UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
FOUR PENN CENTER – 1600 JOHN F. KENNEDY BLVD.
PHILADELPHIA, PENNSYLVANIA 19103-2852

Report Title:	Clean Water Act Compliance Inspection Report
Inspection Date(s):	May 24-25, 2023 and May 31, 2023
Regulatory Program(s):	National Pollutant Discharge Elimination System (NPDES)
Type of Activity:	Pretreatment Compliance Inspection
Facility Name:	DC Water and Sewer Authority
Facility Address:	5000 Overlook Ave., SW, Washington DC 20032
Facility Latitude:	38.81678
Facility Longitude:	-77.0328
County/Parish:	District of Columbia
Permit No:	DC0021199
NAICS Code:	221320
SIC:	4952
Unique Project #:	3E23WN083A

Facility Representative(s): **Point of Contact**

Elaine Wilson, Manager, Water Quality & Pretreatment ☒
Email: elaine.wilson@dcwater.com
Marc Furney, Environmental Compliance Officer
Email: marc.furney@dcwater.com
Haydee De Clippeleir, Director of Clean Water Quality and Technology
Email: haydee.declippeleir@dcwater.com

Inspectors:

Chuck Durham, PG Environmental
Email: chuck.durham@pgenv.com
Sirese Jacobson, PG Environmental
Email: sirese.jacobson@pgenv.com

Report Preparer Signature/Date — Sirese Jacobson, PG Environmental — 8/01/2023 Date

Supervisor Signature/Date — JESSICA DUFFY — Digitally signed by JESSICA DUFFY Date: 2023.08.02 07:56:22 -04'00'

Jessica Duffy, NPDES 2 Section Chief — Date
Enforcement and Compliance Assurance Division

Attachments

Attachment A Industrial User Site Visit Data Sheets

Attachment B Industrial User Site Visit Photograph Log

I. Inspection Summary

Upon arrival at the Blue Plains Advanced Water Treatment Plant (Facility or Blue Plains AWTP), EPA contractors Chuck Durham and Sirese Jacobson, United States Environmental Protection Agency (EPA) Region 3 representatives Steven Maslowski and Shane McAleer, and the Department of Energy & Environment (DOEE) representatives Robert Burnett and Kristopher Drummond (jointly referred to as the Inspection Team), met with the Facility contacts Elaine Wilson, Marc Furney, Hayee De Clippeleir, Nick Passarelli, and Mauricio Pena (Facility representatives). DC Water owns and operates the Blue Plains AWTP. The inspectors discussed the purpose and format of the pretreatment compliance inspection (PCI or inspection) and interviewed the Facility representative about the Facility's pretreatment program.

As part of the PCI, the Inspection Team reviewed the following nondomestic discharger files:

- Department of the Treasury/Bureau of Engraving and Printing (Bureau of Engraving and Printing; categorical industrial user [CIU] subject to Title 40 of the *Code of Federal Regulations* [40 CFR] 433.17)
- Naval Research Lab (non-categorical significant industrial user [SIU])

As part of the inspection, the Inspection Team also conducted site visits at the Washington Aqueduct Division USACE, Medstar Health (Georgetown University Hospital, a non-significant industrial user), and the Bureau of Engraving and Printing.

The last EPA field review of Facility's pretreatment program was a PCA performed in June 2014.

II. Program Description

The Blue Plains AWTP has a design capacity of 380 million gallons per day (MGD) with an average dry-weather flow of approximately 300 MGD. The AWTP treats wastewater from the Washington Suburban Sanitary Commission, Fairfax County, Loudoun County, the Town of Vienna, and the Town of Herndon Falls which is a subset of Fairfax County. The Blue Plains AWTP provides primary and secondary treatment as well as denitrification, multimedia filtration, chlorination, and dichlorination.

III. Industrial User (IU) Characterization

IUs currently identified by the Control Authority (CA)	IU Type	
9	**Discharging Significant Industrial Users**	
	8	**Discharging Non-Categorical SIUs (as defined by the CA)**
	1	**Categorical Industrial Users (CIUs)**
	0	**Middle Tier CIUs**
0	**Zero-Discharging CIUs**	
0	**Non-significant CIU (NSCIU)**	
25	**Other Regulated IUs (e.g., permitted IUs)** **Describe:** According to the Facility representatives, these users consist mostly of industrial users that were formerly classified as SIUs, but	

	have since been reclassified as non-significant industrial users.
40-50	**Waste Haulers** **Describe:** The Facility accepts hauled waste at the Blue Plains AWTP including grease, septage, low-strength stormwater, and groundwater, but does not receive hauled industrial wastewater. See Section G.1 for additional information.

