##### October 28, 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 Nos. 6373-R1, 6374-R1, and 6739 to Operate Three Simultan, Sheet Fed, Two Sided, Eight Plate Cylinder, Non-Heatset Lithographic Printing Presses**

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 new stationary source in the District of Columbia. The application of the United States Department of the Treasury, Bureau of Engraving and Printing (“the Permittee”) for permits to operate three Simultan, sheet fed, two sided, eight plate cylinder, non-heatset, lithographic printing presses, described in the following table, at the Bureau of Engraving and Printing (BEP) at 14th and C Streets SW, per the submitted data, plan and specifications, received May 16, 2013, and re-submitted April 9, 2014 is hereby approved, subject to the following conditions:

|  |  |  |
| --- | --- | --- |
| **Presses Covered by this Document** | | |
| **Press Number** | **Press Location** | **Permit Number** |
| 310 | Basement, C-Wing, Main Building (Section 10) | 6373-R1 |
| 903 | 1st Floor, C-Wing, Main Building (Section 9) | 6374-R1 |
| 203 | Basement, A-wing, Main Building (Section 2) | 6739 |

I. General Requirements:

a. The three Simultan presses identified as numbers 310, 903, and 203 shall be operated in compliance with the applicable air pollution control requirements of 20 DCMR. *(Note: An in-line continuous inkjet printer, also known as the “Parvis system”, was installed on press #903 in 2013 for a pilot test; it remains on the press but is not permitted to operate. A request to install a similar unit on press #310 was withdrawn and permission for its installation is not granted.)*

b. These permits expire on October 27, 2019 [20DCMR 200.4]. If continued operation after this date is desired, the owner or operator shall submit an application for renewal by July 27, 2019.

c. Operation of equipment under the authority of these permits shall be considered acceptance of their 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.

f. These permits shall be kept on the premises and produced upon request.

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

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

II. Emission Limitations:

a. The maximum average emissions, determined on a monthly basis, of volatile organic compounds (VOC) resulting from the operation of each Simultan press shall not exceed the amounts in the following table:

|  |  |
| --- | --- |
| **Press Number** | **Allowable Emissions (lbs/day, monthly average)** |
| 310 | 26.5 |
| 903 | 26.5 |
| 203 | 18.1 |

b. Visible emissions shall not exceed zero percent (0%) opacity from the Simultan presses. [20 DCMR 201 and 606.1]

c. 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. a. No fountain solution (also known as dampening solution) shall be used in connection with the printing units in excess of five percent (5%) alcohol (by weight) in the fountain or, to achieve an equivalent level of control, any one of the following shall occur: [20 DCMR 716.6]:

1. Reduce the on-press (as applied) alcohol content to five percent (5%) alcohol or less (by weight);

2. Use eight and a half percent (8.5%) alcohol or less (by weight) on-press (as-applied) in the fountain solution, provided the solution is refrigerated to less than sixty degrees Fahrenheit (60oF) or sixteen degrees Celsius (16oC); or

3. Use an alcohol substitute so that the on-press (as-applied) VOC content is five percent (5%) or less (by weight) as determined by EPA Method 24 and no alcohol is in the fountain solution.

b. No cleaning solutions shall be used in conjunction with the units containing VOCs in excess of the following limits [20 DCMR 201 and 20 DCMR 716.8(b)]:

1. Thirty weight percent (30%) as determined by EPA method 24 or by calculations based on material safety data sheets (MSDS) where the manufacturer has certified that VOC content was determined by EPA method 24; or

2. Ten millimeters of mercury (10 mmHg) at 20 degrees Celsius (20oC or 68oF) of VOC composite partial pressure calculated as follows:

Where:

Ppc = VOC composite partial pressure at 20oC or 68oF, in mmHg;

Wi = Weight of the “i”th VOC compound, in grams, as determined by ASTM E 260-91;

Ww = Weight of water, in grams as determined by ASTM D 3792-86;

We = Weight of the “i”th exempt compound, in grams, as determined by ASTM E 260-91;

Mwi = Molecular weight of the “i”th VOC compound, in grams per gram-mole (g/g-mol), as given in chemical reference literature;

Mww = Molecular weight of water, eighteen grams per gram-mole (18 g/g-mol)

