

GOVERNMENT OF THE DISTRICT OF COLUMBIA
Department of Energy and Environment

CHAPTER 2 TECHNICAL SUPPORT MEMORANDUM

TO: File

THROUGH: Stephen S. Ours, P.E. *SSO*
Chief, Permitting Branch

FROM: Thomas Olmstead *TO*
Environmental Engineer

**SUBJECT: United States Government Publishing Office
Permit Nos. 7234 thru 7238 to Construct and Operate One (1) Canon
Colorstream 4-Color Inkjet Printer and Four (4) Canon Colorstream 1-
Color Inkjet Printers**

DATE: January 15, 2019

BACKGROUND INFORMATION

A permit application package to construct and operate one (1) Canon Colorstream 4-Color Inkjet Printer and four (4) Canon Colorstream 1-Color Inkjet Printers, in Building C, on the fourth floor at 732 N. Capitol Street NW, was received by the Air Quality Division (“AQD”) of the Department of Energy and Environment (“DOEE” or “the Department”) on November 7, 2018. The applicant is the United States Government Publishing Office (“GPO”). At the time of the application, no press group numbers had been assigned.

The applicant has not requested that any of the information submitted to the Department be held confidential pursuant to 20 DCMR 106.

TECHNICAL INFORMATION

The presses to be permitted are as follows:

Chapter 2 Permit #	Location	Press Type	Description
7234	Building C, 4th Fl	Web Inkjet	Canon Colorstream 4-Color Inkjet Printer
7235	Building C, 4th Fl	Web Inkjet	Canon Colorstream 1-Color Inkjet Printers

CHAPTER 2 TECHNICAL MEMORANDUM

United States Government Publishing Office

Permit Nos. 7234 thru 7238 for One (1) Canon Colorstream 4-Color Inkjet Printer and Four (4) Canon Colorstream 1-Color Inkjet Printers

January 15, 2019

Page 2

Chapter 2 Permit #	Location	Press Type	Description
7236	Building C, 4th Fl	Web Inkjet	Canon Colorstream 1-Color Inkjet Printers
7237	Building C, 4th Fl	Web Inkjet	Canon Colorstream 1-Color Inkjet Printers
7238	Building C, 4th Fl	Web Inkjet	Canon Colorstream 1-Color Inkjet Printers

At this time, the potential to emit volatile organic compounds (VOC) from this facility exceeds 25 tons per year (TPY), the threshold for a major source. Based on the emission calculations provided by the facility, these particular presses have the total potential to emit a combined total of 3.6 TPY of VOC and 3.2 TPY of hazardous air pollutants (HAP).

The facility is currently covered by extended Title V Operating Permit No. 029 which is currently in the renewal process, as well as several Chapter 2 permits.

REGULATORY REVIEW

In developing this permit, the following regulations were evaluated for applicability.

20 DCMR Chapter 2, Section 200: General Permit Requirements

Pursuant to 20 DCMR 200.1 and 200.2, because the equipment is a stationary source that has the potential to emit air pollutants, a permit from the Department must be obtained to install and operate the equipment.

Note that, as of the time of issuance of this set of draft permits, GPO has not yet established press group numbers or other identifiers for the inkjet presses, and as such, AQD has established temporary identifiers in the permit document. Condition I(h) of the attached permit document requires that, within 30 days of installation of the equipment the Permittee must submit a notification of the installation date of each unit as well as needed unit identifications. Following receipt of these identifiers, AQD will administratively amend (without further public comment) the permit document to incorporate these identifiers.

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

Because the facility is not significantly increasing emissions as a result of the presses (the potential to emit VOCs of 3.6 tons per year (TPY) are well below the 25 TPY value meeting the definition of "significant"), the requirements of this section are not applicable.

20 DCMR Chapter 2, Section 205: New Source Performance Standards

There are no NSPS subparts applicable to this printing press.

CHAPTER 2 TECHNICAL MEMORANDUM

United States Government Publishing Office

**Permit Nos. 7234 thru 7238 for One (1) Canon Colorstream 4-Color Inkjet Printer and
Four (4) Canon Colorstream 1-Color Inkjet Printers**

January 15, 2019

Page 2

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

The potential emissions of VOCs (3.6 TPY) are well below the 5 TPY threshold for applicability of this regulation. Similarly, the potential emissions of all HAPs, combined (3.2 TPY) are well below the threshold for applicability of this regulation. Note that these values are for all five pieces of equipment in aggregate, whereas the rule applies to each unit individually, not on a per project basis, so each unit is substantially further below the thresholds than indicated above. As such, the requirements of this regulation are not applicable.