IV. Findings Summary Table
Finding C.4.a – The permits reviewed contained incomplete record keeping requirements.
Finding C.4.b – The permits reviewed did not include a sufficient requirement for reporting all monitoring results.
Finding C.4.c – The Naval Research Lab permit did not clearly indicate that time-proportional samples are allowed.
Finding G.3 – The Facility had not received all one-time certification statements from dental facilities.
Washington Aqueduct Division USACE Site Visit Data Sheet – It is unclear whether the sampling point designated in the SIU's permit is representative of the discharge.
Washington Aqueduct Division USACE Site Visit Data Sheet – The facility representatives indicated that they filter the analytical data to remove anomalies prior to submitting to DC Water
Medstar (Georgetown University Hospital) Site Visit Data Sheet – The facility representatives noted that the neutralization systems in Lombardi Center are not used but are still in place.
Medstar (Georgetown University Hospital) Site Visit Data Sheet – The inspection team noted floor drains in the basement of the facility.
Medstar (Georgetown University Hospital) Site Visit Data Sheet – Each sink in the Surgical Pathology lab contained a small container for formalin neutralization. In addition, the DC Water inspector noted that formalin neutralization in the Surgical Pathology Lab was not mentioned in the Medstar facility's most recent permit application.
Bureau of Engraving and Printing Site Visit Data Sheet – The industrial user representatives could not explain which parts go through the tumbling operation.
Bureau of Engraving and Printing Site Visit Data Sheet – The inspection team observed a basin sink in the polishing room in 702.
Bureau of Engraving and Printing Site Visit Data Sheet – The inspection team observed multiple sinks throughout the production area.
Bureau of Engraving and Printing Site Visit Data Sheet – The facility's current sampling procedures are not representative of the actual discharge practices.

V. Evaluation
The Inspection Team discussed the topics in Subsections A-F below regarding the pretreatment program with the Facility representatives. The Inspection Team also reviewed SIU files to assess the retention of required program documents and to generally evaluate overall program implementation. The following sections describe program areas of concern identified during the inspection process along with compliance assistance items, and associated references to 40 CFR Part 403. All compliance assistance items are included strictly for informational purposes and should not be construed as a formal order or instruction from EPA.

A. Control Authority (CA) Pretreatment Program Modification
1. When was the last program modification? Did the CA notify the EPA of program modifications? (40 CFR 403.18) According to the Facility representatives, the Facility last revised its Sewer Use Ordinance (SUO) in 2022 to include local limits and adopt minor changes. The representatives also stated that the Enforcement Response Plan (ERP) was last revised in 2014.
2. Are there any contributing jurisdictions discharging wastewater to the POTW? Does the CA have an agreement in place that addresses pretreatment program responsibilities? The Blue Plains AWTP receives wastewater from the Washington Suburban Sanitary Commission, Fairfax County, Louden County, the Town of Vienna, and the Town of Herndon Falls. According to the Facility representatives, there are no SIUs located in the Town of Vienna.
B. IU Characterization
1. Describe the CA's procedure for identifying and locating IUs that might be subject to the pretreatment program. Has the CA identified and located all applicable IUs (non-categorical SIUs, CIUs, NSCIUs, etc.)? (40 CFR 403.8(f)(2)(i)) The Facility representatives stated the facility does not conduct a formal industrial waste survey. The Facility identifies new industrial users as new sewer connections are permitted. The representatives also stated that the facility performs occasional Google searches and the DOEE will refer the Facility pretreatment team to new industrial users.
2. Has the CA identified the character and volume of pollutants contributed to the publicly owned treatment works (POTW) by IUs subject to the pretreatment program? (40 CFR 403.8(f)(2)(ii)) Yes, the Facility conducts inspections and compliance monitoring at each SIU at least annually.
3. Has the CA prepared and maintained a list of SIUs, as defined in 403.3(v)(1), along with the applicable SIU criteria? Does the list indicate whether the CA has made a determination that an SIU is a NSCIU, as defined in 403.3(v)(2), rather than an SIU? Have modifications to the list been submitted with annual reports? (40 CFR 403.8(f)(6)) Yes, the Facility maintains a current list of SIUs, which it submits in the annual reports to EPA Region 3. The facility had not designated any SIUs as NSCIUs at the time of the inspection.

C. Control Mechanism Evaluation

1. Has the CA issued individual or general control mechanisms to all SIUs? (40 CFR 403.8(f0(1)(iii))

All SIUs whose files were reviewed during the inspection had been issued an individual permit. SIU permits are issued for four years and can occasionally be extended to up to five years. Currently, the Facility requires permit applications to be submitted within 30 days. For new SIUs, the Facility requires a permit application to be submitted 90 days prior to discharge. The Facility was not implementing any general permit options at the time of the inspection.

2. Do the applications for general control mechanism contain all of the following? (40 CFR 403.8(f)(1)(iii)(A)(2))

a. Contact info
b. Production processes
c. Types of wastes generated
d. Location for monitoring
e. Any request for waiver for pollutants not present per 40 CFR 403.12(e)(2)

Not applicable (N/A). The Facility had not issued general control mechanisms at the time of the inspection.

