BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:	)	
	)	R06- 21
	)	(Rulemaking Air)
ORGANIC MATERIAL EMISSION	)	
STANDARDS AND LIMITATIONS FOR	)	
THE CHICAGO AND METRO-EAST	)	
AREAS: PROPOSED AMENDMENTS	)	
TO 35 ILL. ADM. CODE 218 AND 219	)	

NOTICE

Dorothy Gunn, Clerk
Pollution Control Board
100 West Randolph Street
Suite 11-500
Chicago, Illinois 60601
(Via Facsimile & First Class Mail)

William Richardson, Chief Legal Counsel
Illinois Department of Natural Resources
One Natural Resources Way
Springfield, Illinois 62702-1271
(Via First Class Mail)

Mathew Dunn
Illinois Attorney General's Office
Environmental Control Division
James R. Thompson Center
100 West Randolph Street, 12th Floor
Chicago, Illinois 60601
(Via First Class Mail)

John Knittle
Illinois Pollution Control Board
2125 South First Street
Champaign, Illinois 61820
(Via First Class Mail)

Tim Lindsey
Waste Management and Research Center
One East Hazelwood Drive
Champaign, Illinois 61820
(Via First Class Mail)

PLEASE TAKE NOTICE that I have today filed with the Office of the Clerk of the Illinois Pollution Control Board **the Supplemental Testimony of Gary E. Beckstead, Errata Sheet Number 2, and Supplemental Statement Number 2** on behalf of the Illinois Environmental Protection Agency, copies of which are herewith served upon you.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

By: _____

Annet C. Godiksen
Assistant Counsel
Division of Legal Counsel

Dated: May 10, 2006
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Springfield, Illinois 62794-9276
(217) 782-5544

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:	)	
	)	R06- 21
	)	(Rulemaking Air)
ORGANIC MATERIAL EMISSION STANDARDS AND LIMITATIONS FOR THE CHICAGO AND METRO-EAST AREAS: PROPOSED AMENDMENTS TO 35 ILL. ADM. CODE 218 AND 219	)	

PRE-FILED SUPPLEMENTAL TESTIMONY
OF GARY E. BECKSTEAD

The Illinois Environmental Protection Agency would like to provide responses to questions raised during the April 19, 2006, hearing in the matter of "Organic Material Emission Standards and Limitations for the Chicago and Metro East Areas: Proposed Amendments to 35 Ill Adm Code 218 and 219" concerning the following issues:

IPCB Question:

1. *What are the advantages of aqueous-based cleaning systems compared to solvent-based systems? Why would the Agency steer new sources to aqueous-based systems?*

Agency Response to Question #1:

The Illinois EPA has no preference regarding the type of volatile organic material (VOM) emission control systems that are used by sources that are impacted by the proposed revisions. The primary assessment standard for any chosen control system is the amount of VOM emissions that the environment experiences and the impact that these emissions have on air quality in the Chicago and Metro East ozone nonattainment areas when compared to using a 1.0 mmHg vapor pressure (VP) solvent. The four impacted sources are currently releasing fewer VOM emissions to the environment than if the sources were using a 1.0 mmHg solvent and no controls, as shown in Table 3 of the TSD. The controlled VOM emissions from the cold cleaning operations for the four impacted sources are estimated to be 0.114 tons per year greater if a 1.0 mmHg VP solvent were used in their processes without add-on controls.

Similarly, for any new source planning to install cold cleaning operations, the Agency's assessment would be made not on the basis of whether an aqueous or solvent-based cleaning system is employed but on the basis of the amount of VOM emissions that would be emitted to the atmosphere as compared to that of using a 1.0 mmHg vapor pressure solvent and with the assurance that at least 95 percent overall capture and control of VOM emissions from the cold cleaning operations would occur if an add-on control were employed in the emissions control plan. In regards to approving the control plan or in issuing permits to operate the chosen control plan, the Agency would not request or require sources to demonstrate cost effectiveness via studies.

