

**BEFORE THE ILLINOIS POLLUTION CONTROL BOARD**

IN THE MATTER OF: )  
 )  
REASONABLY AVAILABLE CONTROL ) R10-20  
TECHNOLOGY (RACT) FOR VOLATILE ) (Rulemaking-Air)  
ORGANIC MATERIAL EMISSIONS FROM )  
GROUP IV CONSUMER & COMMERCIAL )  
PRODUCTS: PROPOSED AMENDMENTS )  
TO 35 ILL. ADM. CODE 211, 218, and 219 )

**TESTIMONY OF RORY DAVIS**

My name is Rory Davis. I am an Environmental Protection Engineer in the Air Quality Planning Section, Air Pollution Control Division of the Illinois Environmental Protection Agency's ("Illinois EPA" or "Agency") Bureau of Air. I have been employed by the Agency in the Air Quality Planning Section for four and one half years. Prior to that, I worked at the Illinois Department of Transportation for four years as an Engineering Technician. I have a Bachelor of Science degree in Computational Physics as well as a Bachelor of Science degree in Mathematics from Illinois State University. I also have a Masters degree in Engineering from the University of Illinois at Chicago. My graduate studies consisted of an interdisciplinary program involving coursework from the Chemical Engineering and Mechanical Engineering fields with a concentration on Environmental Engineering.

In my current position with the Agency my duties include providing technical support for regulatory proposals. I will be providing testimony regarding the proposed rule regulating Consumer and Commercial Products, Group IV.

**Proposed Regulation for Consumer and Commercial Products, Group IV**

The Illinois EPA has proposed amendments to Illinois Administrative Code Parts 211, 218, and 219 to regulate Group IV consumer and commercial products in order to reduce emissions of volatile organic material ("VOM") from the affected categories, and to meet Clean Air Act requirements for Reasonably Available Control Technology ("RACT") standards for VOM emissions in the Chicago and Metro-East St. Louis Non-attainment Areas ("NAA"). The

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proposed amendments regulate emissions from miscellaneous metal and plastic parts coatings, automobile and light duty truck assembly coatings, miscellaneous industrial adhesives, and fiberglass boat manufacturing materials. These amendments to the current regulations will aid in the attainment and the maintenance of the National Ambient Air Quality Standards for ozone in the NAAs, and the amendments are both technically feasible and economically reasonable.

The proposed amendments were drafted to regulate the four previously mentioned affected source categories in a manner consistent with Control Techniques Guidelines (“CTG”) issued by the United States Environmental Protection Agency (“USEPA”). The Illinois EPA has relied upon the research and analysis of the USEPA in the CTGs for the limits and work practices in the proposed amendments, as well as for analysis of the technical feasibility and economic impact of the regulations.

#### Regulations for Miscellaneous Metal and Plastic Parts Coatings

The proposed amendments regarding miscellaneous metal and plastic parts coatings are intended to reduce VOM emissions from coatings applied to surfaces that include fabricated metal products, molded plastic parts, small and large farm machinery, commercial and industrial machinery and equipment, automotive or transportation equipment, interior or exterior automotive parts, construction equipment, motor vehicle accessories, bicycles and sporting goods, toys, recreational vehicles, pleasure craft (recreational boats), extruded aluminum structural components, railroad cars, heavier vehicles, lawn and garden equipment, business machines, laboratory and medical equipment, electronic equipment, steel drums, metal pipes, and numerous other industrial and household products.

The proposed amendments include three methods of compliance to provide sources with flexibility in complying with the regulations. Sources may comply with the VOM limits by using low-VOM coatings, by a combination of low-VOM coatings and add-on controls, or by using add-on controls to achieve an overall capture and control efficiency of 90%. Sources are also required to comply with work practice standards. Analysis conducted by the USEPA for the CTG for this source category indicates that there are compliant products or feasible control options for compliance for each of the coating categories regulated by the proposed amendments.

### Regulations for Automobile and Light Duty Truck Assembly Coatings

The proposed amendments for automobile and light duty truck assembly coatings are intended to reduce VOM emissions from coatings applied to new automobile or light-duty truck bodies or body parts for those vehicles. The proposed VOM limits for this source category are specified by the assembly coating process and for various miscellaneous materials used at these coating facilities.

The limits and work practices proposed reflect current practices in the industry that the USEPA considers to be RACT, and were supplied to the USEPA by member and non-member companies of the Alliance of Automobile Manufacturers in 2008 as part of the analysis performed for the CTG on the source category.

### Regulations for Miscellaneous Industrial Adhesives

The proposed amendments for miscellaneous industrial adhesives are intended to reduce VOM emissions from manufacturing and repair facilities using these adhesives for joining surfaces in assembly and construction of a large variety of products.