3. Are general control mechanisms only issued for IUs where all of the following is true? (40 CFR 403.8(f)(1)(iii)(A)(1))

a. Involve same/substantially similar types of operations
b. Discharge the same type of waste
c. Same effluent limitations
d. Same or similar monitoring
e. There are no CIU production-based standards, CIU mass limits, combined wastestream formula, or net/gross calculations

N/A. The Facility had not issued general control mechanisms at the time of the inspection.

4. Do both individual and general control mechanisms include the following, where applicable? (40 CFR 403.8(f)(1)(iii)(B))

a. Statement of duration (5 years max)
b. Statement of non-transferability
c. Applicable effluent limits (local limits, categorical standards, BMPs)
d. Self-monitoring requirements
- **Identification of pollutants to be monitored**
- **Sampling frequency**
- **Sampling locations/discharge points**
- **Appropriate sample types**
- **Reporting requirements**
- **Record-keeping requirements**

e. Statement of applicable civil and criminal penalties
f. Compliance schedules
g. Notice of slug loading or potential problems at POTW
h. Notification of spills, bypasses, upsets, etc.
i. Notification of significant change in discharge
j. 24-hour notification of effluent violation
k. Submit resampling results within 30-days
l. Slug discharge control plan requirement, if required by POTW
m. Certification statements
n. Sampling/analysis requirements (Part 136 or alternative)
o. Reporting of additional sampling
p. 90-day compliance report

The individual SIU permits reviewed as a component of the inspection included most, but not all of the aforementioned provisions. Findings regarding the content of individual control mechanisms are provided below. The Facility had not issued general control mechanisms at the time of the inspection.

Finding C.4.a – The permits reviewed contained incomplete record keeping requirements.
Part IV.3 of the Naval Research Lab and Bureau of Engraving & Printing permits require the retention of records for three years. The requirement specifies that the record retention period may be extended for records pertaining to enforcement or litigation brought by the Facility. However, the requirement does not specify that the record retention period may also be extended at the request of EPA.

Regulatory Requirement
The federal regulations at 40 CFR 403.8(f)(1)(iii)(B)(4) require permits to include "[s]elf-monitoring, sampling, reporting, notification, and record keeping requirements."

The federal regulations at 40 CFR 403.12(o)(2) require records to be retained for at least three years. Additionally, the retention period is extended during unresolved litigation or when requested by the [EPA] Regional Administrator.

Finding C.4.b – The permits reviewed did not include a sufficient requirement for reporting all monitoring results.

Part III.6. of the Naval Research Lab and Bureau of Engraving & Printing permits states "All results from the compliance monitoring location must be reported to DC Water". While this phrase captures the majority of the regulatory language in 40 CFR 403.12(g)(6), it does not specify that the samples would need to be sampled and analyzed using 40 CFR Part 136 methods. Any sample results obtained using methods other than those approved by EPA (i.e., methods in 40 CFR Part 136 or alternative methods approved for site-specific application) cannot be used to assess compliance with the SIU permits.

Regulatory Requirement

The federal regulations at 40 CFR 403.8(f)(1)(iii)(B)(4) require permits to include "[s]elf-monitoring, sampling, reporting, notification, and record keeping requirements."

The federal regulations at 40 CFR 403.12(g)(6) require industrial users that monitor a regulated pollutant at the appropriate sampling location more frequently than required by the District, using 40 CFR Part 136 procedures, to submit the results of the additional monitoring.

Finding C.4.c – The Naval Research Lab permit did not clearly indicate that time-proportional samples are allowed.

Footnote 3 in the limits table in the Naval Research Lab permit states "*Samples shall be representative of normal operations during the monitoring period. Composite samples shall be collected during normal working hours (approximately 0730-1530) using an automatic sampler or manual composite. The manual composite shall contain a minimum of eight subsamples collected approximately every 60 minutes over the 8-h composite period. All sampling and analyses must conform to procedures contained in 40 CFR Parts 136 and 403. A single grab sample can be collected for pH, oil and grease, and volatile organic compounds (VOC).*"

D. Application of Pretreatment Standards and Requirements

1. Does the CA apply all applicable pretreatment standards? (40 CFR 403.8(f)(1)(ii) and 403.8(5))

Based on the files reviewed, the Facility has applied all applicable pretreatment standards.

2. Has the CA evaluated the need for SIUs to develop slug discharge control plans? (40 CFR 403.8(f)(2)(vi))

Yes. According to the Facility representatives, all SIUs are required to implement slug discharge control plans and this requirement is included in the SIU permits.

The file reviews conducted for the Naval Research Lab and Bureau of Engraving & Printing revealed that annual inspections document slug discharge control plan status for each SIU. The 2022 inspections at the Naval Research Lab and the Bureau of Engraving & Printing denoted that each facility had updated their respective slug discharge control plans in 2021. The Naval Research Lab

slug discharge control plan had been updated in February 2021 and the Bureau of Engraving & Printing slug discharge control plan was last revised in September 2021, as denoted in their respective inspection reports. After the PCI, the Facility provided a copy of a slug discharge control plan submitted by the Naval Research Lab in December 2022.

