##### December 9, 2014

Neal Mohlmann, Chief

Office of Environment and Safety

Bureau of Engraving and Printing

U.S. Department of the Treasury

14th and C Streets, SW

Washington, D.C. 20228

**RE: Permit No. 6377 to Operate D200M Nickel Electroforming/Plating Line for Intaglio Printing Plates and Dies**

Dear Mr. Mohlmann:

Pursuant to sections 200.1 and 200.2 of Title 20 of the District of Columbia Municipal Regulations (20 DCMR), a permit from the District Department of the Environment (the Department) shall be obtained before any person can construct and operate a stationary source in the District of Columbia. The application of the United States Department of the Treasury, Bureau of Engraving and Printing (“the Permittee” or “BEP”) for a permit to operate a D200M nickel electroforming/plating line for Intaglio printing plate manufacturing, for which the installation permit (#5839) was issued on July 31, 2006, at the Bureau of Engraving and Printing (BEP), located in the Main Building at 14th and C Streets SW, per the submitted data, plan and specifications, received April 29, 2010, and re-submitted June 18, 2014 is hereby approved, subject to the conditions contained in this permit.

The approved equipment includes the following components: a wet packed scrubber (PBS 15000) control device connected to six (6) nickel electroforming tanks, two (2) comby sprays, two (2) reserve filtering and decanting tanks, three (3) wash sinks, six (6) rectifiers and two (2) working and mounting tables.

I. General Requirements:

a. The nickel electroforming/plating line for intaglio printing plate manufacturing shall be operated in compliance with applicable air pollution control requirements of 20 DCMR and 40 CFR 63 Subpart WWWWWW.

b. This permit expires on December 8, 2019 [20DCMR 200.4]. If continued operation after this date is desired, the owner or operator shall submit an application for renewal by September 8, 2019.

c. Operation of equipment under the authority of this permit 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 these permits 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 these permits; 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.

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

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

h. If not already completed, within 90 days of issuance of this permit to operate, the Permittee shall submit a complete application update to modify the facility’s Title V operating permit to include the requirements of this permit. [20 DCMR 301.1(a)(3)]

II. Emission Limitations:

a. The maximum nickel emissions from the operation of the nickel electroforming/plating line for the manufacture of intaglio printing plates shall not exceed 3.16E-04 lb/hr and 0.002 ton/yr. [20 DCMR 201]

b. The maximum sulfuric acid emissions from the operation of the nickel electroforming/plating line for the manufacture of intaglio printing plates shall not exceed 1.9E-03 lb/hr and 0.0083 ton/yr. [20 DCMR 201]

c. Visible emissions shall not exceed zero percent opacity from the nickel electroforming/plating line for the manufacture of intaglio printing plates. [20 DCMR 201 and 20 DCMR 606.1]

d. 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]

III. Operational Limitations:

a. The nickel electroforming/plating line for the manufacture of intaglio printing plates shall not use raw materials in excess of the following limits on a 12-month rolling basis: [20 DCMR 201]

1. Nickel rounds or pellets: 8.9 lb/hr and 78,000 lb/yr;

2. Nickel sulphamate: 200 gallons/yr;

3. Sulphamic Acid: 400 lb/yr

4. Boric Acid: 350 lb/yr; and

5. Wetting Agent (Sodium Lauryl Sulfate) 100 lb/yr.

b. The Permittee must capture and exhaust emissions from the affected tank to the packed bed scrubber as follows: [40 CFR 63.11507(a)(2)(i) and (ii)]

1. The Permittee must operate the packed bed scrubber according to the manufacturer’s specifications and operating instructions.

2. The Permittee must keep the manufacturer’s specifications and operating instructions at the facility at all times in a location where they can be easily accessed by the operators.

c. The Permittee must cover each tank surface by using a tank cover over all of the effective surface of the tank for at least 95% of the electrolytic process operating time. [40 CFR 63.11507(a)(3)(i) and 20 DCMR 201]

d. In addition to complying with Condition III(b)(1), the packed bed scrubber shall be operated and maintained as follows:

1. The gas flow velocity shall be maintained between 1,500 and 2,100 feet per minute (fpm), inclusive, during daytime operation. Should the velocity drift out of this range, appropriate maintenance activities shall be performed within 48 hours of discovery to bring the flow rate back into the normal range.

2. The gas flow velocity may drop below 1,500 fpm during nighttime operation, however, whenever operations are occurring during regular daytime business hours, the line must be operated in daytime operations mode.