Generally, aqueous-based systems are more environmentally friendly as they generate fewer or no hazardous materials, are safer for the workers, and are generally less costly to the company than solvent-based cleaning. However, choosing solvent-based versus aqueous-based cold cleaning is a business decision that the company makes. Based on information provided by the impacted sources in this rulemaking, cost effectiveness for their control systems and using solvents greater than 1.0 mmHg is in the range of $115 to $562 per ton of VOM removed (See Section 4.0 Economic Reasonableness of the TSD). This is even less than the cost effectiveness range of $238 to $779 per ton that was estimated for the material requirement of lowering the solvent vapor pressure down to 1.0 mmHg. With such a low cost effectiveness, it is my technical opinion that it would be very difficult for conversion to an aqueous-based cleaning system to be more cost effective than the current designs used by the impacted sources, which use solvent-based cleaning systems.

The discussions in Section 4.0 in the TSD delineate the various issues that make the current designs advantageous and more efficient than using a 1.0 mmHg solvent or to converting to aqueous-based cleaning. The need for high quality cleaning of parts used for fine printing (fonts of less than 5) and for surfaces that need to be varnished (airplane components) is an element that cannot be compromised by the impacted sources. The chemical composition of the solvents being used provides the high quality cleaning required. Furthermore, these solvents can be re-cycled and are compatible with the other operations in the plants, whereas, aqueous or 1.0 mmHg solvents are not.

Therefore, in making a decision on which type of cleaning system is appropriate for their operations, sources also need to carefully consider the disadvantages/limitations of each type system. The following were identified as limitations and/or disadvantages of aqueous cleaning in the Agency's review of literature[1]:

[1] Pacific Northwest Pollution Prevention Resource Center, *Aqueous Cleaning Technology Review*, 1999 www.pprc.org

- Aqueous cleaning generates a wastewater stream that requires treatment and discharge. In addition, many currently available aqueous cleaners contain non-biodegradable components that make discharge to sewer systems or surface waters more problematic. Some cleaners that are biodegradable when new are not biodegradable once they have been used, leading to mistakes by users in how they think they can treat or handle the used cleaning solutions.

- Aqueous-cleaning solutions are much more limited in their ability to remove contaminants by chemical action alone than their solvent counterparts. This leads to the requirements for mechanical action and increased temperature. In cases where the contaminants to be removed are especially thick or insoluble, large amounts of mechanical action can be required. For delicate parts contaminated with thick grease or other similar compounds, the usefulness of aqueous cleaning systems can be significantly limited.

- Spotting or corrosion of parts can be a problem with aqueous cleaning if adequate rinsing and drying are not included as part of the aqueous cleaning system. This requirement for additional process steps is a disadvantage when compared with highly volatile cleaners.

- While aqueous cleaning systems were shown repeatedly in the literature to equal or even exceed the performance of solvent systems, the initial effort required to correctly design, test, and install an aqueous-cleaning system is much greater due to the increased complexity of the aqueous-cleaning process and the increased reliance on equipment, as opposed to the cleaning solution. This limitation is very significant for manufacturers that are very short on time or capital, and can lead to a preference for "drop-in" replacements, where little time and effort is required even though the operational savings may not be as great. Manufacturers may opt for petroleum distillate or semi-aqueous cleaners in these cases.

  While aqueous-based cleaning does not fare well for the sources currently impacted by the proposed revisions, this may not be true for new sources. Sources will need to evaluate factors that either save money or generate new costs.

  A review of the literature reveals a number of specific cases where the economics associated with aqueous cleaning technology were compared with solvent cleaning. In many cases, aqueous cleaning faired quite favorably. Some of these reports also examined the difference between using traditional cost estimating and total cost assessment or other more comprehensive cost estimating approaches on the results of the economic analysis. These methods try to take into account a wider range of costs than those traditionally used to make an assessment, sometimes even including intangibles such as future liability. Generally, the investment in aqueous cleaning became more economically beneficial as the cost assessment methodology became more comprehensive. This trend is an indicator that this type of change to an aqueous method may be more beneficial than many

companies realize. The benefits of converting to an aqueous-cleaning system will only become more favorable as costs for solvents and disposal of associated wastes continue to increase.