E. Compliance Monitoring

1. **Has the CA inspected and independently sampled each SIU at least once a year? Middle tier CIUs at least once every two years? Sample once during term of CIU control mechanism if CIU sampling waived for pollutants not present? (40 CFR 403.8(f)(2)(v), 403.12(e)(2), 403.12(e)(2))**

Yes, based on the SIU files reviewed and responses from the Facility representatives, the Facility has been conducting inspections and sampling at least once per year.

2. **Has the CA used proper sampling and analysis procedures (40 CFR Part 136) and inspection procedures? Were the procedures done with sufficient care to produce evidence admissible in enforcement proceedings or in judicial actions? (40 CFR 403.8(f)(2)(v) and (vii), 403.12(g)(5))**

Yes, according to the information reviewed during the inspection, the Facility uses proper sampling, analysis, and inspection procedures.

3. **Has the CA kept records for three years including the following? (40 CFR 403.12(o))**

   a. **Period compliance reports and other reports/notices**
   b. **All monitoring records including: sample date, place, method, time, personnel; analysis date, personnel, method; results**
   c. **BMP compliance documentation**
   d. **Other monitoring records**

Based on the files reviewed, the Facility maintains records for at least three years.

4. **Has the CA evaluated, at least once per year, whether NSCIUs continue to meet the criteria of an NSCIU? (40 CFR 403.8(f)(2)(v)(b), 403.3(v)(2))**

N/A. The Facility was not implementing the option to classify industries as NSCIUs at the time of the inspection.

5. **Has the CA required, received, and analyzed reports and other notices from SIUs? (40 CFR 403.8(f0(2)(iv))**

   a. **Self-monitoring reports**
   b. **BMRs and 90-day compliance reports**
   c. **Compliance schedules reports**
   d. **Notice of slug loading or potential problems at POTW**

e. **Notification of spills, bypasses, upsets, etc.**
f. **Notification of significant change in discharge**
g. **24-hour notification of effluent violation**
h. **Resampling results within 30-days**
i. **Other reports/notifications required by the CA**

Based on the files reviewed during the inspection, the Facility has been requiring, receiving, and analyzing required reports except as noted below.

6. **Have SIUs monitored to demonstrate continued compliance and re-sampled after violation(s)? (40 CFR 403.12(g)(1) & (2))**

Yes, based on the files reviewed, SIUs have re-sampled after violations.

7. **Has the CA ensured CIUs report on all regulated pollutants at least once every 6 months? (40 CFR 403.12(e)(1) & (g)(1))**

Yes. Based on the CIU file reviewed during the inspection, the Facility has ensured that CIUs have reported on regulated pollutants at least once every six months.

8. **Has the CA ensured non-categorical SIUs self-monitor and report at least once every 6 months with a description of the nature, concentration, and flow of the pollutants required to be reported by the Control Authority? (40 CFR 4.312(h) & (g)(1))**

Based on the files reviewed, the Facility has ensured that non-categorical SIUs self-monitor and report at least once every six months.

9. **Has the CA required self-monitoring reports from CIUs to be signed and certified? (40 CFR 403.12(b)(6), 403.12(l))**

Yes. The CIU file reviewed included signed and certified self-monitoring reports.

10. **Has the CA received notification of hazardous waste discharges? (40 CFR 403.12 (j) & (p))**

No, the Facility representatives stated that the facility has not received notification of hazardous waste discharges.

F. Enforcement

1. **Has the CA implemented its enforcement response plan (ERP)? (40 CFR 403.8(f)(5))**

Based on the files reviewed, the Facility is implementing its ERP in instances of SIU noncompliance. According to the Facility representatives from January 2022 to present, the Facility had issued multiple notices of violation to SIUs and had also issued one administrative order to GSA Power Plant for failure to report.

2. Does the CA evaluate both numeric and narrative criteria for significant non-compliance (SNC) and annually publish a list of IUs in SNC? (40 CFR 403.8(f)(2)(viii))

Yes, the Facility evaluates SNC according to the definition in its SUO. The Facility publishes a list of SIUs in SNC in *The Washington Post* but has not had to post an SNC publication in the last 3 years.

2.a Were any SIUs in SNC in the past year? Include name of industry, type of SNC, and current compliance status.

No. According to the Facility representatives, no SIUs were in SNC in 2022.

3. Has the CA developed IU compliance schedules? (40 CFR 403.8(f)(1)(iv)(A))

Yes. The Facility representatives stated that the facility uses compliance schedules; however, no SIUs were on compliance schedules at the time of the inspection.

4. Has the CA ensured CIU compliance within 3 years of standards effective date (or less than 3 years where required by standard)? (40 CFR 403.6(b))

N/A. The Facility did not identify any new CIUs or CIUs subject to a new categorical standard.

5. Has the CA ensured CIUs submit complete baseline monitoring reports (BMRs) and 90-day compliance reports within the required time frames? (40 CFR 403.12(b) & (d))

Not determined. The Inspection Team only reviewed one CIU file, and did not review the Bureau of Engraving and Printing's BMR or 90-day monitoring report as part of the review.