20 DCMR Chapter 3: Operating Permits and Acid Rain Programs

As discussed above, the facility has the potential to emit greater than the major source threshold of VOCs. As such, the facility already has an extended Title V permit (No. 029) that is currently in the renewal process. AQD is working on the renewal Title V. Condition I(g) of the permit document specifies, pursuant to DCMR 301.1(a)(2), that the Permittee must submit a permit application (or application revision, as appropriate) to incorporate the requirements these permits into the facility's Title V permit. Additionally, Condition VI(c) requires that the Permittee report on compliance with these permits as part of their semi-annual and annual compliance reports and certifications. Additionally, the record keeping requirements in the permit have been extended to five years from three years required elsewhere as Chapter 3 requires this longer retention schedule.

20 DCMR Chapter 6: Particulates

No significant amount of particulate matter is expected to result from construction or operation of this equipment. As a result, the visible emission requirements of 20 DCMR 606 have been included in Condition II(b), but no other particulate matter requirements have been included in the permit. However, because any visible emissions from this type of source would be an indication of improper operation of the equipment, the language of this requirement was made more stringent to not allow any visible emissions from the equipment. This modification was made pursuant to authority under 20 DCMR 201.

20 DCMR 700 – Miscellaneous Volatile Organic Compounds (VOCS):

20 DCMR 700 is applicable to the web inkjet presses because the presses are not subject to subsequent sections of Chapter 7. Pursuant to 20 DCMR 700.2, no person shall discharge into the atmosphere more than fifteen (15) pounds of volatile organic compound (VOC) emissions in any one (1) day, nor more than three pounds (3 lb.) in any one (1) hour, from any combination of articles, machines, units, equipment, or other contrivances at a facility, unless the uncontrolled VOC emissions are reduced by at least ninety percent (90%) overall capture and control efficiency. The requirements of this regulation are incorporated into Condition II(a) of the permits for these units. Monitoring is included in Conditions IV(a) and (b). Record keeping requirements are included in Conditions V(a), (b), (c), and (d). Note that Condition V(d) references all equipment at the facility emitting VOCs, but not subject to any section of 20

CHAPTER 2 TECHNICAL MEMORANDUM

United States Government Publishing Office

Permit Nos. 7234 thru 7238 for One (1) Canon Colorstream 4-Color Inkjet Printer and Four (4) Canon Colorstream 1-Color Inkjet Printers

January 15, 2019

Page 2

DCMR 701 through 778 and thus subject to 20 DCMR 700, in aggregate. This requirement is a facility-wide requirement, not a unit-by-unit requirement.

20 DCMR 710 – Intaglio, Flexographic, and Rotogravure Printing:

20 DCMR 710 is not applicable to any of the presses since the source does not operate any intaglio, flexographic or rotogravure printing presses.

20 DCMR 714 – Control Techniques Guidelines (CTGs):

20 DCMR 714 is not applicable to any of the presses since the source does not operate any of the source categories (Miscellaneous Metal Product and Plastic Parts Surface Coatings, Large Appliance Coatings, and Metal Furniture Coatings) specified in 20 DCMR 714.

20 DCMR 715 – Major Source and Case-By-Case Reasonably Available Control Technology (RACT):

AQD is applying the default RACT standards in 20 DCMR 700 in lieu of a case-by-case RACT determination in accordance with 20 DCMR 715. These units would currently be aggregated with the two screen printing units and the Kompac Kwik Finish Coater at the facility for aggregated compliance with 20 DCMR 700. AQD believes that this would be at least as stringent as any case-by-case RACT standard developed under 20 DCMR 715.

20 DCMR 716 – Offset Lithography and Letterpress Printing:

20 DCMR 716 is not applicable to the web inkjet presses because the presses do not constitute an offset lithography or letterpress printing operation.

20 DCMR 770 – Miscellaneous Industrial Solvent Cleaning Operations:

Pursuant to 20 DCMR 770.9(h), products used to clean resin, coating, ink, and adhesive mixing, molding, and application equipment, are not subject to 20 DCMR 770. Therefore, 20 DCMR 770 is not applicable to any of the presses.