Mwe = Molecular weight of the “i”th exempt compound, in grams per gram-mole (g/g-mol), as given in chemical reference literature; and

VPi = Vapor pressure of the “i”th VOC compound at twenty degrees Celsius (20oC) or sixty-eight degrees Fahrenheit (68oF), in mmHg, as determined by Condition III(c).

c. The vapor pressure of each single component compound may be determined from ASTM D2879-86 or may be obtained from a published source approved by the District, such as the sources referenced in 40 C.F.R. § 52.741, or any of the following sources [20 DCMR 747.6]:

1. The most recent edition of *The Vapor Pressure of Pure Substances*, Boulbik, Fried, and Hala; Elsevier Scientific Publishing Company, New York;

2. The most recent edition of *Perry’s Chemical Engineer’s Handbook*, McGraw-Hill Book Company;

3. The most recent edition of *CRC Handbook of Chemistry and Physics*, Chemical Rubber Publishing Company;

4. The most recent edition of *Lange’s Handbook of Chemistry*, John Dean, editor, McGraw-Hill Book Company; or

5. Additional sources approved by the SCAQMD or other California Air districts.

d. Condition III(b) does not apply to: [20 DCMR 716.10]

1. Up to one hundred and ten gallons (110 gal.) per year (facility-wide) of cleaning solutions which meet neither Condition III(b)(1) or (2); and

2. Cleaners used on electronic components of a press, pre-press cleaning operations (for example, platemaking), post-press cleaning operations (for example, binding), cleaning supplies (for example, detergents) used to clean the floor (other than dried ink) in the area around a press, or cleaning performed in parts washers or cold cleaners.

e. The Permittee shall ensure that cleaning solutions and shop towels used for cleaning are kept in closed containers. [20 DCMR 716.9]

f. The Permittee shall ensure that all containers holding VOC-containing materials shall be open only when necessary and openings shall be restricted to the extent feasible. [20 DCMR 716.21]

g. The Permittee shall not allow the leaking of any VOC or VOC-containing material from the printing unit or associated equipment. [20 DCMR 716.22]

h. The Permittee shall not allow the storage or disposal of any VOC or VOC-containing material, including waste material, in a manner that will cause or allow its evaporation into the atmosphere. [20 DCMR 716.23]

i. To the greatest extent feasible, the Permittee shall minimize the use of VOC-containing materials by restricting wasteful usage and by replacing such materials with emulsions or other materials. [20 DCMR 716.24]

j. The maximum average sheet feed rate, determined on a monthly basis, shall not exceed 9000 sheets per hour for any of the three presses. [20 DCMR 201]

k. 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 and Testing Requirements:

a. 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].

b. The Permittee shall monitor the identities, VOC contents, and quantities of each VOC-containing material used on the equipment covered by these permits so as to ensure compliance with Conditions III(a) and (b).

c. The Permittee shall monitor the identities, VOC contents, and quantities of cleaning solutions exempt from the requirements of Condition III(b) pursuant to Condition III(d)(1), facility-wide, to ensure that the 110 gallon limit found in Condition III(d)(1) is not exceeded.

d. To show compliance with Condition III(b), the Permittee shall perform one of the following:

1. Perform testing of each cleaning solution used in accordance with EPA Reference Method 24 (40 CFR 60, Appendix A) that is to be used in the units prior to initial use and semi-annually thereafter.

2. Obtain and review MSDSs for each cleaning solution used to ensure that VOC concentrations do not exceed 30% and that the MSDS values are based on EPA Reference Method 24 testing; or

3. Perform testing or obtain and review accurate documentation for each cleaning solution showing that the composite partial pressure of all VOCs contained in each solution is not greater than 10 mmHg at 10 °C. The composite partial pressure is to be calculated as described in Condition III(b)(2).

e. Unless a specific method is specified elsewhere in these permits, the VOC content of a substance shall be determined based on the MSDS of the material, EPA Reference Method 24, or any other method approved in advance by the Department.

f. The Permittee shall monitor the equipment, materials used, storage containers for VOCs and VOC-containing materials, and disposal procedures to ensure compliance with Conditions III(e) through (i) and (k).

g. In addition to general monitoring, at least once per quarter, the Permittee shall perform a thorough inspection of the presses, press areas, associated equipment, and all solvents storage containers to ensure compliance with Conditions III(e) through (h). Any leaks identified as a result of this monitoring shall be repaired promptly.

h. The Permittee shall monitor the total number of sheets fed each month and the total number of operating hours each month. These numbers shall be used to calculate the average sheet feed rate for the month to determine compliance with Condition III(j).

i. The Permittee shall monitor the emission points for visible emissions as needed to ensure compliance with Condition III(b).

j. The Permittee shall monitor the facility for compliance with the nuisance and odor requirements of Condition II(c).

