

**BEFORE THE ILLINOIS POLLUTION CONTROL BOARD**

IN THE MATTER OF: )  
 )  
REASONABLY AVAILABLE CONTROL ) R10-10  
TECHNOLOGY (RACT) FOR VOLATILE ) (Rulemaking-Air)  
ORGANIC MATERIAL EMISSIONS FROM )  
GROUP III CONSUMER & COMMERCIAL )  
PRODUCTS: PROPOSED AMENDMENTS )  
TO 35 ILL. ADM. CODE 218 and 219 )

**NOTICE**

To: John Therriault, Assistant Clerk  
Illinois Pollution Control Board  
James R. Thompson Center  
100 West Randolph, Suite 11-500  
Chicago, Illinois 60601-3218

**SEE ATTACHED SERVICE LIST**

PLEASE TAKE NOTICE that I have today filed with the Office of the Pollution Control Board the TESTIMONY OF YOGINDER MAHAJAN of the Illinois Environmental Protection Agency, copies of which are herewith served upon you.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL  
PROTECTION AGENCY

By:   
Dana Vetterhoffer  
Assistant Counsel  
Division of Legal Counsel

DATED: November 25, 2009

1021 N. Grand Ave. East  
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**TESTIMONY OF YOGINDER MAHAJAN**

My name is Yoginder Mahajan. I am employed as an Environmental Protection Engineer in the Air Quality Planning Section in the Bureau of Air of the Illinois Environmental Protection Agency (“Agency”). I have been employed in this capacity since March 1992. Prior to my employment with the Agency I worked for various metal fabrication industries for nine years. My educational background includes a Bachelor of Engineering Degree in Mechanical Engineering from Bhopal University at Bhopal, India.

As part of my regular duties in the Air Quality Planning Section, I have been involved with preparing emission estimates for various source categories used in the development of the 1990 ozone season weekday emissions inventories; evaluating control technologies applicable to volatile organic material (“VOM”) emissions sources in preparation of the Rate-of-Progress plans for the Chicago and St. Louis ozone nonattainment areas; and assisting in the development of regulations for the control of VOM emissions from source categories included in the Rate-of-Progress plans. I prepared the technical support document (“TSD”) for this proposal before you.

The Agency's proposal addresses reductions in VOM emissions from the following categories: paper, film and foil coatings; large appliance coatings; and metal furniture coatings. The United States Environmental Protection Agency ("U.S. EPA") identified these three categories of coatings as the Consumer and Commercial Products, Group III.

Section 172 of the Clean Air Act ("CAA") requires that state implementation plans ("SIPs") for nonattainment areas, such as the Chicago and Metro-East St. Louis nonattainment areas ("NAAs") in Illinois, include requirements for reasonably available control technology ("RACT") as it applies to emissions sources. Section 182(b)(2)(A) of the CAA further requires that SIPs be revised to include RACT for VOM emissions sources that are covered by a CTG document issued by U.S. EPA after November 15, 1990, and before the area's date of attainment.

The U.S. EPA defines RACT as "the lowest emission limitation that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility." In September 2007, the U.S. EPA issued the final CTGs for Consumer and Commercial Products, Group III. These CTGs contained information regarding sources of VOM emissions from the applicable industries, the recommended available control options to reduce VOM emissions, and the cost of recommended control measures. The Agency relied on the information contained in the CTGs to develop this proposal.

The affected sources in the Chicago and Metro-East St. Louis NAAs are required to comply with the proposed regulations on and after May 1, 2011.

**Paper, Film, and Foil Coatings**

Currently, 35 Ill. Adm. Code 218 and 219 specify VOM limits in terms of mass of VOM per volume of coating for paper coating. The Agency is proposing to amend subsection (c) of Section 218/219.204 to specify VOM limits in terms of mass of VOM per mass of solids applied, and equivalent limits in terms of mass of VOM per mass of coatings applied. The Agency is proposing a lower VOM limit of 0.20 kg per kg of solids (0.20 lb/lb of solids) for pressure sensitive tape and label surface coating. Except for pressure sensitive tape and label coatings, the VOM limits are equivalent to the existing VOM limits for paper coating. The Agency is proposing to increase the overall control efficiency standard for add-on capture and control systems to 90 percent from the existing 81 percent overall control efficiency requirement. The affected sources may comply with the VOM emission limits by installing and operating add-on capture and control systems or by utilizing a combination of both low VOM coatings and add-on capture and control systems. In addition, the Agency is proposing to add Section 218/219.218, which contains work practice standards recommended by the U.S. EPA.

