##### January 5, 2016

Neal Mohlmann, Chief

Office of Environmental and Safety

Bureau of Engraving and Printing

U.S. Department of the Treasury

14th and C Streets SW

Washington, DC 20228

**RE: Permit Nos. 6706-R1 & 6707-R1 to Operate Two Section 6 Super Orlof Intaglio II, Sheet Fed, Non-Heatset, Intaglio Cylinder-Wipe Currency Presses (#5 and #6 also known as #601 and #602, respectively)**

Dear Mr. Mohlmann:

Pursuant to §200.1 and §200.2 of Title 20 of the District of Columbia Municipal Regulations (20 DCMR), a permit shall be obtained from the Department of Energy and Environment (the Department) before any person may construct or operate a new stationary source in the District of Columbia. The applications of the U.S. Department of the Treasury, Bureau of Engraving and Printing (the Permittee) to operate two (2) KBA Giori, Super Orlof Intaglio II (SOI), sheet fed, non-heatset, four color, water wipeable intaglio currency presses, identified as numbers 5 (also known as #601), and 6 (also known as #602), in Room C-400 in the Main Building at 14th and C Streets SW, per the applications, dated March 4, 2015, are hereby granted subject to the following conditions:

I. General Requirements:

a. The two (2) KBA Giori, Super Orlof Intaglio II (SOI) presses, identified as numbers 5 (also known as #601), and 6 (also known as #602), shall be operated in compliance with the applicable air pollution control requirements of 20 DCMR.

b. These permits expire on January 4, 2021 (20 DCMR 200.4). If continued operation after this date is desired, the owner or operator shall submit an application for renewal by October 4, 2020.

c. Operation of equipment under the authority of these permits shall be considered acceptance of its terms and conditions.

d. The Permittee shall allow authorized officials of the District, upon presentation of identification, to:

1. Enter upon the Permittee’s premises where a source or emission unit is located, an emissions related activity is conducted, or where records required by this permit are kept;

2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of this permit;

3. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and

4. Sample or monitor, at reasonable times, any substance or parameter for the purpose of assuring compliance with this permit or any applicable requirement.

e. This permit shall be kept on the premises and produced upon request.

f. Failure to comply with the provisions of this permit may be grounds for suspension or revocation. [20 DCMR 202.2]

g. If not already completed, within three (3) months of issuance of this permit to operate, the Permittee shall submit a complete application to modify the facility’s Title V operating permit to include the requirements of this permit. [20 DCMR 301.1(a)(3)].

II. Emission Limitation:

a. Emissions of volatile organic compounds (VOC) from the ink used in the process shall not exceed 0.88 pounds per press hour. Except when tested on a one-time basis in accordance with Condition IV(f), compliance with this condition may be determined on a monthly average basis. Monthly average emissions shall be calculated by determining the amount of ink used in the SOI presses in a given month, in pounds, multiplying that value by the percent of the ink used that is emitted as VOC emissions per the most current valid data available, and dividing the result by the number of hours of operation of the presses. This calculation may be performed on a press specific basis or on an average basis across these two SOI presses.

b. VOC emissions from cleaning solvents used shall not exceed 0.60 pounds per press hour. Except when tested on a one-time basis in accordance with Condition IV(f), compliance with this condition may be determined on a monthly average basis. Monthly average emissions shall be calculated by determining the amount of each cleaning solvent used by these two SOI presses in a given month, in pounds, multiplying that by the percent of the solvent used that is emitted, based on the most current data available, and dividing the result by the number of hours of operation of the presses. This calculation may be performed on a press specific basis or on an average basis across these two SOI presses.

c. The total annual VOC emitted from the ink and cleaning solvents as a result of operation of the two presses combined shall not exceed 11.34 tons per year (an average of 5.67 tons per press).

d. Visible emissions shall not be emitted into the outdoor atmosphere from this press, except that discharges not exceeding forty percent (40%) opacity (unaveraged) shall be permitted for two (2) minutes in any sixty (60) minute period and for an aggregate of twelve (12) minutes in any twenty-four hour (24 hr.) period during start-up, cleaning, adjustment of combustion controls, or malfunction of the equipment [20 DCMR 606.1]

 e. 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]

III. Operational Limitations:

1. The VOC content of any ink used in connection with the presses shall not be greater than twelve percent (12%) by weight. [20 DCMR 710.4, 710.5, and 710.9(a)]

b. The VOC emissions released to the atmosphere from the twelve percent (12%) VOC content by weight ink used in connection with the presses shall not exceed one percent (1%) of the 12% VOC content ink by weight. [20 DCMR 201]

1. Emissions from cleaning solvents shall be minimized by the following methods [20 DCMR 201]:

1. The vapor pressure of the cleaning solvent(s) used on these presses shall be less than 5 mmHg at 20 degrees C;

2. The VOC content of the cleaning solvent(s) used on these presses shall be less than 50% by weight; and

3. Automatic plate wash units shall be used to reduce solvent consumption.

1. The VOC content of the “wiping solution” shall not exceed one percent (1%) by weight. [20 DCMR 710.4, 710.8(b) and 710.9(a)]
2. For Conditions III(a) and (d), compliance shall be determined consistent with the testing requirements of Condition IV (g). [20 DCMR 710.9]
3. The average hours of operation per press shall not exceed 7,665 hours per year. [20 DCMR 201]
4. Solvent cleaning operations shall not exceed an average of 7,665 hours per year per press. [20 DCMR 201]
5. Ink usage in connection with all forms of intaglio printing shall be minimized to the extent feasible by routing the inking cylinders or other techniques. [20 DCMR 710.10]
6. All containers holding VOC containing materials shall be open only when necessary and openings shall be restricted to the extent feasible. [20 DCMR 710.12]
7. The leaking of any solvent or solvent-containing material from any printing unit or associated equipment is prohibited. [20 DCMR 710.13]
8. The storage or disposal of any solvent-containing material, including waste material, in a manner that will cause or allow its evaporation into the atmosphere is prohibited. [20 DCMR 710.14]
9. To the greatest extent feasible, persons operating printing units and associated equipment shall minimize their use of VOC containing materials by restricting wasteful usage and by replacing the material with emulsions or other materials. [20 DCMR 710.15]

m. At all times, including periods of startup, shutdown, and malfunction, the owner shall, to the extent practicable, maintain and operate the units in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating procedures are being used will be based on information available to the Department which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