3. At least once per quarter the base reservoir shall be fully drained and refilled with fresh water.

4. The spray nozzles shall be visually examined to ensure that they retain a full cone pattern at least once per week. If any problems are noted during any examination, appropriate maintenance activities shall be performed within 24 hours of discovery.

e. When operating the nickel electroforming/plating line, the Permittee must implement the following applicable management practices as practicable: [40 CFR 63.11507(a) and (g)(1) through (g)(12)]

1. Minimize bath agitation when removing any parts processed in the tank, as practicable except when necessary to meet part quality requirement.

2. Maximize the draining of bath solution back into the tank, as practicable, by extending drip time when removing parts from the tank; using drain boards (also known as drip shields); or withdrawing parts slowly from the tank, as practicable.

3. Optimize the design of barrels, racks, and minimizing dragout of bath solution (such as by using slotted barrels and tilted racks, or by designing parts with flow-through holes to allow the tank solution to drip back into the tank), as practicable.

4. Use tank covers, if already owned and available at the facility, whenever practicable.

5. Minimize or reduce heating of process tanks, as practicable (e.g., when doing so would not interrupt production or adversely affect part quality).

6. Perform regular repair, maintenance, and preventive maintenance of racks, barrels, and other equipment associated with affected sources, as practicable.

7. Minimize bath contamination, such as through the prevention or quick recovery of dropped parts, use of distilled/de-ionized water, water filtration, pre-cleaning of parts to be plated, and thorough rinsing of pre-treated parts to be plated, as practicable.

8. Maintain quality control of chemicals, and chemical and other bath ingredient concentrations in the tanks, as practicable.

9. Perform general good house-keeping, such as regular sweeping or vacuuming, if needed, and periodic washdowns, as practicable.

10. Minimize spills and overflow of tanks, as practicable.

11. Use squeegee rolls in continuous or reel-to-reel plating tanks, as practicable.

12. Perform regular inspections to identify leaks and other opportunities for pollution prevention.

f. At all times, including periods of startup, shutdown, and malfunction, the owner shall, to the extent practicable, maintain and operate the unit 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, Testing, and Compliance Demonstration Requirements:

a. The Permittee must perform EPA test methods 8 and 29 on the nickel electroforming/plating to determine compliance with Condition II(a) and (b) within one year from the initial issuance date of this permit and shall follow the procedures below and furnish the Department with a written report of the results of such performance tests in accordance with the following requirements [20 DCMR 502]:

1. A test protocol shall be submitted to the following address a minimum of thirty (30) days in advance of the proposed test date. The test shall be conducted in accordance with Federal and District requirements.

Chief, Compliance and Enforcement Branch

Air Quality Division

1200 First Street, NE

5th Floor

Washington, DC 20002

2. The test protocol shall be approved by the Department prior to initiating any testing. Upon approval of the test protocol, the Company shall finalize the test date with the assigned inspector in the Permitting and Enforcement Branch. The Department must have the opportunity to observe the test for the results to be considered for acceptance.

3. The final results of the testing shall be submitted to the Department within sixty (60) days of the test completion. A copy of the test report shall be submitted to the address in Condition IV(a)(1).

4. The final report of the results shall include the emissions test report (including raw data from the test) as well as a summary of the test results and a statement of compliance or non-compliance with permit conditions to be considered valid. The summary of results and statement of compliance or non-compliance shall contain the following information:

i. A statement that the owner or operator has reviewed the report from the emissions testing firm and agrees with the findings.

ii. Summary of results with respect to each permit condition.

iii. Statement of compliance or non-compliance with each permit condition.

5. The results must demonstrate to the Department’s satisfaction that the emission unit is operating in compliance with the applicable regulations and conditions of this permit; if the final report of the test results shows non-compliance the owner or operator shall propose corrective action(s). Failure to demonstrate compliance through the test may result in enforcement action.

b. The Permittee shall monitor the types and quantities of raw materials used in the nickel electroforming/plating line for the manufacture of intaglio printing plates to ensure compliance with Condition III(a).

c. The Permittee must demonstrate initial compliance according to 40 CFR 63.11508 (c)(2)(i) through (v) as follows:

1. The Permittee must install a control system designed to capture emissions from the affected tank and exhaust them to a composite mesh pad, packed bed scrubber, or mesh pad mist eliminator.

2. The Permittee must state in the Notification of Compliance Status that BEP has installed the control system according the manufacture’s specifications and instructions.

