September 5, 2006

BY ELECTRONIC MAIL


EPA Docket Center, Mail code 6102T
Environmental Protection Agency
1200 Pennsylvania Ave., NW.
Washington, DC 20460


The Office of Advocacy (Advocacy) is pleased to submit the following comments on the U.S. Environmental Protection Agency’s (EPA) “Proposed Consumer and Commercial Products: Control Techniques Guidelines in Lieu of Regulations for Lithographic Printing Materials, Letterpress Printing Materials, Flexible Packaging Printing Materials, Flat Wood Paneling Coatings, and Industrial Cleaning Solvents,” 71 Fed. Reg. 44521 (Aug. 4, 2006). EPA has prepared draft Control Techniques Guidelines (CTGs) for the control of volatile organic compounds (VOC) emissions from each of the five product categories, which will provide guidance to the States concerning EPA’s recommendations for reasonably available control technology (RACT) level controls for these product categories.

Advocacy supports EPA’s decision to issue CTGs rather than promulgating formal rules, and agrees that the CTG approach will result in additional VOC emission reductions over the rule approach. The proposed CTGs utilize cost effective approaches to VOC control that will help states achieve the ambient ozone standards (VOC emissions are precursor pollutants to ozone formation). Advocacy is pleased to note that, as a result of EPA’s outreach to the small business community, the proposed CTGs provide an excellent balance between environmental protection and regulatory flexibility. Specifically, Advocacy commends the proposed CTGs for printing materials and industrial cleaning solvents. Advocacy encourages EPA to continue to conduct significant pre-proposal

Office of Advocacy

The Office of Advocacy was established pursuant to Pub. L. 94-305 to advocate the views of small entities before Federal agencies and Congress. Because Advocacy is an independent entity within the U.S. Small Business Administration (SBA), the views expressed by Advocacy do not necessarily reflect the position of the Administration or the SBA. The Regulatory Flexibility Act (RFA), as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), gives small entities a voice in the rulemaking process. For all rules which will have a significant economic impact on a substantial number of small entities, the RFA requires that EPA assess the impact of the proposed rule on small business and to consider less burdensome alternatives.

Background

Ground-level ozone forms in the atmosphere when VOCs and nitrogen oxides react in the presence of sunlight. Exposure to ground-level ozone is associated with a variety of human health effects, agricultural crop loss, and damage to forests and other ecosystems. To combat the effects of ground level ozone on human health and the environment, section 183(e) of the Clean Air Act directs EPA to list those categories of products that account for at least 80 percent of the VOC emissions from consumer and commercial products for areas in violation of the National Ambient Air Quality Standards (NAAQS) for ozone (ozone nonattainment areas). Next, EPA must divide the list of categories into four groups. The list of products in Group II consists of the five categories covered by the proposed CTGs.

Section 172(c) of the Clean Air Act provides that state implementation plans (SIPs) for NAAQS nonattainment areas must include reasonably available control measures (RACM), including reasonably available control technology (RACT), for sources of VOC emissions.2 Section 182(b)(2) provides that States must revise their ozone SIPs to

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2 RACT is defined 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, 44 FR 53761 (Sept. 17, 1979).” 71. Fed. Reg. 44525 (August 4, 2006).
include RACT for VOC sources covered by any CTG document issued after November 15, 1990. In the proposed CTGs, EPA provides states with guidance concerning what types of controls could constitute RACT for a given VOC source.

States may follow the CTG and adopt State regulations to implement the CTG recommendations, or they can adopt alternative approaches. Either way, States must submit their RACT rules to EPA for review and approval as part of the formal SIP process, where EPA evaluates the state regulations to determine whether they meet the RACT requirements of the Act and EPA’s regulations.

**CTG for Lithographic Printing Materials and Letterpress Printing Materials**

Lithographic printing materials and letterpress printing materials have many similarities in terms of the types of inks and cleaning materials used, the sources of VOC emissions, and the controls available to address these emissions. Accordingly, EPA combined their discussion of these two categories into one CTG.

The inks used in offset lithographic printing are a source of VOC emissions, with the amount of emissions varying depending on the type of offset lithographic printing process. These processes are comprised of the following: heatset web offset lithographic printing, coldest web and sheet-fed offset lithographic printing, and radiation-cured offset lithographic printing.

The VOC emissions from letterpress printing result from the evaporation of components of the inks and cleaning materials. Letterpress inks are similar to offset lithographic inks and consist mainly of coldset inks and heatset inks. The most significant source of VOC emissions in the letterpress process originates with the cleaning materials that are used to wash the rollers, plates, and outsides of presses. Generally, the keys to reducing VOC emissions from letterpress printing cleaning materials are to reduce the composite vapor pressure of the material used and to employ work practices that better contain the vapors.

The recommendations in the draft CTG apply to offset lithographic printing operations or letterpress printing operations that emit at least 6.8 kg per day (15 lbs per day) of VOC. For the add-on control recommendation for heatset web offset lithographic printing operations and heatset web letterpress printing operations, EPA has provided a size-based exception to this threshold.

