October 24, 2023

Patricia S. Collins

Deputy Director

United States Government Publishing Office

732 North Capitol Street NW

Washington DC 20401

**RE: Permit No. 7355 to Construct and Operate a Koenig & Bauer Rapida 106 X Sheetfed Offset Printing Press (Press Group 90, GPO Unit ID 6957)**

Dear Patricia S. Collins:

Pursuant to sections 200.1 and 200.2 of Title 20 of the District of Columbia Municipal Regulations (20 DCMR), a permit from the Department of Energy and 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 United States Government Publishing Office (GPO) (“The Permittee”) to construct and operate a new Koenig & Bauer Rapida 106 X Sheetfed Offset Printing Press with serial number 382750, on the 2nd floor of Building C, at 732 North Capitol Street NW, Washington DC 20401, per the submitted plans and specifications received by the Department on June 29, 2023, is hereby approved, subject to the following conditions:

I. General Requirements:

1. The Koenig & Bauer Rapida 106 X Sheetfed Offset Printing Press shall be constructed and operated in compliance with the applicable air pollution control requirements of 20 DCMR.

b. This permit expires on October 23, 2028 [20DCMR 200.4]. If continued operation after this date is desired, the Permittee shall submit a request for an extension by July 23, 2028.

c. Construction or operation of equipment under the authority of this permit shall be considered acceptance of its terms and conditions.

1. 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. Within twelve (12) months of initial startup of the printing press, the Permittee shall submit a complete application (or application revision, if another application to renew or modify the permit is already pending) to modify the facility’s Title V operating permit to incorporate the requirements of this permit in that Title V operating permit. [20 DCMR 301.1(a)(2)]. For purposes of this condition and Condition VI(d), “startup” means the setting in operation of the source or portion of the source for any purpose.

II. Emission Limitations:

* 1.

a. Volatile organic compound (VOC) emissions from this equipment shall not exceed 4.50 tons in any 12-consecutive-month rolling period. [20 DCMR 200.7]

b. No visible emissions shall be emitted from this equipment. [20 DCMR 201 and 20 DCMR 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]

Violation of the requirements of this condition that occur as a result of unavoidable malfunction, despite the conscientious employment of control practices, shall be an affirmative defense for which the owner or operator shall bear the burden of proof. A malfunction shall not be considered unavoidable if the owner or operator could have taken, but did not take, appropriate steps to eliminate the malfunction within a reasonable time, as determined by the Department. [20 DCMR 903.13(b)]

III. Operational Limitations:

* 1. a. The Permittee shall not use more than a combined 57,500 gallons per ear of Aqueous Coating Q9009B and Aqueous Coating Q9010B. [20 DCMR 200.7] Should any alternative aqueous coating be planned for use in lieu of or to supplement these coatings, the alternative coating must be reviewed and approved by the Department and this permit condition must be updated to reflect the change prior to use of the new coating in this equipment.
	2. b. No fountain solution shall be used in connection with the printing unit in excess 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(c)]:

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 (16°C); 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.

c. No cleaning solutions shall be used in conjunction with the unit containing VOCs in excess of ten millimeters of mercury (10 mmHg) at twenty degrees Celsius (20°C) or sixty-eight degrees Fahrenheit (68°F) of VOC composite partial pressure calculated as follows [20 DCMR 716.8(a)]:

$$Pp\_{c} = \frac{\sum\_{i=1}^{n}\frac{W\_{i} x VP\_{i}}{Mw\_{i}}}{\frac{W\_{w}}{Mw\_{w}}+\sum\_{i=1}^{n}\frac{W\_{e}}{Mw\_{e}}+\sum\_{i=1}^{n}\frac{W\_{i}}{Mw\_{i}}}$$

Where:

Ppc = VOC composite partial pressure at twenty degrees Celsius (20°C) or sixty-eight degrees Fahrenheit (68°F), 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 (68°F), in mmHg, as determined by Condition III(d).

d. 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.

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. 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 this permit so as to ensure compliance with Conditions III(b) and (c).

c. Unless a specific method is specified elsewhere in this permit, 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.

1. 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 (j).

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 each record 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 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; 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 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 quantity of each VOC-containing material used on the press each month;

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

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

5. All information necessary to complete the calculation included in Condition III(c) for each cleaning solution used and showing compliance by that methodology as supplemented by Condition III(d);

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

7. Records of all deviations from the requirements of Conditions III(e) through (h);

8. Records of all maintenance performed on the presses;

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

10. 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 furnish to the Department, upon receipt of a written request and within a reasonable time, any information that the Department may request 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 to the Department copies of records required to be kept by the permit. [20 DCMR 302.1(g)(5)]

c. The Permittee shall include the conditions of this permit in each semi-annual and annual compliance certification submitted to the Department pursuant to Chapter 3 Permit No. 029-R1-A4 or any subsequently issued Final Title V permit for the 732 N. Capitol Street NW facility.

d. The Permittee shall, within 15 days of initial “startup” of the printing press (see Condition I(g)), notify the Department in writing of the date of the unit’s startup.

e. Unless otherwise specified, all reports required pursuant to this permit shall be submitted to air.quality@dc.gov.

If you have any questions, please me at (202) 535-1747 or stephen.ours@dc.gov.

Sincerely,

Stephen S. Ours, P.E.

Chief, Permitting Branch

Air Quality Division

SSO:AB