

GOVERNMENT OF THE DISTRICT OF COLUMBIA

District Department of the Environment

Air Quality Division



**CHAPTER 2 TECHNICAL SUPPORT MEMORANDUM**

**TO:** File

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

**FROM:** Abraham T. Hagos *ATH*  
Environmental Engineer

**SUBJECT: Bureau of Engraving and Printing  
Permit (#6377) to Operate a D200M Nickel Electroforming/Plating Line for  
Intaglio Printing Plate and Die Manufacturing**

**DATE:** November 6, 2014

---

**BACKGROUND INFORMATION**

The Air Quality Division (AQD) of the District Department of the Environment (“DDOE” or “the Department”) received an application with cover letter, dated April 30, 2010, from the Bureau of Engraving and Printing (BEP) for modification of Permit (#5839) issued in July 31, 2006, to construct/operate a nickel plating line installed in the facility’s main building in room D200. This modification application contained revised emission limits, which are based on the results of the compliance tests that were conducted at BEP on the nickel line on March 3 and 4, 2010. On or about June 18, 2014, an update of that application was submitted.

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

**TECHNICAL INFORMATION**

The equipment to be permitted is one (1) Nickel Electroforming/Plating Line for the Manufacture of Intaglio Printing Plates. This line includes 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.



## **CHAPTER 2 TECHNICAL MEMORANDUM**

### **Bureau of Engraving and Printing**

### **Permit (#6377) to Operate a Nickel Electroforming/Plating Line for the Manufacture of Intaglio Printing Plates and Dies**

November 6, 2014

Page 2

## **REGULATORY REVIEW**

### 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. Conditions have been added to the permit pursuant to the authority of this regulation (and Section 201) to reflect approval of the applicant's equipment as proposed with limits on the potential to emit based on what was represented in the application. The permit requirements, if complied with, are expected to ensure proper operation of the equipment.

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

Because the facility is not significantly increasing emissions as a result of this modification permit, the requirements of this section are not applicable.

### Chapter 2, Section 205: New Source Performance Standards

There are no NSPS subparts applicable to this printing press.

### Chapter 3: Operating Permits and Acid Rain Programs

The facility has the potential to emit greater than the major source threshold of VOCs, though this particular equipment is not expected to emit VOCs. As such, the facility already has a Title V permit (#035). It is in the permit renewal process. Condition I(h) of the attached permit requires that a Title V permit application update be supplemented within 90 days of the issuance of the permit to request that the requirements of this permit be included in the renewed Title V permit. 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.

### Chapter 6: Particulates

No significant amount of particulate matter is expected to result from the operation of this equipment. As a result, the visible emission requirements of 20 DCMR 606 has been included in Condition II (c), but no other particulate matter requirements have been included in the permits. However, because any visible emissions from this type of source would be an indication of improper operation of the equipment, the language of this visible emissions 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.

### Chapter 7: Volatile Organic Compounds and Hazardous Air Pollutants

This equipment is not expected to emit VOCs. As such, this regulation is not applicable. While the plates and dies being plated are to be used for intaglio printing, this does not trigger the applicability of 20 DCMR 710.

## **CHAPTER 2 TECHNICAL MEMORANDUM**

### **Bureau of Engraving and Printing**

### **Permit (#6377) to Operate a Nickel Electroforming/Plating Line for the Manufacture of Intaglio Printing Plates and Dies**

November 6, 2014

Page 3

#### **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(d) of this permit.

#### **40 CFR 63 Subpart WWWW– National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations**

This federal regulation is applicable to the facility because BEP is an area source of HAPs and the equipment to be permitted is non-chromium electroplating equipment which is a source of HAPs (specifically nickel compounds). The nickel plating line is considered “new” under this regulation as it was installed and commenced operation in 2009. In general, the facility complies with the control requirements of this regulation with the use of a packed bed scrubber and tank lids.

The standards and management practices required in 40 CFR 63.11507 are included in Conditions III(b), (c), and (e) of the proposed permit.

The compliance requirements of 40 CFR 63.11508 are found in Conditions IV(c) and (d).

The record keeping requirements of 40 CFR 63.11509(e) and (f) were included in Conditions V(j) and V(a) of the proposed permit, respectively while the reporting requirements of 40 CFR 63.11509(b), (c), and (d) were included in Conditions VI(a), (b), and (c), respectively.

All applicable record keeping requirements were included in Condition V of the permit. It should be noted that records will be required to be kept for five years, rather than three per 20 DCMR 500.8, due to the more stringent five year requirement in 40 CFR 63.11509 and the difficulty of having two different document retention policies for federally required records and District-required records.

Note that the facility already submitted the required initial notification on May 18, 2010. BEP also submitted the required notification of compliance status on May 18, 2010, but submitted an updated and revised notification of compliance status with the June 2014 application.

For a thorough review of the requirements of this regulation and how they apply to the proposed installation, please see the June 2014 permit application update submitted by BEP.

## **RECOMMENDATIONS**

The application and attached permit comply with all applicable federal and District air pollution control laws and regulations.

**CHAPTER 2 TECHNICAL MEMORANDUM**

**Bureau of Engraving and Printing**

**Permit (#6377) to Operate a Nickel Electroforming/Plating Line for the Manufacture of Intaglio Printing Plates and Dies**

November 6, 2014

Page 4

The application and draft permit will be posted for public review in the D.C. Register and on the DDOE website on November 7, 2014 and will be available for public comment through December 8, 2014. If no public comments are received, it is recommended that permit (#6377) 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/ATH