G. Additional Evaluations

1. Hauled Waste

The Facility accepts hauled waste at the Blue Plains AWTP. The AWTP receives grease, septage, low-strength stormwater, and groundwater, but does not receive hauled industrial wastewater. The Facility issues permits to 40-50 waste hauling companies. The Facility has a designated discharge point at the AWTP. The waste haulers are required to provide manifests at the security gate. The Facility performs random sampling of the hauled waste, including sampling for metals, oil and grease, total suspended solids (TSS), total phosphorus, total Kjeldahl nitrogen (TKN), chemical oxygen demand (COD), and polychlorinated biphenyls (PCBs).

2. Dental Mercury Program

Finding G.3 – The Facility had not received all one-time certification statements from dental facilities.
According to the Facility representatives, there are approximately 700 dental facilities in the service

area and the Facility has received the one-time certification statements from approximately 50 percent of dental facilities.

3. Fats, Oils, and Grease (FOG) Program

The facility is in the process of updating its FOG program (implemented as a separate program from the pretreatment program) and is looking at expanding regulations. The Facility currently has a 3-member staff that provides oversight to approximately 3,500 food service establishments (FSEs). FSEs are not permitted and are inspected on an as-needed basis. The goal is to inspect every FSE at least once every two years, but this will require additional staff.

Attachment A

Industrial User Site Visit Data Sheets

IU SITE VISIT DATA SHEET

INSTRUCTIONS: Record observations made during the IU site visit. Provide as much detail as possible.	
Name of industry: Washington Aqueduct Division USACE	
Address of industry: 2500 1st St., NW, Washington DC 20001	
Date of visit: 5/24/2023	Time of visit: 1:45 PM – 4:40 PM
Name of inspectors: Chuck Durham and Sirese Jacobson (PG Environmental) Elaine Wilson, Marc Furney, and Mauricio Pena (DC Water) Steven Maslowski and Shane McAleer (EPA Region 3) Robert Burnett and Kristopher Drummond (DOEE)	

Provide the name(s) and title(s) of industry representative(s)

Name	Title
Jude McKenna	Senior Project Engineer
Rachel Ledonne	Engineering Technician
Audrey Litz	Environmental Protection Specialist
Chris Bruno	Supervisor of Water Treatment Plant
Roy Person	Assistant Supervisor of Water Treatment Plant

IU Permit Number: 059-0	Exp. Date: March 31, 2027	IU Classification: non-categorical SIU

Please provide the following documentation:

1. Nature of operation:
The facility is a water treatment plant that provides water to DC, Fairfax County, and Arlington County. The facility can treat on average 70 million gallons per day (MGD) and up to 120 MGD.

2. Number of employees:	Not determined (N/D)	Number of shifts:	N/D	Hours of operation:	N/D

3. Wastestream flow(s) discharged to the POTW:
The facility discharges filter backwash from the water filtration building to the POTW. When the facility does not discharge to the sanitary sewer, the facility discharges to the cove, which is part of the McMillan Reservoir.

Sanitary:	N/R	Process:	1.2-1.6 MGD over the 29 days the facility was discharging	Combined:	N/R

4. Describe any significant changes in process or flow: Temporary changes in process due to equipment failure as noted in #6 below.

5. Type of pretreatment system (Describe):
The facility does not operate a pretreatment system. The facility only has equalization basins that control the discharge to the POTW to within permitted limit.

	Continuous flow	**X**	**Batch**		Combined

6. Process area description (identify raw materials and processes used)
The facility is a newly permitted SIU, with a permit effective date of April 1, 2023. The facility pumps water from the McMillian Reservoir into the water treatment plant where it is filtered and is sent out to the water purveyors. The facility has 12 filters used in the process.

The backwash system has had three actuators burn out which limits their ability to discharge to the sewer. The manufacturer has requested failed components to be returned for evaluation before sending the replacement. The facility representatives indicated that they are still negotiating with the manufacturer to get replacement parts rather than waiting on the outcome of any evaluation. In addition, the backwash pump has been down for two years.

7. Chemical storage area (identify the chemicals that are maintained on site and how they are stored):
The following chemicals were stored throughout the facility: chlorine, sodium hypochlorite, phosphoric acid, caustic soda, and ammonium hydroxide.

Any floor drains?	Yes	Any spill control measures?	Not Reviewed (N/R)

8. Are hazardous wastes drummed and labeled?
Yes. Hazardous waste was located outside stored on secondary containment pallets and under cover.

9. Does the IU have hazardous waste manifests? N/R.

10. Solid waste production and disposal: N/R

11. Description of sample location and methods:
The permit only allows the facility to discharge during dry weather, and during wet weather with prior approval from DC Water. The permit fact sheet lists the sample type as “Manual composite of 1st-low, high, and 2nd-low rate discharge cycles.”