V. Record Keeping Requirements:

a. The information specified in Condition V(b) shall be maintained by the Permittee at the facility for a period not less than five (5) years from when they were 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 20 DCMR 716.25(a)]

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

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; and

b. The Permittee shall maintain the following records in accordance with Condition V(a):

1. Records of the identity and VOC content of each ink, fountain solution, blanket wash, cleaning solution, or other VOC-containing material used in conjunction with the equipment each month;

2. Records of the results of testing or records of the manufacturers’ documentation obtained pursuant to Conditions III(b) and IV(d). Chains of custody for all samples shall be required as part of the testing records required.

3. Records of the quantity of each VOC-containing material used on the presses each month;

4. Records of the total 12-month rolling VOC emissions from the equipment, updated monthly;

5. Records of the alcohol content of any fountain solution used in connection with the printing unit sufficient to document compliance with Condition III(a).

6. If complying with Condition III(b)(2) instead of Condition III(b)(1), all information necessary to complete the calculation included in that condition for each cleaning solution used and showing compliance by that methodology as supplemented by Condition III(c);

7. Records of any VOC leaks identified and the actions taken to correct the problem;

8. Records of the results of the quarterly (or more frequent) inspections of the presses, associated equipment, and solvent storage containers performed pursuant to Condition IV(g). These records shall identify the inspector(s) who performed the inspections and these inspectors shall sign or initial the records to certify that they performed the complete inspection and that the records represent the results of the inspection;

9. Records of the total number of sheets fed each month to each press as well as the total number of hours of operation of each press each month;

10. Based on the information recorded pursuant to Condition V(b)(9), the Permittee shall record, within one week of the end of the month, the average sheet feed rate for each press the previous month;

11. Records of all deviations from the requirements of Conditions III (e) through (i) and (k);

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

A. inks; and

B. solvents.

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

13. Records of all maintenance performed on the presses and associated equipment;

14. Records of any visible emissions from the equipment observed during operation; and

15. Records of any complaints or exceedances related to the odor requirements of Condition II(c) and the response taken by the Permittee to investigate and correct any identified problem(s).

VI. Reporting Requirements [20 DCMR 200.8]:

a. The Permittee shall immediately report to the Department, by telephone, any permit deviation that poses an imminent and substantial danger to public health, safety, or the environment. [20 DCMR 302.1(c)(3)(C)(ii)] This shall be reported to the Department’s Emergency Operations number at (202) 645-5665.

b. The Permittee shall immediately notify the Air Quality Division by telephone via the Department’s Emergency Operations number at (202) 645-5665, of any exceedance of any emission limit or any limit established as a surrogate for emissions. Additionally, the Permittee shall submit to the Air Quality Division a written notice of such exceedance within two working days of discovery. [20 DCMR 500.1]

c. In addition to complying with Condition VI(a) and (b) 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.

d. Within 15 days of receipt of a written request, the Permittee shall furnish to the District any information the District requests to determine whether cause exists for reopening or revoking the permit, or to determine compliance with the permit. Upon request, the Permittee shall also furnish the District with copies of records required to be kept by the permit. [20 DCMR 302.1(g)(5)]

e. The Permittee shall include the conditions of these permits in each semi-annual and annual compliance certification submitted to the Department pursuant to Chapter 3 permit #035.

f. A copy of the most recent analytical results or other documentation kept pursuant to Conditions V(b)(1) and (2) shall be submitted to the Department with the Permittee’s Title V semi-annual and annual reports for each VOC-containing material used during the reporting period.

g. All written reports required pursuant to these permits shall be submitted to:

Chief, Compliance and Enforcement Branch

Air Quality Division

1200 First Street, NE

5th Floor

Washington, DC 20002

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

Sincerely,

Stephen S. Ours, P.E.

Chief, Permitting Branch

SSO/ATH