

GOVERNMENT OF THE DISTRICT OF COLUMBIA
Department of Energy and Environment

CHAPTER 2 TECHNICAL MEMORANDUM

TO: File

THROUGH: Stephen S. Ours, P.E. *SSO*
Chief, Permitting Branch

FROM: Abraham T. Hagos *SSO For ATH*
Environmental Engineer

SUBJECT: **Bureau of Engraving and Printing (BEP)
Permit Nos. 6974, 6975, 6976 and 6977
Permits to Operate Four Intaglio, Sheet Fed, Non-Heatset, Water Wipeable
Currency Presses - Section 2 (Nos. 201 and 202) and Section 10 (Nos. 110 and
210)**

DATE: November 24, 2015

BACKGROUND INFORMATION

The U.S. Department of the Treasury, Bureau of Engraving and Printing (BEP) is currently subject to a settlement agreement with DOEE to operate the I-10 presses at the facility using low VOC content cleaning solutions. The term "low VOC content" is not defined. Previously, BEP has been using a low VOC aqueous cleaning solution with approximately 1% VOC by weight on these presses. However, BEP has encountered printing quality issues and has determined a higher VOC content is needed in the cleaning solvent, albeit lower than the traditional 100% VOC solvents used on these types of equipment and previously used on the SOI presses at the facility.

Therefore, BEP submitted permit applications, dated February 19, 2015, to modify the cleaning process used on the I-10 intaglio currency presses. These applications follow the longer term testing which has been conducted on the Section 10 I-10 presses and the Section 6 and 9 SOI presses, in accordance with the approval letter from the Department of Energy and Environment (DOEE) dated March 10, 2014 and subsequent extensions of that testing. The proposed process modification allows the use of cleaning solvent with a VOC content of fifty percent (50%) or less (by weight) in automatic plate wash units and for manual cleaning on the presses. The solvent used during the test period was LO-VO WASH 50, which is manufactured by Tower Products. Per the testing agreement, and consistent with the tested LO-VO WASH 50 cleaning solvent used, the permits are establishing a low vapor pressure requirement of less than 5 mmHg at 20°C for any cleaning solvents used.

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The VOC emissions are expected to exceed the previous emissions on the I-10 presses due to the change from the aqueous cleaning solution to the 50% VOC solvent. The new solvent requirements reduce the hourly solvent VOC emissions and annual potential to emit on the SOT's. The ink use rates and ink VOC emissions are unchanged from the prior permits and procedures. Overall, based on the testing, actual emissions are expected to slightly decrease, though potential emissions are increasing overall.

The permit action will be published in the DC Register on December 4, 2015. Public comments for the permit action will be solicited through January 4, 2016.

The Company has not requested that any of the materials submitted with this application be held confidential.

REGULATORY REVIEW

Chapter 2, Section 204: Permit requirements for Sources Affecting Non-Attainment Areas:

Non-attainment New Source Review (NSR) will not be triggered by the proposed modification. Although the modification is expected to result in a decrease in VOC emissions on an actual to actual basis, it results in an increase in potential to emit on a potential-to-actuals basis. This increase, however, does not trigger non-attainment New Source Review. See the application for a full analysis.

Chapter 2, Section 209: Permit requirements for Minor New Source Review Sources (MNSR):

In accordance to 20 DCMR 209.1, these rules apply to individual units that have the potential to emit (PTE) greater than 5 tons per year VOC. The proposed projects results in a PTE increase greater than 5 tons per year of VOC, however, no individual unit has a potential to emit increase greater than 5 tons per year of VOC.

Nonetheless BEP performed an analysis pursuant to 20 DCMR 209. See the application for this analysis. Per this analysis, if the regulation were applicable, it appears that the control technology method they have proposed would meet its requirements.

Chapter 6, Section 606: Visible Emissions:

The visible emissions limitations of 20 DCMR 606 is applicable to this facility and has therefore been included in Condition II(d) of each of the permits.

Chapter 7, Section 710: Volatile Organic Compounds and Hazardous Air Pollutants:

The requirements of 20 DCMR 710 are applicable and have been included in the permits.

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Chapter 9, Section 903: Odorous or Other Nuisance Air Pollutants:

“An emission into the atmosphere of odorous or other air pollutants from any source in any quantity and of any characteristic, and duration which is, or is likely to be injurious to the public health or welfare, or which interferes with the reasonable enjoyment of life or property is prohibited [20 DCMR 903.1]” is applicable to all sources. This requirement is contained in Condition II(e) of the permits.

RECOMMENDATIONS

The applications to operate Section 2 and 10 presses and the attached operating permits comply with all applicable federal and District air pollution control laws and regulations.

Public comments for the permit actions will be solicited from December 4, 2015 through January 4, 2016. AQD will resolve any comments received before issuing the permits, and if no comments are received, I recommend that permit Nos. 6974, 6975, 6976 and 6977 be issued in accordance with 20 DCMR 200.2, as proposed.

SSO:ATH