The facility representatives stated that they discharged to the sanitary sewer the day prior to the inspection. They also collected a sample from the sampling point designated in the permit. The facility representatives indicated that they believed the most representative samples would be collected at the filters rather than the sampling point designated in the discharge permit and requested that DC Water consider accepting as an approved sample location.

Notes:

- The facility representatives noted that the flow data being reported to DC Water is filtered data, pulling out anomalies and outliers. DC Water representatives requested that for all future reporting the facility provided raw un-filtered data.
- The DC Water inspector indicated that the facility should update its Standard Operating Procedure (SOP) for filter backwash to include the practice of not discharging to the sanitary sewer when it is raining, so as not to overwhelm the combined sewer.

1. **Finding – It is unclear whether the sampling point designated in the SIU's permit is representative of the discharge.**
2. The facility representatives indicated that they believed the most representative sample would need to be collected at the filters rather than the sampling point designated in the discharge permit. It was suggested that the facility do comparative sampling at the filters and the current designated sampling point. The DC Water inspector noted that when the facility is down, they still need to perform their semi-annual sampling.**Finding – The facility has not been providing all analytical results to DC Water.**
   The facility representatives indicated that they filter the analytical data to remove anomalies prior to submitting to DC Water.

IU SITE VISIT DATA SHEET

INSTRUCTIONS: Record observations made during the IU site visit. Provide as much detail as possible.	
Name of industry: Medstar (Georgetown University Hospital)	
Address of industry: 3800 Reservoir Road, Washington, DC 20007	
Date of visit: 5/25/2023	Time of visit: 9:00 am – 12:05 pm
Name of inspectors: Sirese Jacobson (PG Environmental) Elaine Wilson (DC Water) Steven Maslowski (EPA Region 3) Robert Burnett and Hokti Shepard (DOEE)	

Provide the name(s) and title(s) of industry representative(s)

Name	Title
Reggie Pearson	Vice President of Operations
Emmanuel Ebong	Safety Director
Ron Parotte	Director Facilities Management

IU Permit Number: NS1002-4	Exp. Date: January 2, 2025	IU Classification: non-significant industrial user

Please provide the following documentation:

1. Nature of operation: The facility is a general medical and research hospital. The hospital is licensed for 609 beds and is operating at 419 beds. The hospital includes one kitchen.

2. Number of employees:	12,000 students during school term	Number of shifts:	N/D	Hours of operation:	24 hours per day, 7 days per week

3. Wastestream flow(s) discharged to the POTW:
Waste streams discharged to the AWTP include sanitary wastewater as well as water from the kitchen, operating rooms, and various laboratories.

Sanitary:	N/R	Process:	14,000 gpd	Combined:	N/R

4. Describe any significant changes in process or flow:
The hospital is building a new hospital pavilion which will include intensive care unit (ICU) rooms, operating rooms, emergency services, and a parking garage. There will be 156 beds in the new pavilion.

5. Type of pretreatment system (Describe):
The facility installed a sewage ejector pump in October/November 2022 (for rag removal). The unit has not been cleaned since installation. In addition, the facility is planning to install a 2,000-gallon grease interceptor by the end of June 2023. The facility plans to pump out the grease interceptor every 4-6 weeks.

X	**Continuous flow**		Batch		Combined

6. Process area description (identify raw materials and processes used)

The inspection team started the walk through in the basement to view the sewage ejector unit and the proposed location for the grease interceptor. The facility had floor drains in the basement. The facility representative indicated that they are no longer used and that they plan to seal the drains in conjunction with construction associated with installation of the grease interceptor.

The inspection team proceeded to observe the neutralization system in the Mechanical Center Room in the Lombardi Center. The facility representative stated that there was another neutralization system in the basement.

The inspection team proceeded to the kitchen. The DC Water inspector met with the project manager for the grease interceptor project and they discussed that all kitchen drain lines would be plumbed to the interceptor, with final installation planned for June/July 2023.

The inspection team proceeded to the Main Lab. The facility was collecting methanol waste as hazardous waste – the container had an accumulation start date of May 10, 2023. The inspection team did not discuss each laboratory instrument and the specific reagents and chemicals used due to time constraints; however, the DC Water inspector requested the safety data sheets (SDSs) for the reagents used in the laboratory instruments that drain to the sewer.

The inspection team proceeded to Cytology. The room had a flammables cabinet. Waste is stored at the bottom of the cabinet. According to the facility representatives, Environmental Services picks up waste approximately twice per month. No floor drains were observed in the room. The room includes one sink which is used to rinse off slides.

The inspection team proceeded to the Sterile Processing Department. This department includes nine steam units. The facility uses peracetic acid in one of the units and also utilizes deionized water.

The inspection team also observed the Surgical Histology Lab, Pathology Lab, and Radiology. In the Surgical Histology Lab and Pathology lab the facility neutralizes formalin. In the Pathology lab, the facility neutralizes formalin at five of the six stations. The facility was collecting unprocessed formalin in containers placed in the sink at each station. The facility representatives explained that once formalin is neutralized, it is dumped down the drain once per week.