Heatset ink operations with the potential to emit less than 25 tons per year (tpy) of VOC are exempt from both the recommended 90 percent reduction in VOC for control equipment installed before March 14, 1995, and the recommended 95 percent efficiency for control equipment installed on or after March 14, 1995. EPA recommended the 25 tpy threshold because information suggested that controls for small printers may be more costly for a given amount of emission reductions. This recommendation was based on a
2004 analysis that one facility with potential to emit 26 tpy before control would experience costs greater than $15,000 per ton which is much higher than the 1993 $3,000 per ton estimate for the 25 tpy model facility. Since RACT does account for both costs and emissions, it was deemed appropriate to limit this CTG to facilities with at least 25 tpy of emissions. EPA welcomed more information on the smallest heatset web facilities and the costs of controlling VOCs emitted from the dryers at facilities with potential to emit of up to 100 tpy. EPA has also invited smaller facilities to share information with them on their experiences controlling dryer emissions, including any alternative control approaches, and the costs of such controls. If EPA confirms the information in the 2004 analysis, EPA should reaffirm the 25 tpy threshold for the CTG.

Advocacy commends EPA for the flexibility and transparency it has shown in developing this CTG as well as EPA’s receptiveness to input from small facilities in drafting the best possible guidance documents. Advocacy invites EPA to adopt a similar approach when it develops guidance documents in the future.

**Flexible Packaging Printing Materials**

Flexible packaging includes, but is not limited to, bags, pouches, labels, liners, and wraps utilizing paper, plastic, film, aluminum foil, metalized or coated paper or film, or any combination of these materials. The primary source of VOC emissions from the flexible packaging printing industry is evaporation of components of the printing inks, coatings, adhesives and cleaning materials. The two main approaches to reducing VOC emissions from these materials consist of (1) adding or improving existing capture and control systems, and (2) using lower VOC content or using VOC-free inks, coatings and adhesives.

The draft CTG recommends an overall capture and control efficiency of 80 percent for flexible packaging printers. Alternatively, the CTG recommends ink, coating and adhesive limits of 0.5 kg VOC per kg of solids applied, or 0.10 kg VOC per kg of materials applied. EPA has provided an exemption from these recommendations for flexible packaging printing operations with the potential to emit less than 25 tpy of VOC from inks, coatings and adhesives combined.

Again, EPA has recommended the 25 tpy threshold based on information suggesting that add-on controls for small printers may be more costly for a given amount of emission reduction. EPA has also requested that small flexible packaging printing facilities share their experiences controlling emissions, and offer any alternative control approaches with cost estimates. If the new information is consistent with the small heatset facility costs cited earlier, EPA should again reaffirm the 25 tpy threshold.

**Industrial Cleaning Solvents**

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3 The analysis was performed in a 2004 state Best Achievable Control Technology analysis for a facility with heatset dryer emissions. All figures are in 2005 dollars. 71 Fed. Reg. 44528 (August 4, 2006).
Industrial cleaning solvents are used by a large diversity of industries. This category of products includes solvents used to remove contaminants such as adhesives, inks, paint, dirt, soil, oil, and grease from parts, products, tools, machinery, equipment, vessels, floors, walls, and other production-related work areas. Generally, VOC emissions from industrial cleaning solvents occur through evaporation during cleaning activities. Because a portion of all solvents evaporate during use, such solvent-based cleaning can result in a large quantity of VOC emissions.

The draft CTG generally recommends a VOC content limit of 50 grams per liter of cleaning material, unless emissions are controlled by an emission abatement efficiency of at least 85 percent. This limit would not be applicable to industrial cleaning operations that have potential VOC emissions of less than 6.8 kg per day (15 lbs per day), before controls. EPA largely modeled this recommendation on the San Francisco, California Bay Area Air Quality Management District (AQMD) standard, including the specific category exclusions provided for in the Bay Area AQMD rule. The agency recognized that due to the large diversity of industrial use of solvent cleaners, there were many applications for which the 50 grams/liter recommendation would not be feasible. The CTG also advises states to specifically evaluate the particular industries and operations in their states and “tailor their rules to those specific scenarios.”

EPA estimates that approximately 28 percent of the facilities in ozone nonattainment areas will potentially meet the 6.8 kg per day threshold; however, an unknown number of these facilities will be exempt from the recommendations if they qualify for any of the category exclusions listed in the CTG.

Generally speaking, the Bay Area AQMD studies indicate that there are cost savings associated with replacing high-VOC cleaning materials with alternative cleaning materials that contain low or no VOC content. In addition, the CTG offers the flexibility to the states establishing RACT standards to consider the particular industrial scenario and tailor the VOC standards as appropriate. The added flexibility will yield significant cost savings for thousands of facilities, while still providing substantial VOC emission reductions.

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Conclusion

Advocacy commends EPA for working hard with Advocacy and small business representatives to develop this set of guidance documents. EPA’s outreach to affected industries and openness to comments and recommendations from parties with experience in reducing VOC emissions will yield a series of final CTGs that provide effective guidance for states and operators in implementing and complying with their ozone emission standards. EPA has provided an excellent example of how systematic outreach and research can improve the quality and consistency of guidance documents. Advocacy encourages EPA to continue to employ this approach when developing guidance documents in the future.

Sincerely,

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Chief Counsel for Advocacy

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Kevin L. Bromberg
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cc: Steven D. Aitken, Acting Administrator
Office of Information and Regulatory Affairs