Of the studies that evaluated economics, several were especially extensive and made use of the financial data of manufacturers that had recently converted from solvent to aqueous cleaning. Using a total cost assessment method to evaluate the economics of conversion for eight projects at manufacturers, one study found that operational costs were reduced by 75 percent in three cases and more than 95 percent in five cases. All the cases resulted in a positive net present value. Aside from no add-on control costs, the next largest cost savings identified was the reduction in chemical costs as solvent was no longer needed/purchased. If chlorinated solvents and chlorofluorocarbons are used, there is a high purchase cost that is largely attributable to the taxes assessed on these solvents. One study found that labor for maintenance generally increased for the aqueous system, although this contradicts with the findings of other industry case studies in which it was reported that less labor time was spent maintaining the aqueous-cleaning system versus a vapor degreaser.

Menke, et al. economically analyzed the conversion to an aqueous-cleaning system from a TCA vapor degreaser within an automotive radiator manufacturing line and found the payback to be 2.4 years when using a "hybrid" cost analysis (similar to total cost assessment)[2]. In this analysis labor costs for daily maintenance were $87,500 on an annual basis for the vapor degreaser versus $5,400 for the aqueous system. For the same process change, the payback value increased to 11.6 years when using a traditional cost analysis that ignored many of the less obvious costs related to both the old and new process. This example highlights the large difference that can be seen when using different cost accounting methods and reinforces the concept that aqueous cleaner investments will often appear more favorable as the economic analysis becomes more detailed.

Gavaskar's[3] economic evaluation comparing automated aqueous rotary washing with perchloroethylene (PCE) vapor degreasing for steel caplets showed a payback of 7 years, much too long to be considered a favorable investment for most manufacturers. However, an examination of the analysis shows a chemical cost comparison of $1,795 for vapor degreasing versus $2,711 for aqueous cleaning on an annual basis. The vapor degreasing chemical cost figure may be based on currently outdated lower costs for PCE, which brings forward another limitation of economic analyses reported in the literature.

---

[2] Menke, Dean M., et al., *Demonstration of Alternative Cleaning Systems*, Washington, D.C., U.S. EPA, August 1995. (U.S. EPA report number EPA/600/R-95/120.)

[3] Gavaskar, Arun, et al., "An Automated Aqueous Rotary Washer for the Metal Finishing Industry," in *Pollution Prevention Possibilities for Small and Medium-Sized Industries - Results of the WRITE Projects*, Washington, D.C., U.S. EPA, May 1995. (U.S. EPA report number EPA/600/R-95/070.)

The economic analyses verify that there have been a number of cases where aqueous cleaning has been economically viable and this trend will continue in the future as the costs for add-on equipment and installation and solvent costs increase.

The Agency found that most of the available literature addresses the conversion of solvent-based cleaning to aqueous-based and little is devoted to designing a new aqueous system. Following are three websites that address the subject of aqueous versus solvent-based cleaning that provide a basic overview as well as insight into the various parameters that need to be considered in determining which system is the better choice:

www.pprc.org/pubs/techreviews/**aqueous**

http://www.p2pays.org/ref/01/00898.pdf

http://www.p2pays.org/ref/23/22342.pdf

IPCB Question:

2. *How would the waste streams from a new source using an aqueous-based system compare to a solvent-based system using add-on controls? (See page 22 of transcript)*

Agency Response to Question #2

In regards to waste streams from the impacted sources, using solvents other than the current ones or converting to aqueous cleaning would create a distinct waste stream that would need to be handled differently by the impacted sources. This would necessitate process changes and additional costs with a possible final result of poorer cleaned parts. However, for new sources choosing aqueous-based cleaning systems at initial start-up, the waste stream would be handled in a more cost efficient manner to minimize volume and assure, if possible, that it is biodegradable and not a hazardous waste.