20 DCMR 771 – Miscellaneous Cleaning and VOC Materials Handling Standards:

20 DCMR 771 is not applicable to the presses because the presses do not apply coatings, inks, or adhesives to flexible packaging nor are the units subject to 20 DCMR 770 as discussed above. Therefore, 20 DCMR 771 is not applicable to these units.

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 can be found in Condition II(c) of the permit.

CHAPTER 2 TECHNICAL MEMORANDUM

United States Government Publishing Office

**Permit Nos. 7234 thru 7238 for One (1) Canon Colorstream 4-Color Inkjet Printer and
Four (4) Canon Colorstream 1-Color Inkjet Printers**

January 15, 2019

Page 2

20 DCMR 1404: Emission Standards for the Printing and Publishing Industry:

The requirements of 40 CFR 63, Subpart KK (adopted by reference in 20 DCMR 1404) are not applicable to the presses as discussed below. Therefore, 20 DCMR 1404 is not applicable to these units.

New Source Performance Standard (NSPS) for Graphic Arts Industry: Publication Rotogravure Printing:

The requirements of the New Source Performance Standard (NSPS) for Graphic Arts Industry: Publication Rotogravure Printing, 40 CFR 60, Subpart QQ, are not included for the printing presses, since these units do not constitute a publication rotogravure printing press as defined in 40 CFR 60.431.

New Source Performance Standard (NSPS) for Flexible Vinyl and Urethane Coating and Printing:

The requirements of the New Source Performance Standard (NSPS) for Flexible Vinyl and Urethane Coating and Printing, 40 CFR 60, Subpart FFF, are not included for the printing presses, since these units do not constitute a rotogravure printing line used to print or coat flexible vinyl or urethane products as defined in 40 CFR 60.581.

New Source Performance Standard (NSPS) for Polymeric Coating of Supporting Substrates Facilities:

The requirements of the New Source Performance Standard (NSPS) for Polymeric Coating of Supporting Substrates Facilities, 40 CFR 60, Subpart VVV, are not included for the printing presses, since these units do not operate a coating operation or any onsite coating mix preparation equipment used to prepare coatings for the polymeric coating of supporting substrates as defined in 40 CFR 60.741 where polymeric coating of supporting substrates is defined as a web coating process that applies elastomers, polymers, or prepolymers to a supporting web other than paper, plastic film, metallic foil, or metal coil.

National Emission Standards for Hazardous Air Pollutants for Printing and Publishing Industry:

The requirements of the National Emission Standards for Hazardous Air Pollutants for Printing and Publishing Industry, 40 CFR 63, Subpart KK, are not included for the printing presses, since these units do not constitute publication rotogravure, product and packaging rotogravure, or wide-web flexographic printing presses, as defined in 40 CFR 63.822.

National Emission Standards for Hazardous Air Pollutants for Paper and Other Web Coating:

The requirements of the National Emission Standards for Hazardous Air Pollutants for Paper and Other Web Coating, 40 CFR 63, Subpart JJJJ, are not included for the printing presses, since the source is not a major source of HAPs. This subpart applies to each new and existing facility that is a major source of HAP, as defined in §63.2, at which web coating lines are operated.

CHAPTER 2 TECHNICAL MEMORANDUM

United States Government Publishing Office

**Permit Nos. 7234 thru 7238 for One (1) Canon Colorstream 4-Color Inkjet Printer and
Four (4) Canon Colorstream 1-Color Inkjet Printers**

January 15, 2019

Page 2

40 CFR 64 – Compliance Assurance Monitoring (CAM)

This regulation is not applicable to this equipment pursuant to 40 CFR 64.2(a)(3). In order for 40 CFR 64 to be applicable, the unit must be subject to an emission limitation or standard, use a control device to achieve compliance with it, and pre-control device emissions from the unit must exceed the major source threshold for the controlled pollutant. In this case, no control device is used to achieve compliance. Therefore, 40 CFR 64 is not applicable.

RECOMMENDATIONS

The applications to construct and operate the printing presses and the attached operating permits comply with all applicable federal and District air pollution control laws and regulations.

The applications and draft permits will be posted for public review in the D.C. Register and on the DOEE website on January 25, 2019 and will be available for public comment through January 11, 2019. If no public comments are received, it is recommended that permit Nos. 7234 thru 7238 be issued. If comments are submitted or a hearing is requested, AQD will consider all comments before determining whether it is appropriate to issue the permit as drafted.

SSO:TJO

07900