7. Chemical storage area (identify the chemicals that are maintained on site and how they are stored): The facility stores a number of reagents for instruments in the laboratories. Storage of these chemicals was not observed during the inspection.

Any floor drains?	Yes	Any spill control measures?	Secondary containment pallets and berms

8. Are hazardous wastes drummed and labeled?
The inspection team observed hazardous waste in the Surgical Histology lab including xylene, alcohol, acetone, acetic acid, combined dyes, expired reagents, and trace metals (including silver nitrates). The hazardous waste storage area was empty at the time of the inspection. EMSI hauls hazardous waste offsite twice per week.

9. Does the IU have hazardous waste manifests? N/R

10. Solid waste production and disposal: N/R

11. Description of sample location and methods:
Sampling is not performed at this non-significant industrial user.

Notes:

- The DC Water inspector requested the current SDSs for the Main Lab for instruments that discharge to the drain.
- The DC Water inspector indicated that they would follow up on the grease interceptor installation.

1. **Finding – The facility representatives noted that the neutralization systems in Lombardi Center are not used but are still in place.**

2. **Finding - The inspection team noted floor drains in the basement of the facility.**
   The facility representative explained that use of the floor drains have been discontinued.

3. **Finding – Each sink in the Surgical Pathology lab contained a small container for formalin neutralization. In addition, the DC Water inspector noted that formalin neutralization in the Surgical Pathology Lab was not mentioned in the facility's most recent permit application.**

IU SITE VISIT DATA SHEET

INSTRUCTIONS: Record observations made during the IU site visit. Provide as much detail as possible.	
Name of industry: Bureau of Engraving and Printing	
Address of industry: 301 14th St., SW; Washington DC 20228	
Date of visit: 5/25/2023	Time of visit: 9:00 am – 12:40 pm
Name of inspectors: Chuck Durham (PG Environmental) Marc Furney (DC Water) Shane McAleer (EPA Region 3)	

Provide the name(s) and title(s) of industry representative(s)

Name	Title
Kristi Cavanaugh	Environmental Protection Specialist
David Kaczka	Environmental Management Division (EMD) Manager

IU Permit Number: 017-12	Exp. Date: August 31, 2026	IU Classification: CIU subject to 40 CFR 433.17

Please provide the following documentation:

1. Nature of operation:
According to the facility representatives, 98% of the process is printing U.S. currency and 2% is printing security documents (e.g., two pages of U.S. passports, specialty printing in miscellaneous documents such as the purple heart certification and congressional awards). In addition, the facility designs and produces the engraved plates used in the printing process.

2. Number of employees:	1,100	Number of shifts:	4	Hours of operation:	24 hours per day, 7 days per week

3. Wastestream flow(s) discharged to the POTW:
Process wastewater is discharged to the sewer via two outfalls. Outfall 018 is a continuous discharge from the wiping solution treatment. Outfall 019 is a batch discharge from the plating wastewater treatment system.

Sanitary:	N/R	Process:	Average flow: 104,000 gpd	Combined:	N/R

4. Describe any significant changes in process or flow: The facility representative stated that the plan is to start up a recycle unit which will reduce the discharge by 80%.

The facility's long-term plan is to move publishing operations to a new facility in Maryland that will use brass plates engraved via vapor deposition. The facility plans to begin construction in 2025 with the first printing at the new location targeted for 2027 and full operation by 2030.

5. Type of pretreatment system (Describe):

Plating line treatment:

- The facility has a chrome and nickel recovery system. Wastewater comes from the rinse tanks in the nickel and chrome plating lines as well as the floor washdown water from chrome plating area.
- Wastewater goes through an oil/water separator into a surge tank and then into Tank-1 for chrome reduction using sodium metabisulfite and acidification to 2 s.u. Wastewater is then pumped to Tank-2 where pH is raised to 9.8-10.0 s.u. for metals precipitation and nickel recovery. From T2, wastewater is pumped to the Lamella clarifier with polymer addition. The sludge from the clarifier is pumped to Tank-10 (a holding tank). Wastewater from the clarifier and Tank 10 are pumped to the filter press. Leachate from the filter press goes to filtration and the effluent is discharged to the sewer. Filter cake is disposed of as a hazardous waste by Clean Harbors.

Ink-wiping solution treatment:

- The wastewater enters the treatment system at a pH above 12. The pH is then dropped to 10 and bentonite slurry is added to bond with ink to reduce settling.
- Wastewater then gravity flows to Tank-4 where the pH is lowered to 8-8.2 s.u. Wastewater then gravity flows to Tank-7 where polymer is added. The sludge settles out in the gravity settling tank. Supernatant is discharged to the sewer. Sludge is pumped to a 10,000-gallon holding tank and then to the filter presses. Sludge filter cake is collected in 2,400-lb boxes. The facility generates nine boxes of filter cake sludge per week which are disposed of as a hazardous waste by Clean Harbors.