Minimizing the hazardous waste stream is always desirable in any process, since disposing of it only adds to the overall costs of the cleaning process as well as to the adverse environmental impacts. For the sources impacted by the proposed revisions, converting to aqueous-based cleaning would probably increase the volume of the waste stream, since more volume of cleaning solution would be needed to attain the desired surface cleanliness compared to solvent-based cleaning. In the information provided by Diversapack for this rulemaking, they indicated that a waste stream of 71,920 gallons in 2003 and 60, 450 gallons in 2004 would have been generated if their current system was abandoned and a solvent with 1.0 mmHg vapor pressure was utilized (Reference TSD Attachment 1 -Exhibit 4). If aqueous cleaning were employed, the waste stream volume would probably be as large if not larger. Determining the comparative increase in

volume and the characteristics of the waste stream is difficult to assess, since it would depend highly on the degree of surface cleaning desired by the source and the type of dirt and grease on the parts being cleaned.

IPCB Question:

3. *Are there re-use options (for used solvent) similar to those used by the sources using add-on controls? (See page 24 of transcript)*

Agency Response to Question #3

The extraction of solvent that is in the waste stream is always desirable; however, the cost effectiveness in extracting it will always be a business consideration. If the extracted solvent is re-useable and compatible with the other processes in the plant, it becomes more valuable to the source. For aqueous-based cleaning systems, the only solvent in the waste stream would be from the cleaning of the parts; therefore, re-claiming such a small quantity of solvent would be expensive and consequently probably not cost-effective. Diversapack and Printpack have indicated that the solvents that make-up a commercially available and suitable cleaning material with 1.0 mmHg vapor pressure (e.g., HCS 402 Ink Remover) are not re-useable in their process. Diversapack indicated in their cost analysis data that they would prefer to employ a firm specializing in handling hazardous waste at a cost of $2.50 per gallon than to deal with extracting any solvents or treating the waste stream to make it biodegradable and non-hazardous. However, the re-claimed solvents from the currently used 55.19 mmHg vapor pressure material are re-useable, are found in greater volume in the waste stream, and are compatible with other processes in their facility, which makes them highly valuable and very cost effective to recover. Thus, only the solids from the cleaning operation need to be disposed.

It should also be noted that for Printpack and Diversapack nearly a third of the VOM going to their control oxidizers is from their cold cleaning operations (over 500 tons per year for Diversapack in 2004). If an aqueous system were employed, this VOM would no longer go through the oxidizer's combustion process for destruction and, therefore, would require the addition of supplemental natural gas to maintain the desired temperature ranges to assure proper destruction of VOM collected from the printing processes.

For a new source that finds that an aqueous cleaning system is technically feasible, a change will not be implemented without a full understanding of all the costs and benefits. The re-usability of solvents in the waste stream and the cost effectiveness of extracting it is a factor that a new source would need to consider. Unfortunately, it is impossible to generalize about the overall economics in choosing an aqueous cleaning system, because the values and methods that go into making such an analysis are very company specific.

The largest capital expenditure in the decision of choosing solvent-based versus aqueous-based cleaning is the comparative control system equipment costs. In the

case of Printpack and Diversapack, there would not be an initial capital expenditure for an add-on control, since the control equipment already exists to handle VOM emissions from the printing processes and ducting to it is the only additional costs incurred. Eliminating this capital investment for the add-on control equipment is the major cost factor favoring aqueous over solvent-based cleaning. If add-on controls had to be purchased to handle the solvent-based cold cleaning emissions exclusively, the estimated costs would be in the range of $1.2 MM for Printpack and $600,000 for Diversapack, which would obviously favor a decision toward an aqueous-based solution.

Annual operating costs for add-on controls for FY2005 for Printpack and Diversapack was $210,000 and $289,900 respectively. Printpack routed 1830 tons of uncontrolled VOM emissions to their control device, and Diversapack sent 1,599 tons of VOM to theirs. Therefore, the cost effectiveness of these controls was $115 and $181 per ton of VOM removed.

The higher cost of the solvent-based versus aqueous-based cleaning solutions is also an often cited advantage for aqueous-based cleaning, but for Diversapack and Printpack this advantage does not hold true. According to company provided data from Diversapack the cost of their currently used solvent, which has a vapor pressure of 55.19 mmHg, is $4.82 per gallon. This compares with a 1.0 mmHg vapor pressure solvent that cost $23.00 per gallon and aqueous-based cleaners that cost $28.50 per gallon[4].