3. The Permittee must implement the applicable management practices specified in Condition III(e) as practicable.

4. The Permittee must state in the BEP’s Notification of Compliance Status that BEP have implemented the applicable management practices specified in Condition III(e) as practicable.

5. The Permittee must follow the manufacturer’s specifications and operating instructions for the control systems at all times.

c. The Permittee must demonstrate initial compliance according to 40 CFR 63.11508 (c)(3)(i) through (iv) as follows:

1. The Permittee must install a tank cover on the affected tank.

2. The Permittee must state in the Notification of Compliance Status that BEP operate the tank with the cover in place at least 95 percent of the electrolytic process operating time.

3. The Permittee must implement the applicable management practices specified in Condition III(e) as practicable.

4. The Permittee must state in the Notification of Compliance Status that BEP have implemented the applicable management practices specified in Condition III(e) as practicable.

d. To demonstrate continuous compliance with the applicable management practices and equipment standards specified in this permit and 40 CFR 63, Subpart WWWWWW, the Permittee must satisfy the following requirements: [20 DCMR 107.1 and 40 CFR 63.11508 (d)(1), (2), (4), (6) and (8)]

1. The Permittee must always operate and maintain the Nickel Plating including air pollution control equipment. The control equipment shall remain operative or effective and shall not be removed. [20 DCMR 107.1 and 40 CFR 63.11508(d)(1)]

2. The Permittee must prepare an annual compliance certification according to the requirements specified in Condition VI(c) and keep it in a readily-accessible location for inspector review [40 CFR 63.11508(d)(2)].

3. The Permittee must demonstrate continuous compliance of the control system as follows: [40 CFR 63.11508(d)(4)]

i. The Permittee must operate and maintain the control system according to the manufacturer’s specifications and instructions.

ii. Following any malfunction or failure of the capture or control devices to operate properly, The Permittee must take immediate corrective action to return the equipment to normal operation according to the manufacturer’s specifications and operating instructions.

iii. The Permittee must state in the annual certification that BEP has operated and maintained the control system according to the manufacturer’s specifications and instructions.

iv. The Permittee must record the results of all control system inspections, deviations from proper operation, and any corrective action taken.

v. The Permittee must keep the manufacturer’s specifications and operating instructions at the facility at all times in a location where they can be easily accessed by the operators.

4. The Permittee must demonstrate continuous compliance regarding operating the affected tank with a cover as follows: [40 CFR 63.11508(d)(6)]

i. The Permittee must operate the tank with the cover in place at least 95 percent of the electrolytic process operating time.

ii. The Permittee must record the times that the tank is operated and the times that the tank is covered on a daily basis.

iii. The Permittee must state in the annual certification that BEP has operated the tank with the cover in place at least 95 percent of the electrolytic process time.

5. The Permittee must demonstrate continuous compliance as follows: [40 CFR 63.11508(d)(8)]

i. The Permittee must implement the practices found in Condition III(e) during all times that the affected tank or process is in operation.

ii. The Permittee must state in the annual compliance certification that BEP has implemented the management practices in Condition III(c) as practicable.

e. The Permittee shall monitor the operations to ensure that the nickel electroforming and plating line and associated equipment is being operated and maintained in accordance with Conditions III(b) through (f). If any deficiencies are identified, they must be noted in a log and the corrective actions taken must be recorded.

f. In addition to general monitoring, at least once per quarter, BEP shall perform a thorough inspection of the nickel electroforming and plating line and associated equipment to ensure compliance with Conditions III(b) through (f). The results of these inspections and any corrective actions taken to correct deficiencies shall be recorded in a log.

g. Permittee shall monitor the emission points for visible emissions as needed to ensure compliance with Condition II(c).

 h. Permittee shall monitor the facility for compliance with the nuisance and odor requirements of Condition II(d).

i. Permittee shall conduct and allow the Department access to conduct tests of air pollution emissions from any source as requested. [20 DCMR 502.1]

V. Record Keeping Requirements:

a. The information specified in Condition V shall be maintained by the Permittee at the facility for a period not less than five (5) years from when it was originated and shall be made available to the Department upon written or verbal request. Such records shall meet the following standards: [20 DCMR 302.1(c)(2)(B), 20 DCMR 500.8, and 40 CFR 63.11509(f)]

1. The records shall provide sufficient data and calculations to demonstrate clearly that the emission limitations or control requirements are met; and

2. Data or information required to determine compliance with an applicable limitation shall be recorded and maintained in a time frame consistent with the averaging period of the standard.