X	Continuous flow (see #11 below)	X	Batch (see #11 below)		Combined

6. Process area description (identify raw materials and processes used)

All inks in the printing process are non-flammable and have flash points >200°F. Everything at this location is printed on pre-cut sheets. There is no heat set printing or curing at this facility.

Currency Production:
The facility has three types of presses.

- Intaglio presses (8 presses in total) – This process generates wastewater from wiping solution. Inks used in the process are heavy paste-type inks.
    - The wiping solution removes all ink but a small amount from the plate. The remaining ink gets pressed into the paper during engraving. The excess solution is wiped automatically by the wiping blades and drains to a tank (each press has its own tank). The tanks drain to the treatment system. The facility representative stated that the plan is to start up a recycle unit which will reduce the discharge by 80%.
- Simultan printing (3 printers total). This process prints on both sides of the paper. The waste solvents from the blanket wash are collected in 55-gallon drums and shipped offsite. The inks used in this process are a conventional off-set ink and a heavy paste ink with a low concentration of volatile organic compounds (VOCs).
- Currency offset printing – This process consists of Large Examining Printing Equipment (LEPE) and currency overprinting equipment. The Currency Overprinting Equipment (COPE) uses heavy paste ink with VOCs less than 0.1%. The waste inks and waste solvents are collected in 55-gallon drums and shipped offsite as hazardous waste.

Plate-making:

- Plates are made of pure nickel deposited through electroforming layers of nickel in a plastic mold using a nickel sulfamate solution. The facility has 6 nickel baths (typically uses 4 baths), with a rinse bath (3 total rinses) set between every two plating baths. The plate forming process runs for 17 hours, and is then separated from the plastic mold, trimmed, and inspected. The plate is then moved to the right side of the room to be chrome-plated to increase the hardness of the plate.
- The are no foam suppressants used in the chrome plating line. Instead, plastic balls float on top of the plating tanks to aid in minimizing off-gas production. The chrome plating line includes 3 chrome baths with on-board scrubbers, a de-chrome tank using caustic soda, and a degreaser. Plates are prepped in the degreaser tank using an alkaline solution to charge the plate and then rinsed with an acid wash before going in the plating tanks. The only discharge from the chrome line tanks to the plating waste treatment unit from the plate rinsing station and the periodic disposal of the degreaser tanks (once per year). Chrome plating rinse tanks are used as makeup water in the plating tanks. The underfloor (the floor is an open grate) of the chrome process area is sprayed down once each day. All the nickel rinse baths and the floor wash waters from the chrome side, as well as the degreaser discharge are sent to the plating line treatment system and then discharged to the POTW's conveyance system through location 019.

7. Chemical storage area (identify the chemicals that are maintained on site and how they are stored):
The inspection team observed the chemical storage room on the second floor of the Annex. The room had a trench drain along the back wall and the floor sloped towards the drain. According to the facility representatives, the drain does not have an outlet and provides containment.

Any floor drains?	No	Any spill control measures?	N/D

8. Are hazardous wastes drummed and labeled?
The inspection team observed the facility's hazardous waste storage which includes one room for non-flammable materials and one room for 90-day storage of hazardous waste. Clean Harbors picks up hazardous waste from the facility.

9. Does the IU have hazardous waste manifests? Yes. The Facility representative reviewed hazardous waste manifests onsite.

10. Solid waste production and disposal: Sludge generated in waste treatment is shipped offsite weekly by Clean Harbors. Sludge from treatment of the plating wastewater is shipped offsite monthly by Clean Harbors.

11. Description of sample location and methods:
Sampling point 018 is continuous discharge and sampling point 019 is a batch discharge from the plating wastewater treatment system.

During the walk-through of the plating line waste treatment area, the facility representative noted that 24-hr time-proportional samples are used, collecting samples every 15 minutes. However, the discharge through Outfall 019 is typically only 18 hours per week. The inspection team noted that the sampling procedure should be representative of discharge practices to ensure compliance samples are representative of the actual discharge.

Notes:

- The inspection team requested all photos taken by the facility representatives during the inspection. Photos were provided via email June 8, 2023.

1. **Finding – The industrial user representatives could not explain which parts go through the tumbling operation.**
   The inspection team observed tumblers in the machine shop (see Photograph 1); however, the industrial user representative was unsure which parts enter the tumbler.

2. **Finding – The inspection team observed a basin sink in the polishing room in 702.**
   The facility representatives could not confirm if the sink (see Photograph 2) drained to the sanitary sewer or the onsite wastewater treatment system.

3. **Finding – The inspection team observed multiple sinks throughout the production area.**

4. **Finding – The facility's current sampling procedures are not representative of the actual discharge practices.**
   As stated above, the facility representative stated that 24-hr time-proportional samples are used, collecting samples every 15 minutes. However, wastewater is discharged through Outfall 019 typically only 18 hours per week.

Attachment B

Industrial User Site Visit Photo Log

Photograph 1: Tumbling operation in the machine shop at the Bureau of Engraving and Printing.

Photograph 2: Basin sink in polishing room 702 at the Bureau of Engraving and Printing.