IPCB Question:

4. *Should the rule be adopted, how would the Agency require the source to examine alternative control measurers to promote pollution prevention? (See page 26 of transcript)*

Agency Response to Question #4

The Agency will assess pollution prevention control measures on equal footing with any other proposed equivalent alternative control measures. If VOM emissions to the atmosphere are equal to or less than using 1.0 mmHg vapor pressure materials, the proposed pollution prevention control measure will be approvable by the Agency. There is no formal requirement in the proposed revisions that pollution prevention control measures be evaluated. The Agency's role is in setting the environmental standard that must be met. The decision regarding how this standard is met is left with the source.

IPCB Question:

5. *Does the Agency require sources to demonstrate cost effectiveness via studies? (See page 26 of transcript)*

---

[4] U.S. Navy, *Chemical Cleaning as a Solvent Alternative,* 1999 http://p2library.nfesc.navy.mil/P2_Opportunity_Handbook/8_I_1.html

Agency Response to Question #5

The Agency does not require sources to demonstrate cost effectiveness via studies for control measures that they are planning to implement. The Agency assesses the sources' compliance with the Agency's regulations and determines if the source is meeting the proposed emission limits.

IPCB Question:

6. *Are the solvent retailers aware of the proposal and were they part of the Bureau's outreach?*

Response to Question #6:

The outreach for the proposed revisions included the four impacted sources, in addition to the Illinois Environmental Regulatory Group (IERG), Illinois Manufacturers Association (IMA), and the Chemical Industry Council of Illinois (CICI).

Retailers were not contacted in the initial outreach process. However, it is the Agency's understanding that potentially impacted sources from this rulemaking are larger users of cold cleaning chemicals that buy at the wholesale level directly from industrial suppliers. Furthermore, they do not buy an off-the-shelf product but buy the various ingredients needed and formulate the desired cleaning solutions at their facilities. Therefore, a cold cleaning solution with a vapor pressure of 55.19 mmHg as used by Diversapack or 19.12 mmHg as used by Pechiney, does not exist at a retailer or a wholesaler per se. From an enforcement perspective, the documentation required to allow the use of solvents greater than 1.0 mmHg VP would be the federally enforceable permit held by the user of the chemicals. However, the retailers still have a responsibility under the regulations.

Illinois EPA is planning to contact retailers and is compiling a contact list for outreach. This outreach will take place before the close of the final comment period.

IPCB Question:

7. *Does the Agency want to set an actual date in (c)(3)(C)* [now (c)(4)(C)] *versus using the effective date of the adopted rule?*

Response to Question #7:

218.182 (c)(3)(C) will now be 218.182 (c)(4)(C). The Agency is proposing that the effective date for existing operations be established as November 30, 2006. Existing sources that are using add-on controls must be tested by March 1, 2007. New sources using add-on controls or an equivalent alternative control plan that

begin operations after November 30, 2006, shall be tested within 90 days after initial start-up.

IPCB Question:

8. *How often should records be done/do we need a time requirement to avoid violations going unnoticed/unreported? See (d)(3),(4), and (6)?*

Response to Question #8:

As specified in 218.182 (c)(4)(C), recordkeeping for add-on controls and equivalent alternative control plans are to be performed pursuant to Sections 218.105 (c), (d), (e), and (f). In Section 218.105(d)(2), it is required that an owner or an operator that uses an afterburner to comply shall use Agency and U.S.EPA approved continuous monitoring. Records must be kept that verify that a source is in compliance on a continuous hourly basis in the ozone nonattainment areas of Chicago and Metro East St. Louis; therefore, consistent with these requirements, daily record keeping is being proposed where appropriate in the Section 218.182(d)(3), (4), and (6).