b. The Permittee shall maintain records of the types and quantities of raw materials used in the electroforming and plating line to show compliance with Condition III(a).

c. The Permittee shall maintain records of the procedures used and results of testing required pursuant to Conditions IV(a) and (i).

d. The Permittee shall maintain a log of the dates and results of inspections performed pursuant to Condition IV(f) and records of any deficiencies identified pursuant to Conditions IV(e) and (f) as well as the actions taken to correct any identified deficiencies. These records shall identify the personnel/inspector(s) who performed the inspections who shall sign or initial the records to certify that they performed the complete inspection and that the records represent the results of the inspection.

e. The Permittee shall record the total number of plates and nickel dies produced per each bath as well as the total number of hours of operation of the nickel electroforming and plating line each month and each year.

f. The Permittee shall keep records of any occurrences of visible emissions from the emission points of the nickel electroforming and plating line as well as any actions taken to correct the problem.

g. The Permittee shall keep records of any occurrences of exceedances of the requirements of Condition II(d) and any odor complaints received. BEP shall also keep records of the actions taken to correct any identified odor or nuisance pollutant exceedances.

h. The Permittee shall keep records of the maintenance performed on the nickel electroforming and plating line and associated equipment.

i. Permittee shall keep the records specified in 40 CFR 63.11509(e)(1) through (3) as follows:

1. A copy of any Initial Notification and Notification of Compliance Status that BEP submitted and all documentation supporting those notifications.
2. The occurrence and duration of each startup, shutdown, or malfunction of operation of the nickel electroforming and plating line when such startup or shutdown causes the source to exceed any applicable emission limitation.
3. The occurrence and duration of each malfunction of operation or process equipment or the required air pollution control and monitoring equipment.
4. All required maintenance performed on the air pollution control and monitoring equipment.
5. The records required to show continuous compliance with each management practice and equipment standard that applies to the equipment, as specified in IV(d).

VI. Notification and Reporting Requirements:

a. If the Permittee makes a change to the following items (as compared to the previously submitted Notification of Compliance Status) that does not result in a deviation, the Permittee shall submit an amended Notification of Compliance Status within 30 days of making the change: [40 CFR 63.11509(b)(3)]

1. List of affected sources and the plating and polishing metal HAP used in, or emitted by, those sources;

2. Description of the capture and emission control systems used to comply with the applicable equipment standards; or

3. Statement by the owner or operator of the affected source as to whether the source is in compliance with the applicable standards or other requirements.

b. The Permittee shall prepare an annual compliance certification report according to Conditions VI(b)(1) through (5). Unless requested by the Department or required to be submitted under a different regulatory or permit requirement, these reports do not need to be submitted unless a deviation from the requirements of any of the permit conditions of this permit has occurred during the reporting year, in which case, the annual compliance report shall be submitted along with the deviation report. [40 CFR 63.11509(c)(2), (4), (6), and (7)]

1. The Permittee must state that it has operated and maintained the control system according to the manufacturer’s specifications and instructions.
2. The Permittee must state that BEP has operated the tank with the cover in place at least 95 percent of the electrolytic process time.
3. The Permittee must state that you implemented the applicable management practices in Condition III(e) as practicable.
4. Each annual compliance report shall be prepared no later than January 31 of each year immediately following the reporting period and kept in a readily-accessible location for inspector review.
5. If a deviation has occurred during the year, each annual compliance report shall be submitted along with the deviation report, and postmarked or delivered no later than January 31 of the year immediately following the reporting period.

c. Any deviations from the compliance requirements specified in this permit that occurred during a calendar year shall be submitted (postmarked or delivered), along with the annual compliance certification report, no later than January 31 of the year immediately following the calendar year reporting period. [40 CFR 63.11509(d)]

d. All reports and certifications required to be submitted pursuant to Conditions VI(a) through (c) shall be submitted to both of the following addresses:

Chief, Compliance and Enforcement Branch

Air Quality Division

1200 First Street, NE 5th Floor

Washington, DC 20002

and

U.S. Environmental Protection Agency, Region III

Attn: Director, Air Protection Division

1650 Arch Street

Philadelphia, PA 19103

e. 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 at (202) 724-7650 or (202) 535-2250. If such emissions are believed to be an imminent and substantial danger to public health, safety, or the environment, prior to contacting the Compliance and Enforcement Branch, the Permittee shall report the exceedance to the Department’s Emergency Operations number at (202) 645-5665.

f. In addition to complying with Conditions VI(a) through (e) and any other reporting requirements mandated by the 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

SSO:ATH