## GOVERNMENT OF THE DISTRICT OF COLUMBIA

Department of Energy and Environment

# TECHNICAL SUPPORT MEMORANDUM

TO:

File

THROUGH: Stephen S. Ours, P.E.

Chief, Permitting Branch

FROM:

Abraham T. Hagos

**Environmental Engineer** 

**SUBJECT:** 

U.S. Department of the Treasury, Bureau of Engraving and Printing

Permit No. 7209 to Construct and Operate One (1) Sheet Fed, Non-Heatset, Offset, Lithographic, Komori Lithrone SX729 (LSX729)

**Seven-Color Printing Press** 

DATE:

July 20, 2018

#### BACKGROUND INFORMATION

A permit application to construct and operate one (1) new press, identified as a Komori Lithrone SX729 (LSX729) seven-color, non-heatset, sheet-fed, offset, lithographic printing press, at the Bureau of Engraving and Printing (BEP), in the Main Building, A Wing, Room A-170, at 14th and C Streets SW, was received by the Air Quality Division on April 17, 2018. Additional information was received on July 10, 2018. The applicant is the U.S. Department of the Treasury, Bureau of Engraving and Printing.

The permit action will be published in the DC Register on August 3, 2018. Public comments for the permit action will be solicited through September 4, 2018.

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

### TECHNICAL INFORMATION

The equipment to be covered by this permit is a lithographic printing press. The activities at this location include printing United States of America (USA) currency. The applicant will use a variety of conventional inks, UV offset inks, UV and aqueous coatings, cleaning solvents, presoaked cleaning blankets, and fountain (dampening) solutions. These must comply with the limits in 20 DCMR 716, where applicable.





## **CHAPTER 2 TECHNICAL MEMORANDUM**

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### REGULATORY REVIEW

### 20 DCMR Chapter 2, Section 200: General Permit Requirements

The printing press is a potential air pollution source because ink and solvents contain volatile organic compounds. Thus a Chapter 2 permit is required.

# 20 DCMR Chapter 2, Section 204: Permit Requirements for Sources Affecting Non-Attainment Areas

Major new sources and major modifications to an existing major source that emit ozone precursors of VOC are subject to the requirement of 20 DCMR 204. BEP has evaluated the applicability of the 20 DCMR 204 and has determined that the proposed application is not subject to 20 DCMR 204 since the addition of the proposed equipment will not result in a significant emissions increase of VOC.

The new proposed press will result in potential emissions of 0.97 tons per year of VOC emissions.

The new proposed press will not result in a significant emission increase at the BEP facility and the 20 DCMR 204 non-attainment new source review permitting requirements will not be triggered.

# 20 DCMR Chapter 2, Section 209: Permit Requirements for Non-Major Stationary Sources (Minor New Source Review)

As noted above, the potential emissions of the unit are 0.97 tons per year of VOC. As a result, the trigger threshold for 20 DCMR 209 to be applicable of 5 tons per year of VOCs is not exceeded. As such, this regulation is not applicable.

# 20 DCMR Chapter 6, Section 606: Visible Emissions

This regulation is applicable to the printing press as it is applicable to all sources. However, since VOCs are the only emissions from the source, any visible emissions from the unit, even during start-up or shut-down would be signs of improper operation of the equipment. Therefore, Condition II(b) of the permit was developed to require that no visible emissions be released from this equipment.

20 DCMR Chapter 7: Volatile Organic Compounds and Hazardous Air Pollutants
The requirements of 20 DCMR 716 are applicable to the Komori Lithrone SX729
(LSX729) seven-color, sheet-fed, non-heatset, offset, lithographic printing press. AQD reviewed these requirements extensively and determined that the "printing operation" discussed in 20 DCMR 716.1(b) covers equipment at the whole facility. Additionally, the facility, as a whole, is a major source of VOCs, thus triggering 20 DCMR 716.1(a). As such, all relevant sections of 20 DCMR 716 are applicable rather than only 20 DCMR 716.25(b), which would be the only applicable section if this press were considered alone and only triggered 20 DCMR 716.1(c).

# **CHAPTER 2 TECHNICAL MEMORANDUM**

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The relevant requirements of 20 DCMR 716 have been included in the permit, along with appropriate monitoring, testing, record keeping, and reporting requirements.

20 DCMR 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. It is contained in Condition II(c) of the permit.

<u>40 CFR part 60, Subpart QQ – Publication Rotogravure Printing</u>
This press does not meet the definition of rotogravure printing and is not subject to Subpart QQ.

# <u>40 CFR Part 63</u>, Subpart KK – National Emission Standards for the Printing and publishing Industry

This standard applies the facilities that operate publication rotogravure, product and packaging rotogravure, or wide-web flexographic printing presses and are major sources or synthetic minor sources of hazardous air pollutants (HAPs). The BEP facility does not operate these types of presses and is not a major source or synthetic minor source of HAPs as defined by 40 CFR Part 63, Subpart A and is therefore not subject to Subpart KK.

<u>40 CFR 63</u>, Subpart JJJJ – Paper and Other Web Coating – This standard applies to facilities that operate web coating lines and are major sources of HAPs. This is not a web coating line and the BEP facility is not a major source of HAPs as defined by 40 CFR Part 63, Subpart A and is therefore not subject to Subpart JJJJ.

### RECOMMENDATIONS

The proposed project and attached permit comply with all applicable federal and District air pollution control laws and regulations.

Public comments for the permit action will be solicited from August 3, 2018 through September 4, 2018. AQD will resolve any comments received before issuing the final permit, and if no comments are received, I recommend that permit No. 7209 be issued in accordance with 20 DCMR 200.1 and 200.2.

SSO/ATH

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