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:	)	
	)	R06- 21
	)	(Rulemaking Air)
ORGANIC MATERIAL EMISSION STANDARDS AND LIMITATIONS FOR THE CHICAGO AND METRO-EAST AREAS: PROPOSED AMENDMENTS TO 35 ILL. ADM. CODE 218 AND 219	)	

ERRATA SHEET NUMBER 2

THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY ("Agency" or "Illinois EPA") submits this ERRATA SHEET NUMBER 2 for the above-titled matter to the Illinois Pollution Control Board ("Board") and the participants listed on the Service List. The revisions proposed below are to the Agency's original proposal filed with the Board on December 22, 2005, and include revisions proposed in Errata Sheet Number 1 submitted to the Board at the hearing on April 19, 2006, as Hearing Exhibit Number 3. In support of the these changes are Gary Beckstead's pre-filed supplemental testimony and Supplemental Statement Number 2, both of which were also served on the Board and the Service List.

Section 218.182 Cold Cleaning

c) Material and Control Requirements:

2) On and after March 15, 2001, no person shall:

A) Cause or allow the sale of solvent with a vapor pressure which exceeds 1.0 mmHg (0.019 psi) measured at 20° C (68° F) in units greater than five (5) gallons, for use in cold cleaning degreasing operations located in the area covered by Section 218.103 of this Part.

B) Operate a cold cleaning degreaser with a solvent vapor pressure which exceeds 1.0 mmHg (0.019 psi) measured at 20° C (68° F).

NOTE – The language in (c)(2) has been returned to its current state, with the exception of a numerical indicator. The language from the originally proposed (c)(2) and (c)(3) is now found in (c)(3) and (c)(4).

3) On and after November 30, 2006 ~~March 15, 2001~~, no person shall:

A) Cause or allow the sale of solvent with a vapor pressure which exceeds 1.0 mmHg (0.019 psi) measured at 20° C (68° F) in units greater than five (5) gallons, for use in cold cleaning degreasing operations located in the area covered by Section 218.103 of this Part, unless the purchaser provides a copy of a valid state or federal construction or operating permit or a copy of the Federal Register demonstrating that they are in compliance with the control requirements of subsection (c)(4) ~~(e)(3)~~ of this Section or are exempt under subsection (f) or (g) of this Section.

B) Operate a cold cleaning degreaser with a solvent vapor pressure which exceeds 1.0 mmHg (0.019 psi) measured at 20° C (68° F), unless they are in compliance with the control requirements of subsection (c)(4) ~~(e)(3)~~ of this Section or are exempt under subsection (f) or (g) of this Section.

~~4~~3) Control Requirements:

B) An equivalent alternative control plan ~~achieving at least 95 percent reduction of VOM~~ may be used to meet the control requirements of this Section pursuant to Section 218.108 of this Part. Pursuant to the material requirements of subsection (c)(3)(B) ~~(e)(2)(B)~~ of this Section, a solvent with a vapor pressure of 1.0 mmHg (0.019 psi) measured at 20° C (68° F) shall be the basis for assessment of equivalent emissions from any equivalent alternative control plan. If used as an equivalent alternative control plan, an add-on control must demonstrate at least a 95 percent overall capture and control efficiency. A control plan approved by the Agency shall be effective only when included in a federally enforceable permit or approved by the U.S. EPA as a SIP revision pursuant to Section 218.108 of this Part.

the method of compliance between subsection (c)(3) ~~(c)(2)~~ and (c)(4) ~~(c)(3)~~ of this Section. Such notification shall include a demonstration of compliance with the newly applicable subsection.

Section 219.182 Cold Cleaning

c) Material and Control Requirements:

2) On and after March 15, 2001, no person shall:

A) Cause or allow the sale of solvent with a vapor pressure which exceeds 1.0 mmHg (0.019 psi) measured at 20° C (68° F) in units greater than five (5) gallons, for use in cold cleaning degreasing operations located in the area covered by Section 219.103 of this Part.

B) Operate a cold cleaning degreaser with a solvent vapor pressure which exceeds 1.0 mmHg (0.019 psi) measured at 20° C (68° F).