The Agency staff reviewed the 2005 VOM emissions inventory and determined that there are 16 affected sources in the Chicago NAA and two in the Metro-East NAA. Seven out of 16 affected sources comply with the regulations by using add-on capture and control systems. The Agency believes that no new add-on capture and control systems will be

installed to comply with the proposed regulations. Rather, the Agency expects that affected sources will continue to use compliant coatings, or upgrade their existing add-on capture and control systems to meet the proposed VOM emission limits. The Agency estimates that approximately 21.45 tons per year of VOM emissions will be reduced in the Chicago NAA at a cost of \$1,200 per ton of VOM reduced. The Agency does not expect any reduction in VOM emissions in the Metro-East St. Louis NAA.

**Metal Furniture Coatings and Large Appliance Coatings**

Currently, 35 Ill. Adm. Code 218 and 219 specify VOM limits in terms of mass of VOM per volume of coating for air dried and baked coatings for large appliance coatings and metal furniture coatings. The Agency is proposing to amend subsections (g) and (h) to provide VOM limits for one-component and multi-component general purpose coatings, and provide specific VOM emission limits for certain specialty coatings. For several of these coating types, separate emission limits in terms of mass of VOM per volume of coating are proposed for baked and air-dried coatings. Also, equivalent VOM limits in terms of mass of VOM per volume of solids applied are specified. The proposed regulations exempt stencil coatings, safety-indicating coatings, touch-up repair coatings, and coating applications utilizing handheld aerosol cans.

The proposed regulations require the use of one or more of the following application methods: electrostatic application, high volume low pressure (“HVLP”) spray, flow coat, roller coat, dip coat including electrodeposition, brush coating for only large appliance

coatings, or other coating application method capable of achieving a transfer efficiency equivalent or better than achieved by HVLP spraying.

Affected sources may use add-on capture and control systems to comply with the VOM content limits of the coatings. The Agency is proposing to increase the overall control efficiency standard to 90 percent from the existing 81 percent overall control efficiency.

The affected sources may comply with the VOM emission limits by installing and operating add-on capture and control systems or by utilizing a combination of both low VOM coatings and add-on capture and control systems. In addition, the Agency is proposing to add Section 218/219.218, which contains work practice standards recommended by the U.S. EPA.

The Agency staff reviewed the 2005 VOM emissions inventory and determined that there are six affected sources of metal furniture coating in the Chicago NAA and none in the Metro-East NAA. There are no affected sources of large appliance coatings in the Chicago and Metro-East St. Louis NAAs. The Agency expects that affected sources will continue using compliant coatings to comply with the VOM limits. The Agency does not expect any reduction in VOM emissions.

On July 20, 2009, the Agency posted a draft of the proposed rule and copies of the pertinent CTGs on its website for public comments. The Agency also contacted potentially affected sources via email, soliciting feedback on the proposed regulations.

The Agency did not receive any comments regarding this proposal. The Agency believes these proposed changes are not controversial, as they are largely based on the U.S. EPA's recommendations. The Agency believes that the proposed changes are technically feasible and economically reasonable.

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**CERTIFICATE OF SERVICE**

I, the undersigned, an attorney, state that I have served electronically the attached TESTIMONY OF YOGINDER MAHAJAN upon the following person:

John Therriault, Assistant Clerk  
Illinois Pollution Control Board  
James R. Thompson Center  
100 West Randolph, Suite 11-500  
Chicago, Illinois 60601-3218

and electronically to the following persons:

**SEE ATTACHED SERVICE LIST.**

ILLINOIS ENVIRONMENTAL  
PROTECTION AGENCY

By:   
Dana Vetterhoffer  
Assistant Counsel  
Division of Legal Counsel

DATED: November 25, 2009

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Service List R10-10

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