STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JOHN ELIAS BALDACCI
GOVERNOR

DAVID P. LITTELL
COMMISSIONER

MEMORANDUM

TO: Board of Environmental Protection

FROM: Deb Avalone-King, Bureau of Air Quality

DATE: June 18, 2009

RE: Post to Public Hearing: Chapter 161 Graphic Arts – Lithography and Letterpress Printing

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Statutory and Regulatory Reference:

A. Statutory authority.

38 MRSA Section 585-A provides that the Board of Environmental Protection "may establish and amend regulations to implement ambient air quality standards and emission standards. These regulations shall be designed to achieve and maintain ambient air quality standards and emission standards within any region and prevent air pollution."

B. Specific legal mandates requiring adoption.

Section 184 of the Clean Air Act requires states to implement or update reasonably available control technology (RACT) controls on all major VOC and NOx emission sources and on source categories covered by a Control Technique Guideline (CTG) document. EPA defines RACT as the lowest emission limit 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 2006, EPA published a CTG for offset lithography printing operations which recommended specific limits for chemicals and processes used in these operations.

Location/Applicability:

The proposed regulation will apply statewide.

Description:

Background: Many inks, fountain and cleaning solutions used in graphic arts contain volatile organic compounds (VOC), which are precursors to ground-level ozone formation. This regulation restricts the VOC emissions from offset lithography and letterpress printing operations. Under Section 184 of the Clean Air Act Amendments of 1990, the State must submit plans to control VOC emissions from all sources covered by a Control Technique Guideline (CTG) issued by US EPA.

This regulation requires all sources within this category to determine their emission levels and implement reasonable options for keeping such emissions at a minimum, in a cost effective way that includes: control technology approaches, VOC and composite vapor pressure limits and standards for work practices. The rule provides a variety of approaches for managing VOC emissions and complying with the limits stipulated in the rule with flexibility for sources to implement the limits in the manner that is most suitable for their facility.

Environmental Issues:

Volatile organic compounds contribute to ground-level ozone formation or smog which aggravates respiratory ailments such as asthma, bronchitis, and emphysema. The presence of ozone impedes the breathing of even healthy people and exacerbates existing respiratory and heart health conditions. Epidemiologic studies show that long-term exposure to ozone causes premature aging of the lungs and decreases in lung capacity and function. Though children, the elderly and those with heart disease or respiratory problems like asthma and emphysema are at particular risk, about 20 percent of otherwise healthy adults are unusually sensitive to ozone's effects, experiencing symptoms like coughing, wheezing and pain when they breathe deeply in highly polluted areas.

Departmental Recommendation:

The Department recommends that the Board hold a public hearing on this proposal on August 6 2009.

Estimated Time of Presentation:

15 minutes