NOTE – The language in (c)(2) has been returned to its current state. The language from the originally proposed (c)(2) and (c)(3) is now found in (c)(3) and (c)(4).

3) On and after November 30, 2006 ~~March 15, 2001~~, no person shall:

A) Cause or allow the sale of solvent with a vapor pressure which exceeds 1.0 mmHg (0.019 psi) measured at 20° C (68° F) in units greater than five (5) gallons, for use in cold cleaning degreasing operations located in the area covered by Section 219.103 of this Part, unless the purchaser provides a copy of a valid state or federal construction or operating permit or a copy of the Federal Register demonstrating that they are in compliance with the control requirements of subsection (c)(4) ~~(c)(3)~~ of this Section or are exempt under subsection (f) or (g) of this Section.

B) Operate a cold cleaning degreaser with a solvent vapor pressure which exceeds 1.0 mmHg (0.019 psi) measured at 20° C (68° F), unless they are in compliance with the control requirements of subsection (c)(4) ~~(c)(3)~~ of this Section or are exempt under subsection (f) or (g) of this Section.

~~4~~3) Control Requirements:

B) An equivalent alternative control plan ~~achieving at least 95 percent reduction of VOM~~ may be used to meet the control requirements of this Section pursuant to Section 219.108 of this Part. Pursuant to the material requirements of subsection (c)(3)(B) ~~(e)(2)(B)~~ of this Section, a solvent with a vapor pressure of 1.0 mmHg (0.019 psi) measured at 20° C (68° F) shall be the basis for assessment of equivalent emissions from any equivalent alternative control plan. If used as an equivalent alternative control plan, an add-on control must demonstrate at least a 95 percent overall capture and control efficiency. A control plan approved by the Agency shall be effective only when included in a federally enforceable permit or approved by the U.S. EPA as a SIP revision pursuant to Section 219.108 of this Part.

C) Add-on controls operating at a source prior to November 30, 2006, ~~the effective date of this rule~~ shall be tested by March 1, 2007 ~~2006~~. Add-on controls constructed after November 30, 2006, ~~the effective date of this rule~~ shall be tested within 90 days of initial startup. Testing procedures and recordkeeping for add-on controls and equivalent alternative controls subject to subsections (c)(4)(A) and (B) ~~(e)(3)(A) and (B)~~ of this Section are to be performed pursuant to Section 219.105 (c), (d), (e) and (f) of this Part.

d) Recordkeeping and Reporting Requirements: On and after March 15, 1999:

NOTE – The new language from Errata Sheet #1 in subsection (d)'s heading has been rearranged.

1) All persons subject to the requirements of subsections (c)(1)(A), ~~and~~ (c)(2)(A), and (c)(3)(A) of this Section must maintain records which include for each sale:

A) The name and address of the solvent purchaser;

B) The date of sale;

C) The type of solvent;

D) The unit volume of solvent;

E) The total volume of solvent; and

F) The vapor pressure of the solvent measured in mmHg at 20° C (68° F).

2) All persons subject to the requirements of subsections (c)(1)(B), ~~and~~ (c)(2)(B), and (c)(3)(B) of this Section must maintain records which include for each purchase:

A) The name and address of the solvent supplier;

B) The date of purchase;

C) The type of solvent; and

D) The vapor pressure of the solvent measured in mmHg at 20° C (68° F).

E) For any mixture of solvents, the vapor pressure of the mixture, as used, measured in mmHg at 20° C (68° F).

3) All persons subject to the requirements of subsection (c)(4) ~~(c)(3)~~ of this Section must maintain records, which include for each purchase:

A) The name and address of the solvent supplier;

B) The date of purchase;

C) The type of solvent;

D) The unit volume of solvent;

E) The total volume of solvent; and

F) The vapor pressure of the solvent measured in mmHg at 20° C (68° F).

G) For any mixture of solvents, the vapor pressure of the mixture, as used, measured in mmHg at 20° C (68° F).