IV. Monitoring and Testing Requirements:

a. The Permittee shall monitor the types, constituents, characteristics, and quantities of inks and cleaning solvents used on the presses to ensure compliance with Conditions III(a) through (c).

b. The Permittee shall monitor the operating hours of the press to ensure compliance with Conditions II(a) and (b) and III(f) and (g).

1. The Permittee shall monitor use of storage containers for VOC and solvent-containing materials and disposal practices for such materials to ensure compliance with Conditions III(i) and (k).
2. The Permittee shall monitor the status of the presses and related equipment to ensure that no leaking is occurring and that they are being operated properly to ensure compliance with Conditions III(j) and (m). Any leaks identified as a result of this monitoring shall be repaired promptly.
3. The Permittee shall monitor and continually review and observe operational practices to ensure compliance with Conditions III(h) and (l).
4. The Permittee shall conduct and allow the Department access to conduct tests of air pollution emissions from any source as requested. [20 DCMR 502.1]

g. At least on a quarterly basis and whenever there is a change in formulation of inks or wiping solutions, the Permittee shall analyze samples of each ink and wiping solution used on the presses during that quarter to determine the weight percent VOCs in the inks and wiping solutions. [20 DCMR 502.1 and 20 DCMR 710.9]

Compliance determinations and testing pursuant to this condition shall be performed as follows:

1. The percentage VOC content is by weight and applies to the inks and solutions as contained in the storage wells (fountains) of the printing unit, and does not include water;

2. The percentage VOC content shall be determined in accordance with Procedure B of test method ASTM D-2369-81; where, in lieu of testing the formulated inks and solutions, the individual components of the formulations may be tested and the VOC content of the formulations may be calculated there from; and

3. The percentage water content shall be determined in accordance with test method ASTM D-3792-79.

h. The Permittee shall monitor the emission points for visible emissions as needed to ensure compliance with condition II(d).

V. Record Keeping Requirements:

The following information shall be maintained at the facility for a period not less than five (5) years from the date of the monitoring sample, measurement, report, or application [20 DCMR 500.8 and 20 DCMR 302.1(c)(2)(B)] and shall be made available to the Department upon written or verbal request:

a. Records of the identity and volume of each cleaning solvent used on the presses each month;

b. Records of the mass of each ink used on the presses each month;

c. Records of the VOC content, by weight, of each ink used.

d. Records of the chain of custody of each ink sample taken as well as the identification of any laboratory used to analyze the sample and the methods used by that laboratory.

e. Records of the identity, vapor pressure, and VOC content of any cleaning solvents used. This information is usually contained in Material Safety Data Sheets (MSDSs) for the products used.

f. Records, updated monthly, of the total mass of VOCs emitted as a result of the operation of the presses (including VOCs emitted by use of inks and cleaning solvents);

g. Records of the total hours of operation of each press each month;

h. Records, updated monthly, of the average VOC emissions per hour of press operation that month from each of the following sources:

1. inks; and

2. solvents.

(Note: these records shall be used to determine compliance with Conditions II(a) and (b) of this permit. They shall be updated within thirty (30) days of the end of each calendar month.);

i. Records of the results of the occurrence of any leaks of any solvent-containing material from any printing unit or associated equipment, along with the actions taken to address the leak;

j. Records of the dates, methods and procedures used, and results of all testing performed by the Permittee or its representatives or contractors pursuant to Conditions IV(f) and (g).

k. Records of the maintenance performed on the presses; and

l. Records of the results of any visible emissions observed pursuant to condition IV(h). If no visible emissions were observed, no records are required.

VI. Reporting Requirements:

a. A copy of the analytical results of the ink and wiping solution samples taken quarterly and upon formulation changes pursuant to Condition IV(g) shall be submitted to the Department with the Permittee’s Title V semi-annual and annual reports.

b. Emissions in excess of any emission limits shall be reported by telephone, immediately upon discovery, to the Air Quality Division’s Compliance and Enforcement Branch.

c. In addition to complying with Condition VI(b) and any other reporting requirements mandated by 20 DCMR, the owner or operator shall, within thirty (30) calendar days of becoming aware of any occurrence of excess emissions, supply the Department in writing with the following information:

1. The name and location of the facility;

2. The subject source(s) that caused the excess emissions;

3. The time and date of the first observation of the excess emissions;

4. The cause and estimated/expected duration of excess emissions;

5. For sources subject to numerical emission limitations, the estimated rate of emissions (expressed in the units of the applicable emission limitation) and the operating data and calculations used in determining the magnitude of the excess emissions; and

6. The proposed corrective actions and schedule to correct the conditions causing the excess emission.

If you have any questions, please me at (202) 535-1747 or Abraham T. Hagos at (202) 535-1354.

Sincerely,

Stephen S. Ours, P.E.

Chief, Permitting Branch

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