Similar to the proposed limits for miscellaneous metal and plastic parts coatings, the proposed amendments for miscellaneous industrial adhesives include three methods of compliance in order to provide flexibility to sources. Sources may comply with the VOM limits by using low-VOM adhesive products, by a combination of low-VOM adhesives and add-on controls, or by using add-on controls to achieve an overall capture and control efficiency of 85%. The proposed amendments also subject sources to application method limitations and work practice requirements. Analysis conducted by the USEPA for the CTG for this source category indicates that there are compliant products or feasible control options for compliance for each of the adhesive categories and processes regulated by the proposed amendments.

### Regulations for Fiberglass Boat Manufacturing Materials

The proposed amendments for fiberglass boat manufacturing materials are intended to reduce VOM emissions from materials used for manufacturing fiberglass hulls or decks for boats, or from sources that construct molds for the manufacture of fiberglass boat hulls or decks.

The proposed amendments provide sources flexibility in compliance by including three methods of compliance. Sources may choose to use lower-VOM materials, an emissions averaging option, or use an option that allows for add-on controls to reduce VOM emissions to a level consistent with the overall emission limit from the averaging option. The proposal also requires that sources comply with limitations regarding VOM-containing cleaning solutions, as well as with work practice requirements for mixing containers.

Analysis conducted by the USEPA indicates that the proposed limits are feasible for existing sources. However, it should be noted that Illinois currently has no affected sources in the NAAs in Illinois, and therefore the limits could only be applied to new sources in this category in the future. USEPA also states in the CTG that the limits reflect the current industry norms for this source category due to a NESHAP for the category.

### **The Proposed Rule is Economically Reasonable**

The costs associated with the proposed amendments are based upon analysis by the USEPA in its CTGs for the affected categories. These analyses are discussed in greater detail in the technical support document for the proposed amendments and the CTGs for the specific affected source categories. These affected source categories will be addressed individually for the purposes of this testimony.

### Economic Impact of Amendments for Miscellaneous Metal and Plastic Parts Coatings

The USEPA has estimated the average cost per source for the proposed regulation to be \$10,500. This figure can be used to estimate a statewide cost for the 111 identified potentially affected sources in Illinois to be \$1,165,500. USEPA has also estimated the cost per ton of VOM reduced to be \$1758 per ton. Illinois EPA considers these estimates to be reasonable for the control of VOM.

#### Economic Impact of Amendments for Automobile and Light Duty Truck Assembly Coatings

The USEPA estimates that there will be no additional cost for the implementation of the control techniques guidelines for auto and light-duty truck assembly coating. Affected sources have reduced VOM emissions from coating operations in response to the New Source Performance Standards (“NSPS”), the 2004 National Emission Standards for Hazardous Air Pollutants (“NESHAP”) for this category, and various State rules. USEPA also estimates that the additional work practices recommended in the CTG will result in a net cost savings to sources, as implementing these work practices reduces the amount of coating and cleaning materials used.

#### Economic Impact of Amendments for Miscellaneous Industrial Adhesives

The USEPA has estimated the average cost per source for the proposed regulation to be \$2,300. This figure can be used to estimate a statewide cost for the 12 identified potentially affected sources in Illinois to be \$40,272. USEPA has also estimated the cost per ton of VOM reduced to be \$265 per ton. Illinois EPA considers these estimates to be reasonable for the control of VOM.

#### Economic Impact of Amendments for Fiberglass Boat Manufacturing Materials

Because there are currently no sources in Illinois that will be affected by the proposed regulation of this source category, there will be no associated economic impact for sources in Illinois. The CTG for the category states that the USEPA expects that sources in this category will incur little if any increased costs due to the control recommendations.

#### **The Proposed Rule is Technically Feasible**

In nearly all aspects of the drafting of the rule the Illinois EPA has relied upon the analysis of the USEPA to determine whether the limits in the CTGs and the proposed amendments are technically feasible. Upon review of the CTGs, Illinois EPA concurs with the USEPA’s analysis and finds that the proposed limits are technically feasible for sources in Illinois. In many cases the limits proposed have been in place in other regions of the U.S. for a number of years. In other cases, such as for automobile and light duty truck assembly coatings and fiberglass boat manufacturing material, the proposed limits are in line with what USEPA considers to be current industry standards for the source categories. In these cases the VOM limits reflect what is

considered to be common levels of emissions in these source categories due to existing regulation such as a NESHAP.

### **Summary of Testimony**

It is the position of the Illinois EPA that the proposed VOM limits for the four source categories affected are feasible, and that in most cases flexibility in compliance options has been provided to sources. Further, the economic impact that the proposed amendments will have on affected sources is reasonable for achieving RACT control of VOM, and cost effective on a per ton basis for control of VOM in the Illinois ozone non-attainment areas. In regard to both the feasibility of controls and their economic impact, the Illinois EPA relied heavily on the analysis of the USEPA that was conducted for the purposes of the CTGs for these source categories, and generally concurs with their recommendations.