4) All persons subject to the requirements of subsection (c)(4) ~~(c)(3)~~ of this Section shall maintain records documenting the use of good operating practices consistent with the equipment manufacturer's specifications for the cold cleaning degreasers and add-on control equipment. At a minimum these records shall include:

A) Records for periodic inspection of the cold cleaning degreasers and add-on control equipment with date, individual performing the inspection, and nature of inspection;

B) Records for repair of malfunctions and breakdowns with identification and description of incident, date identified, date repaired, nature of repair, and the amount of VOM that escaped into the atmosphere as a result of the incident;

C) Control device monitoring and recording data; and

D) A daily log of operating time for the control device, monitoring equipment, and all associated degreasers.

5) All persons subject to the requirements of subsection (c) of this Section shall notify the Agency at least 30 days before changing the method of compliance between subsection (c)(3) ~~(c)(2)~~ and (c)(4) ~~(c)(3)~~ of this Section. Such notification shall include a demonstration of compliance with the newly applicable subsection.

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:	)	
	)	R06- 21
	)	(Rulemaking Air)
ORGANIC MATERIAL EMISSION	)	
STANDARDS AND LIMITATIONS FOR	)	
THE CHICAGO AND METRO-EAST	)	
AREAS: PROPOSED AMENDMENTS	)	
TO 35 ILL. ADM. CODE 218 AND 219	)	

SUPPLEMENTAL STATEMENT NUMBER 2

NOW COMES the Illinois Environmental Protection Agency ("Illinois EPA") by and through one of its attorneys, Annet C. Godiksen, and submits the following SUPPLEMENTAL STATEMENT NUMBER 2 in the above-titled matter to the Illinois Pollution Control Board ("Board") and the participants on the Service List.

This SUPPLEMENTAL STATEMENT NUMBER 2 addresses two issues raised during the April 19, 2006, hearing in the above-titled matter. The Agency would like to correct and clarify the previous testimony regarding the retroactivity of certain portions of the proposed rulemaking. The Agency does not intend for this proposed rulemaking to be retroactive and the amended language as found in ERRATA SHEET NUMBER 2 reflects this position. Concerning the compliance status of the four affected sources between 1999 and the effective date of this proposed rulemaking, the Agency reserves the right to exercise its enforcement discretion.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

By: _____

Annet C. Godiksen
Assistant Counsel
Division of Legal Counsel

Dated: May 10, 2006
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Springfield, Illinois 62794-9276
(217) 782-5544

STATE OF ILLINOIS)
) SS.
COUNTY OF SANGAMON)

PROOF OF SERVICE

I, the undersigned, on oath state that I have served the attached Supplemental Testimony of Gary E. Beckstead, Errata Sheet Number 2 and Supplemental Statement Number 2 upon the person to whom it is directed, by placing it in an envelope addressed to:

TO: Dorothy Gunn, Clerk
Illinois Pollution Control Board
James R. Thompson Center
100 W. Randolph Street, Suite 11-500
Chicago, Illinois 60601
(Via Facsimile & First Class Mail)

Matthew Dunn
Illinois Attorney General's Office
James R. Thompson Center
100 West Randolph Street, 12th Floor
Chicago, Illinois 60601
(Via First Class Mail)

John Knittle, Hearing Officer
Illinois Pollution Control Board
2125 South First Street
Champaign, Illinois 61820
(Via First Class Mail)

William Richardson Chief Legal Counsel
Illinois Department of Natural Resources
One Natural Resources Way
Springfield, Illinois 62702-1271
(Via First Class Mail)

Tim Lindsey
Waste Management and Research Center
One East Hazelwood Drive
Champaign, Illinois 61820
(Via First Class Mail)

and mailing it by First Class Mail from Springfield, Illinois on May 10, 2006, with sufficient postage affixed.

Cynthia Sims

SUBSCRIBED AND SWORN TO BEFORE ME

this 10th day of May, 2006

Cynthia L. Wolfe
Notary Public

OFFICIAL SEAL
CYNTHIA L. WOLFE
NOTARY PUBLIC, STATE OF ILLINOIS
MY COMMISSION EXPIRES 3-20-2007

THIS FILING IS SUBMITTED ON RECYCLED PAPER