week-long testing also is significant. Not only must the presses involved be taken out of production, but significant additional disruption is caused by designing and constructing a temporary enclosure around a press to enable it to be tested. Additional disruption of manufacturing at that machine and nearby equipment is caused by removing the enclosure. The cumulative costs of the actual testing and the disruption of manufacturing makes capture testing one of the most disruptive requirements ever placed on the converting industry.

While one might need to incur such cost and disruption to the manufacturing process to establish a capture efficiency baseline, it is not justified only for the sake of re-testing to verify a static process.

In summary, excluding presses with PTEs, the capture system is intrinsic to the drying mechanism for the press and therefore capture efficiency is inherently a design function of printing and coating equipment. Capture efficiency, as a practical matter, does not change unless the base design of the capture system is changed. Any adverse impacts on the drying mechanism would be visible in the print quality (e.g. blowout in the between color stations would result in drying of plates and poor print).

Given the need to properly maintain production equipment, the fact that capture efficiency is inherent to design, and the fact that design does not change over time unless affirmatively modified by the converter, FPA recommends that IPCB amend the testing provisions in the proposed rule and delete the requirement for retesting capture efficiency. FPA recommends that IPCB redraft the provision to follow the recommendations of US EPA as outlined in the "Technical Support Document for Title V Permitting of Printing Facilities (EPA. 2007 June)". Retesting should be reserved for those instances where a fundamental change has taken place in the equipment's capture design or where parametric monitoring indicates that the capture characteristics of the equipment has fundamentally changed.

Attached is FPA's suggested changes to IPCB's Proposed Amendment to Section 218.401(c)(6). Our proposed changes are underlined. FPA appreciates this opportunity to comment and would be happy to provide additional information and resources to assist IPCB on this and related issues. Please do not hesitate to contact me at 410/694-0823 or RSinghal@flexpack.org if our members or FPA can be of assistance.

Sincerely,



Ram K Singhal
Vice President
Technology & Environmental Strategy
Flexible Packaging Association

Cc: John T. Therriault, Assistant Clerk
Illinois Pollution Control Board
James R. Thompson Center
100 West Randolph Street, Suite 11-500
Chicago, IL 60601

ATTACHMENT: FPA'S PROPOSED AMENDMENTS TO Section 218.401(c)(6):
(All changes proposed by FPA are underlined below:)

Section 218.401 Flexographic and Rotogravure Printing

c) Capture system and control device requirements

6) The capture system and control device are operated at all times when the subject printing line is in operation. The owner or operator shall demonstrate compliance with this subsection by using the applicable capture system and control device test methods and procedures specified in Section 218.105(c) through Section 218.105(f) of this Part and by complying with the recordkeeping and reporting requirements specified in Section 218.404(e) of this Part. The owner or operator of a printing line subject to the requirements in Section 218.401(c)(2) or 218.401(c)(1)(B) of this Section that performed all testing necessary to demonstrate compliance with Section 218.401 (c)(1)(B) prior to August 1, 2010, is not required to retest pursuant to this subsection (c)(6). Within 120 days of the effective date of this rule, the owner or operator of a printing line subject to the requirements in Section 218.401(c)(3) shall perform testing in compliance with this subsection (c)(6), even if the owner or operator already performed such testing prior to August 1, 2010, except as provided below:

- A) Retesting of destruction efficiency shall not be required provided:
- i) On or after May 1, 2000, the owner or operator of the subject printing line performed destruction efficiency testing of the affected control device using the applicable test methods and procedures specified in Section 218.105(d) through Section 218.105(f) of this Part;
 - ii) The owner or operator submitted the results of such tests to the Agency, and the tests were not rejected by the Agency;
and
 - iii) The owner or operator complies with all recordkeeping and reporting requirements in Section 218.404(e)(1)(B);
- B) Retesting of capture efficiency for a printing line using a permanent total enclosure to capture emissions shall not be required provided:
- i) The owner or operator has made a demonstration that the capture system meets the definition of a permanent total enclosure as demonstrated through use of US EPA Method 204;
 - ii) Monitoring of the enclosure demonstrates that operating parameters continue to be maintained in appropriate ranges;
and

- iii) The owner or operator complies with all recordkeeping and reporting requirements in Section 218.404(e)(1)(B).
- C) Retesting of capture efficiency for a printing line using a capture system other than a permanent total enclosure to capture emissions shall not be required provided:
 - i) The owner or operator of the subject printing line performed capture efficiency testing of the affected printing line using the applicable test methods and procedures specified in Section 218.105(c) of this Part;
 - ii) The owner or operator submitted the results of such tests to the Agency, and the tests were not rejected by the Agency;
 - iii) Operating parameters continue to be maintained in appropriate ranges;
 - iv) No physical changes were made to the printing line that could affect the efficiency of the capture system (e.g. addition of print stations, increasing or decreasing the volumetric flow rate from the dryers or changing the static pressure in the exhaust duct); and
 - v) The owner or operator complies with all recordkeeping and reporting requirements in Section 218.404(e)(1)(B);

Nothing in this subsection (c)(6), however, shall limit the Agency's ability to require that the owner or operator perform testing pursuant to Section 201.282: