**U.S. ENVIRONMENTAL PROTECTION AGENCY**
**REGION III WATER BRANCH, ENFORCEMENT**
**AND COMPLIANCE ASSURANCE DIVISION**
**CLEAN WATER ACT**
**COMPLIANCE INSPECTION REPORT**

**for**

**Name of Facility:** JHMI Utilities, LLC
**Facility Address:** 600 N. Wolfe Street, Baltimore, MD 21287
**Mailing Address:** 600 N. Wolfe Street, Baltimore, MD 21287

Report Prepared on: 6/9/2023 By: Daniel O'Connell Digitally signed by Daniel O'Connell Date: 2023.06.09 08:01:35 -05'00', Environmental Scientist (PG Environmental)
*Date* *Signature*

Report Final as of: 6/9/2023 By: Duffy, Jessica Digitally signed by Duffy, Jessica Date: 2023.06.09 09:51:51 -04'00', EPA
*Date* *Signature*

## General Information

| | |
|---|---|
| **Type of Inspection:** | Industrial Facility CEI |
| **Owner:** | JHMI Utilities, LLC |
| **Operator:** | JHMI Utilities, LLC |
| **Permittee:** | JHMI Utilities, LLC |
| **NPDES Permit No:** | MD0071196 |
| **NPDES Permit Effective Date:** | September 1, 2022 |
| **NPDES Permit Expiration Date:** | August 31, 2027 |
| **Receiving Water and/or MS4:** | Northwest Harbor Patapsco River |
| **Latitude and Longitude:** | 39.29906 , -76.59134 |

## On-Site Facility Inspection Overview

On April 5, 2023, U.S. Environmental Protection Agency (EPA) Region III's contract inspectors from PG Environmental, (hereinafter referred to as "Inspectors") inspected the JHMI Utilities Power Plants (hereinafter, "Plants") in Baltimore, Maryland. Discharges from each Plant are covered under the same NPDES permit. JHMI Utilities, LLC is identified as the Permittee and owns and operates the Plants. A representative from Maryland Department of the Environment was present during the inspection.

**Approximate Entry Time:** 8:45 AM (EDT) **Approximate Exit Time:** 11:00 AM (EDT)

**Unique Project Identifier (UPI): 3E23WN038A**

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## I. INTRODUCTION

On April 5, 2023, the Inspectors performed inspections on the two (2) JHMI Plants located within the Johns Hopkins medical complex in Baltimore, Maryland. JHMI Utilities, LLC is the Permittee and owns and operates the Plants. The Permittee's activities are regulated under National Pollutant Discharge Elimination System (NPDES) Permit No. MD0071196 (hereinafter, "Permit"), which became effective on September 1, 2022, and expires on August 31, 2027 (refer to Appendix A). The Inspectors were joined on the inspection by the Plant Supervisor.

The primary purpose of the inspection was to review the onsite Plant operations, to review the accuracy and reliability of the Permittee's self-monitoring and reporting program, and to obtain information that will assist EPA in assessing the Permittee's compliance with the requirements of the Permit. The weather at the time of the inspection was partly cloudy and cool.

The Plants are power plants, providing steam and cooling to the facilities on the Johns Hopkins medical campus. The North Energy Plant is located at Madison Street and Wolfe Street, and the South Energy Plant is located along Fayette Street. Both Plants are operated 24 hours per day, 365 days per year. The Plants have a combined discharge rate of 185,000 gallons per day (GPD). However, the Plant Supervisor stated that frequently they do not discharge, especially in the cooler months.

## II. INSPECTION PROCESS

### Inspection Opening Conference

The Inspectors arrived at the North Energy Plant at 8:45 AM (EDT) for the inspection. Danny O'Connell of PG Environmental presented his Clean Water Act inspector credential to the Plant Supervisor at the outset of the inspection and explained the purpose of the inspection was to observe compliance with the Permit. Table 1 describes the individuals that participated in the inspection.

**Table 1: Inspection Attendee List**

| Name | Affiliation | Telephone | Email |
|---|---|---|---|
| **EPA Region III Contract Inspector** | | | |
| Danny O'Connell, Inspector | PG Environmental | (720) 789-8032 | danny.oconnell@pgenv.com |
| Spencer Gibson, Inspector | PG Environmental | (515) 865-2778 | spencer.gibson@pgenv.com |
| **State Representative** | | | |
| Thomas Johnson, Environmental Compliance Specialist | Maryland Department of the Environment | (410) 537-3530 | thomas.johnson1@maryland.gov |
| **Site/Facility Representative** | | | |
| Amanda McClaskey, Plant Supervisor | JHMI Utilities, LLC | (410) 614-9294 | Amcclas1@jhmi.edu |

**Facility Site Walk**

As part of the process, the Inspectors inspected permitted operations at both the North and South Energy Plants with the Plant Supervisor and contract operators (refer to Appendix B, Photographs 1 through 10). The Inspectors also visually inspected the control room, cooling towers, Outfall 001 and the sampling points for Outfalls 001 and 002. The cooling system for each building (North and South) consists of:

- Cooling towers
- Chillers
- Reservoirs

In the cooling system, water is circulated through chillers and cooling towers, with water quality being maintained by blowdown as needed (refer to Figures 1 and 2). The source of water is treated Baltimore City water. Both the North and South Energy Plants discharge blowdown to the Baltimore City storm sewer system. Some roof drains at the complex also discharge to each of the outfalls.

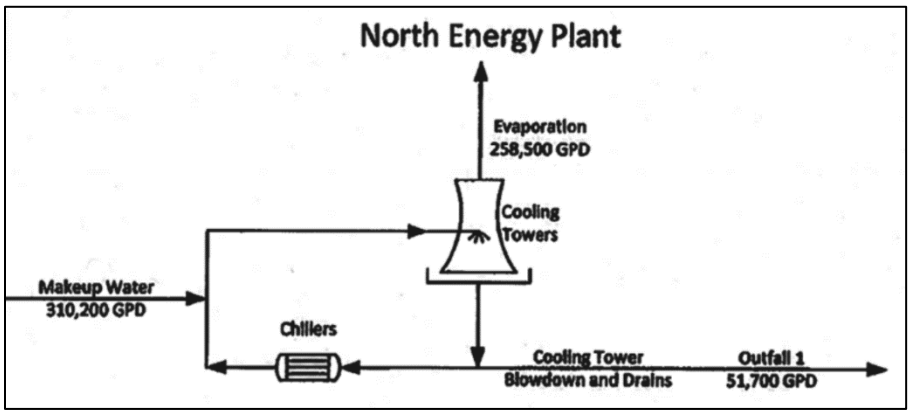



**Figure 1.** Diagram of North Plant process flow.

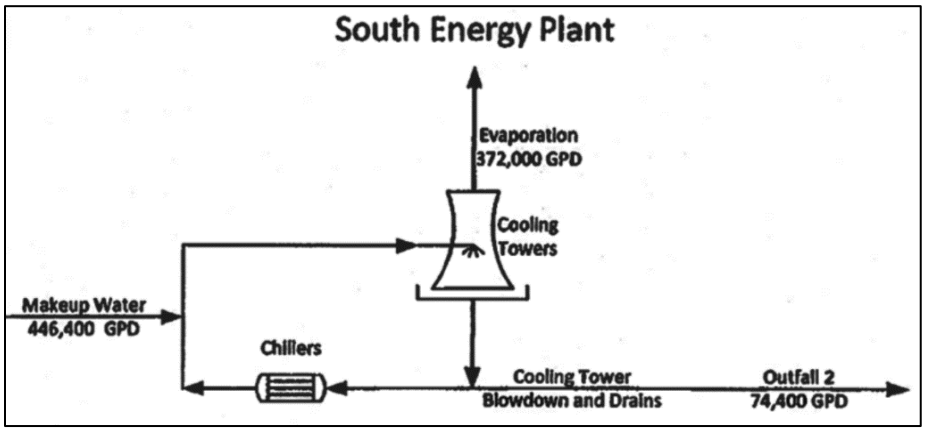



**Figure 2.** Diagram of South Plant process flow.

**Note:** Figures 1 and 2 are taken directly from the permit fact sheet and are included in the report to provide an overview of the process flow. The Plant does not discharge regularly so the values represented in the figures are subject to change based on operational changes of the Plant throughout the year.

The cooling facilities at the two plants are a linked, closed-loop system. The South Energy Plant has six chillers and six cooling towers, and the North Energy Plant has 12 chillers and 12 cooling towers. The system begins running when the outside temperature reaches between 46° and 48° Fahrenheit. The Plants were undergoing renovations at the time of inspection that included replacing old chillers, cooling towers,

and pumps. The South Energy Plant chillers were newer and more efficient, so they were being used more frequently but did not have capacity to cover all of the Johns Hopkins facilities during the summer months.

The Plant Supervisor stated that they hoped to complete renovations at the South Energy Plant by the next winter. The renovations at the North Energy Plant had been ongoing for approximately four years and would not be complete until the South Energy Plant projects were completed.

The blowdown from the cooling towers is an intermittent discharge and, according to the Plant Supervisor, there is rarely any blowdown from the cooling towers from November through April. A once-through heat exchanger is used to keep critical medical equipment cool in the winter; the discharge from this system goes to Outfall 001. The Plant Supervisor stated that the source water for the cooling system is filtered and treated with a glucose derivative before use. The Plant Supervisor also expressed that high copper concentrations from the City of Baltimore source water have caused compliance issues at the Plants in the past.

Outfall 001 is the North Energy Plant discharge point and Outfall 002 is the South Energy Plant discharge point. Discharges go to the Baltimore City storm sewer system that runs about a mile before discharging into Baltimore Harbor. Operators collect samples for Outfall 001 at a storm drain on the west side of Wolfe Street, just south of Madison Street. There was a manhole on the sidewalk that provided access to the blowdown discharge pipe; however, it appeared to be easier to collect the effluent sample from the curb access to the storm drain basin. For Outfall 002, the operators collect samples from the cooling towers discharge pipe inside the basement level of the building. Plant representatives explained that this is done to gain a representative sample prior to any mixing with stormwater from the roof drainage. The Plant Supervisor was not certain where the effluent connects to the public storm sewer system for Outfall 002. During the site walk it was discovered that the portable pH meter used by operators during sampling at the Plants' outfalls was not being calibrated prior to conducting compliance analyses.

The heating system generates steam for medical use and climate control. The boiler blowdown and floor drains and domestic sewage are combined with wastewater from additional processes in the hospital complex in a sump and is discharged to Baltimore City's sanitary sewer system (refer to Appendix B, Photographs 8 and 9). The source of the additional wastewater is unclear.

**Records Review**

The Inspectors conducted a records review to evaluate the Permittee's compliance with the Permit. Most of the records and reports required by the Permit were available for review prior to and after the inspection. Plant equipment operation and maintenance (O&M) manuals were reviewed onsite. The Plant's electronic discharge monitoring reports (eDMRs) were obtained electronically and reviewed offsite after the onsite inspection. The following were reviewed:

- eDMR data during the period from April 1, 2018 through March 31, 2023;
- Daily handwritten operational datasheets;
- Operations logbook;
- Various Plant equipment O&M manuals; and
- Safety data sheets for treatment chemicals

**Summary of Observations**

The following summarizes the Inspectors' observations relative to the Permit requirements, including the status of certain treatment units, operation and maintenance practices, and the Permittee's monitoring and reporting documentation.

**Permit Status and Effluent Exceedances**

Part I.A.1 of the Permit defines effluent limitations and monitoring requirements for Outfalls 001 and 002 discharges.

As part of the data review, the Inspectors reviewed EPA's Enforcement and Compliance History Online (ECHO) Database and eDMR data in order to evaluate compliance (refer to Appendix C, Exhibits 1 and 2).

**Observation 1.** According to data in the Effluent Limit Exceedance Report in EPA's ECHO database, the Plant experienced 45 effluent limit exceedances from Outfall 001 and Outfall 002 between April 1, 2018 and March 31, 2023 (refer to Appendix C, Exhibit 1 and Table 2). The highest percentage of exceedances occurred for copper concentrations followed by total residual chlorine. The Plant Supervisor explained the exceedances experienced at the Plants were believed to be due to high levels of copper and residual chlorine in the Baltimore City source water.

EPA's ECHO Database indicates the Plants were in a state of significant noncompliance (SNC) from October 1, 2021 through December 31, 2021 and from April 1, 2022 through December 31, 2022 (refer to Appendix C, Exhibit 2).

**Table 2. Outfalls 001 and 002 Final Effluent Exceedances (April 1, 2018 through March 31, 2023)***

| Permit # | Outfall | Monitoring Period End Date | Parameter Name | DMR Value | Permit Limit | Units | Limit Type |
|---|---|---|---|---|---|---|---|
| MD0071196 | 002 | 6/30/2020 | Copper (as Cu) | 0.02 | 0.013 | mg/L | Daily Maximum |
| MD0071196 | 002 | 6/30/2020 | Copper (as Cu) | 0.02 | 0.009 | mg/L | Monthly Average |
| MD0071196 | 001 | 9/30/2021 | Copper (as Cu) | 0.04 | 0.013 | mg/L | Daily Maximum |
| MD0071196 | 001 | 9/30/2021 | Copper (as Cu) | 0.04 | 0.009 | mg/L | Monthly Average |
| MD0071196 | 002 | 9/30/2021 | Copper (as Cu) | 0.014 | 0.009 | mg/L | Monthly Average |
| MD0071196 | 002 | 9/30/2021 | Copper (as Cu) | 0.014 | 0.013 | mg/L | Daily Maximum |
| MD0071196 | 001 | 10/31/2021 | Copper (as Cu) | 0.013 | 0.009 | mg/L | Monthly Average |
| MD0071196 | 001 | 4/30/2022 | Copper (as Cu) | 0.23 | 0.013 | mg/L | Daily Maximum |
| MD0071196 | 001 | 4/30/2022 | Copper (as Cu) | 0.23 | 0.009 | mg/L | Monthly Average |
| MD0071196 | 002 | 4/30/2022 | Copper (as Cu) | 0.086 | 0.009 | mg/L | Monthly Average |
| MD0071196 | 002 | 4/30/2022 | Copper (as Cu) | 0.086 | 0.013 | mg/L | Daily Maximum |
| MD0071196 | 001 | 5/31/2022 | Copper (as Cu) | 0.085 | 0.013 | mg/L | Daily Maximum |
| MD0071196 | 001 | 5/31/2022 | Copper (as Cu) | 0.085 | 0.009 | mg/L | Monthly Average |
| MD0071196 | 002 | 5/31/2022 | Copper (as Cu) | 0.072 | 0.009 | mg/L | Monthly Average |
| MD0071196 | 002 | 5/31/2022 | Copper (as Cu) | 0.072 | 0.013 | mg/L | Daily Maximum |
| MD0071196 | 001 | 6/30/2022 | Copper (as Cu) | 0.018 | 0.013 | mg/L | Daily Maximum |
| MD0071196 | 001 | 6/30/2022 | Copper (as Cu) | 0.018 | 0.009 | mg/L | Monthly Average |
| MD0071196 | 002 | 6/30/2022 | Copper (as Cu) | 0.064 | 0.013 | mg/L | Daily Maximum |
| MD0071196 | 002 | 6/30/2022 | Copper (as Cu) | 0.064 | 0.009 | mg/L | Monthly Average |
| MD0071196 | 001 | 7/31/2022 | Copper (as Cu) | 0.056 | 0.009 | mg/L | Monthly Average |
| MD0071196 | 001 | 7/31/2022 | Copper (as Cu) | 0.056 | 0.013 | mg/L | Daily Maximum |
| MD0071196 | 002 | 7/31/2022 | Copper (as Cu) | 0.065 | 0.013 | mg/L | Daily Maximum |
| MD0071196 | 002 | 7/31/2022 | Copper (as Cu) | 0.065 | 0.009 | mg/L | Monthly Average |
| MD0071196 | 001 | 8/31/2022 | Copper (as Cu) | 0.033 | 0.013 | mg/L | Daily Maximum |
| MD0071196 | 001 | 8/31/2022 | Copper (as Cu) | 0.033 | 0.009 | mg/L | Monthly Average |
| MD0071196 | 001 | 8/31/2022 | Total Residual Chlorine | 0.1 | 0.011 | mg/L | Daily Maximum |
| MD0071196 | 001 | 8/31/2022 | Total Residual Chlorine | 0.1 | 0.019 | mg/L | Monthly Average |
| MD0071196 | 002 | 8/31/2022 | Copper (as Cu) | 0.047 | 0.013 | mg/L | Daily Maximum |
| MD0071196 | 002 | 8/31/2022 | Copper (as Cu) | 0.047 | 0.009 | mg/L | Monthly Average |
| MD0071196 | 001 | 9/30/2022 | Copper (as Cu) | 0.065 | 0.013 | mg/L | Daily Maximum |
| MD0071196 | 001 | 9/30/2022 | Copper (as Cu) | 0.065 | 0.009 | mg/L | Monthly Average |
| MD0071196 | 001 | 9/30/2022 | Total Residual Chlorine | 0.321 | 0.011 | mg/L | Monthly Average |
| MD0071196 | 001 | 9/30/2022 | Total Residual Chlorine | 0.321 | 0.019 | mg/L | Daily Maximum |
| MD0071196 | 002 | 9/30/2022 | Copper (as Cu) | 0.43 | 0.013 | mg/L | Daily Maximum |

| Permit # | Outfall | Monitoring Period End Date | Parameter Name | DMR Value | Permit Limit | Units | Limit Type |
|---|---|---|---|---|---|---|---|
| MD0071196 | 002 | 9/30/2022 | Copper (as Cu) | 0.43 | 0.009 | mg/L | Monthly Average |
| MD0071196 | 002 | 9/30/2022 | Total Residual Chlorine | 0.115 | 0.011 | mg/L | Daily Maximum |
| MD0071196 | 002 | 9/30/2022 | Total Residual Chlorine | 0.115 | 0.019 | mg/L | Monthly Average |
| MD0071196 | 001 | 10/31/2022 | Copper (as Cu) | 0.036 | 0.013 | mg/L | Daily Maximum |
| MD0071196 | 001 | 10/31/2022 | Copper (as Cu) | 0.036 | 0.009 | mg/L | Monthly Average |
| MD0071196 | 001 | 10/31/2022 | Total Residual Chlorine | 0.1 | 0.011 | mg/L | Daily Maximum |
| MD0071196 | 001 | 10/31/2022 | Total Residual Chlorine | 0.1 | 0.019 | mg/L | Monthly Average |
| MD0071196 | 001 | 11/30/2022 | Copper (as Cu) | 0.06 | 0.013 | mg/L | Daily Maximum |
| MD0071196 | 001 | 11/30/2022 | Copper (as Cu) | 0.06 | 0.009 | mg/L | Monthly Average |
| MD0071196 | 001 | 11/30/2022 | Total Residual Chlorine | 0.229 | 0.011 | mg/L | Daily Maximum |
| MD0071196 | 001 | 11/30/2022 | Total Residual Chlorine | 0.229 | 0.019 | mg/L | Monthly Average |

*The Permit indicates the minimum level (quantification level) for total residual chlorine is 0.10 mg/L. The Permittee may report all results below this minimum level as "<0.10 mg/L." All results reported below the minimum level shall be considered in compliance.

**Sampling and Analysis Methods**

Part II.A.3 of the Permit states, "The analytical and sampling methods used shall conform to procedures for the analysis of pollutants as identified in Title 40 CFR Part 136 - "Guidelines Establishing Test Procedures for the Analysis of Pollutants" unless otherwise specified."

**Observation 2.** The portable pH meter used by operators during sampling at the Plants' outfalls was not being calibrated prior to conducting compliance analyses. The Plant Supervisor stated most compliance samples are sent to a contract laboratory for analysis.

**Closing Conference**

After the facility site walk, the Inspectors met with the Plant Supervisor for a closing conference and shared his preliminary observations. The Inspectors reiterated to the Plant Supervisor that all preliminary observations discussed were not compliance determinations. Any and all preliminary observations shared were subject to further investigation by the Inspector and EPA upon the additional review of records and documentation. Additional observations may be contained in this inspection report that were not identified at the time of the closing conference after the additional review of materials following the inspection.

The inspection concluded at approximately 11:00 AM (EDT).

# Appendix A
# NPDES Permit No. MD0071196

Maryland
Department of
the Environment

**Larry Hogan**, Governor
**Boyd K. Rutherford**, Lt. Governor

**Horacio Tablada**, Secretary
**Suzanne E. Dorsey**, Deputy Secretary

Aug 19, 2022

**CERTIFIED MAIL**

Anatoly Gimburg, Director of Facilities
JHMI Utilities, LLC – Johns Hopkins Hospital
JHMI Utilities
600 N. Wolfe Street, Billings B-120
Baltimore, Maryland 21287

Re: State Discharge Permit No. 18-DP-3801 MD, NPDES Permit No. MD0071196

Dear Mr. Gimburg:

Enclosed is the issued discharge permit referenced above with the effective date indicated on the cover page. The permittee is responsible for complying with all permit conditions. You are therefore advised to read the permit carefully and become thoroughly familiar with the requirements.

The U.S. Environmental Protection Agency (EPA) recently promulgated a final rule to modernize Clean Water Act reporting for municipalities, industries, and other facilities by converting to an electronic data reporting system (see 40 CFR 127.16). Under the final rule, any Discharge Monitoring Reports (DMRs) to be submitted must now be electronically reported to the Department.

Thus Maryland Department of the Environment now requires use of NetDMR for filing your required NPDES DMRs. NetDMR is a freely available Web based tool that allows NPDES permittees to electronically sign and submit their DMRs to EPA via a secure internet connection. NetDMR is designed to improve data quality, reduce reporting liabilities, save paper, and provide cost savings. It allows participants to discontinue mailing in hard copy forms under 40 CFR 122.41 and 403.12. For more information go to the EPA website (www.epa.gov/netdmr) or call the MDE Water and Science Administration, Compliance Program, at 410-537-3520 and ask to speak to a NetDMR coordinator.

As indicated in Condition II.A.2 of your permit, before you can submit official DMRs using NetDMR you must attend a training Webinar and successfully set-up and submit test monitoring results electronically. If you do not attend the required training in a timely manner, you will be at risk of violating the new U.S. EPA NPDES electronic reporting rule.

Enclosed is also a copy of the Federal Register, Part 136 - "Guidelines Establishing Test Procedures for Analysis of Pollutants". Unless otherwise specified, these guidelines are to be used for the analyses required by this permit. The most current version of 40 C.F.R. Part 136 can be

found online at EPA's website (www.epa.gov/epahome/cfr40.htm). Finally you'll find enclosed a brochure for NetDMRs.

Please direct all future correspondence regarding permit compliance to the following address:

Attention: Discharge Monitoring Reports
Water and Science Administration – Compliance Program
Maryland Department of the Environment
1800 Washington Boulevard, Suite 425
Baltimore, Maryland 21230-1708

If you have any other questions, please do not hesitate to contact Casey Leach, Industrial Stormwater Permits Division, at 410-537-3323 or at casey.leach@maryland.gov .

Sincerely,

D. Lee Currey, Director
Water and Science Administration

Enclosures (3)

Cc: WSA-Compliance Division- Central

Maryland
Department of
the Environment

**Larry Hogan**, Governor
**Boyd K. Rutherford**, Lt. Governor

**Horacio Tablada**, Secretary
**Suzanne E. Dorsey**, Deputy Secretary

| | | | |
|---|---|---|---|
| STATE DISCHARGE PERMIT NUMBER | 18-DP-3801 | NPDES PERMIT NUMBER | MD0071196 |
| EFFECTIVE DATE | September 1, 2022 | APPROVAL DATE | Aug 19, 2022 |
| EXPIRATION DATE | August 31, 2027 | REAPPLICATION DATE | August 31, 2026 |
| MODIFICATION DATE: | N/A | | |

Pursuant to the provisions of Title 9 of the Environment Article, Annotated Code of Maryland, and regulations promulgated thereunder, and the provisions of the Clean Water Act, 33 U.S.C. § 1251 et seq. and implementing regulations 40 CFR Parts 122, 123, 124, and 125, the Department of the Environment, hereinafter referred to as the "Department," hereby authorizes

JHMI Utilities
Johns Hopkins Hospital
600 North Wolfe Street
Billings Administration, Room B-120
Baltimore, Maryland 21287

TO DISCHARGE FROM — Cooling tower blowdown from a hospital.

LOCATED AT — 600 N. Wolfe Street, Billings B-120
Baltimore, Maryland 21287

VIA OUTFALLS

001 and 002 as identified and described herein

TO

A municipal storm drain to the Northwest Harbor Patapsco River, a designated Use II water body under COMAR 26.08.02.02 protected for water contact recreation, fishing, aquatic life, wildlife, and support of shellfish harvesting in accordance with the following special and general conditions and map made a part hereof.

## I. SPECIAL CONDITIONS

### A.1 EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the effective period of this permit, the permittee is authorized to discharge cooling tower blowdown via Outfall 001 (Maryland Coordinates 1428.1 E and 594.9 N) and Outfall 002 (Maryland Coordinates 1427.7 E and 592.9 N). Outfall 001 is at the storm drain inlet on N. Wolfe St. and the corner of E. Madison St. Outfall 002 is an inaccessible connection to the eight-inch storm sewer beneath the south end of the facility.

Discharges authorized from this outfall shall be limited and monitored by the permittee at a sampling tap on the circulating loop of the North Plant and the discharge from Outfall 002 shall be limited and monitored by the permittee at a sampling tap on the circulating loop of the South Plant as specified in the table below:

| PARAMETER | QUANTITY OR LOADING | | | QUALITY OR CONCENTRATION | | | | FREQUENCY OF ANALYSIS | SAMPLE TYPE | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|
| | MONTHLY AVERAGE | DAILY MAXIMUM | UNITS | MINIMUM | MONTHLY AVERAGE | DAILY MAXIMUM | UNITS | | | |
| Flow | Report | Report | MGD | | | | | 1/Month | Measured | |
| Total Copper | | | | | 0.009 | 0.013 | mg/L | 1/Month | Grab | (2) |
| Dissolved Copper | | | | | Report | Report | mg/L | 1/Month | Grab | |
| Hardness (as $CaCO_3$) | | | | | Report | Report | mg/L | 1/Month | Grab | |
| Total Residual Chlorine | | | | | 0.011 | 0.019 | mg/L | 1/Month | Grab | (1) |
| pH | | | | 6.0 | | 9.0 | s.u. | 1/Month | Grab | |
| Temperature | | | | | 90 | | °F | 1/Week | i.s. | |
| Total Phosphorus | | | | | Report | Report | mg/L | 1/Month | Grab | |

There shall be no discharge of floating solids or persistent foam in other than trace amounts. Persistent foam is foam that does not dissipate within one half-hour from the point of discharge.

## I. SPECIAL CONDITIONS

### A.1 EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The effluent limitations and monitoring requirements are based on an annual average flow of 185,120 gallons per day (gpd) (sum of two outfalls). The permittee shall alert the Department when its annual average flow exceeds 200,000 gallons per day (gpd). The permittee shall evaluate any change in annual average flow each year and, in accordance with General Condition B.1, notify the Department by May 1 if the annual average flow is expected to exceed this level. This requirement is not a flow limit. Annual average flow should be calculated by adding the flow volume for every day in a calendar year and dividing by the number of days in the year, days of no flow should be counted as zero.

The discharge of wastewater from cleaning of the cooling water system with acids, solvents, or detergents is prohibited. If caustic inorganic cleaners or chlorine shock treatment are used, the permittee shall monitor the discharge for pH and total residual chlorine during those periods of discharge in addition to the monthly monitoring of the routine discharge.

(1) The minimum level (quantification level) for total residual chlorine is 0.10 mg/l. The permittee may report all results below this minimum level as "<0.10 mg/l". All results reported below the minimum level shall be considered in compliance.

(2) Results reported as below detection will not be accepted unless the test method with the lowest method detection level in 40 CFR 136 is used. An alternate test method may be substituted as long as the Department concurs that its detection level is less than the applicable Toxic Substance Criteria in COMAR 26.08.02.03 or the permittee demonstrates to the Department that a lower detection level is not practically achievable for this wastewater. Sample preservation procedures, container materials, and maximum allowable holding times must be specified in any application to the Department for use of an alternate test method(s). Written approval from the Department must be given before any alternate test method(s) is used. The integrity of all testing shall be ensured by following all sample preservation procedures, container materials, and maximum allowable holding times for the test method(s) specified. If a variance from the prescribed preservation techniques, container materials, and maximum holding times applicable is requested sufficient data shall be provided in the application to the Department to assure the integrity of the sample.

I. SPECIAL CONDITIONS

B. DEFINITIONS

1. "Ambient temperature of the effluent receiving stream" means the water temperature not impacted by a point source discharge, where ambient temperature is measured in areas of the stream representative of typical or average conditions of the stream segment in question.

2. "Bypass" means the intentional diversion of wastes from any portion of a treatment facility.

3. "Clean Water Act" means the Federal Water Pollution Control Act Amendments of 1972," 33 U.S.C. 1251, 86 Stat. 866, as amended by the "Clean Water Act of 1977," 91 Stat. 1566, and all other amendments to that act.

4. "CFR" means the Code of Federal Regulations.

5. "COMAR" means the Code of Maryland Regulations.

6. "Daily determination of concentration" means an analysis performed on an effluent sample representative of flow for that calendar day, with concentration expressed in mg/l or other appropriate unit of measurement.

7. "Daily maximum effluent concentration" means the highest reading of any daily determination of concentration.

8. "Daily maximum temperature" means the highest temperature observed during a 24-hour period, or if flows are of shorter duration, during the operating day.

9. "Department" means the Maryland Department of the Environment (MDE).

10. "Dry weather" means a period that begins when there is no longer any precipitation runoff flowing into the facility's storm drains, and ends with any precipitation event that produces runoff.

11. "Estimated flow" means a calculated volume or discharge rate based on a technical evaluation of sources contributing to the discharge, including but not limited to pump capabilities, water meters and batch discharge volumes.

12. "Grab sample" means an individual sample collected over a period of time not exceeding 15 minutes. Grab samples collected for pH and total residual chlorine must be analyzed within 15 minutes from the time of collection.

13. "Immersion Stabilization (i-s)"means a calibrated device used to measure temperature. It is immersed in the effluent stream until the temperature reading is stabilized.

14. "Measured flow" means any method of liquid volume measurement for which accuracy has been previously demonstrated in engineering practice, or for which a relationship to absolute volume has been obtained.

15. "Minimum value" means the lowest value measured during a 24-hour period.

16. "Monthly, quarterly, semi-annual, or annual average effluent concentration" means the value calculated by computing the arithmetic mean of all daily determinations of concentration made during any respective calendar-month, 3-month, 6-month, or 12-month period.

17. "National Pollutant Discharge Elimination System (NPDES)" means the national system for issuing permits established under §402 of the Clean Water Act (1972).

18. "NetDMR" means a nationally-available electronic reporting tool, initially designed by states and later adapted for national use by EPA, which can be used by NPDES-regulated facilities to submit discharge monitoring reports (DMRs) electronically to EPA through a secure Internet application over the National Environmental Information Exchange Network (NEIEN). EPA can then share this information with authorized states, tribes, and territories.

19. "Outfall" means the location where effluent is discharged into receiving waters.

20. "Permittee" means an individual or organization holding a discharge permit issued by the Department.

21. "Recorded" (i.e., recorded flow, pH, temperature, etc.), means any method of providing a permanent, continuous record including but not limited to circular and strip charts.

22. "Sampling Point" means the effluent sampling location in the outfall line(s) downstream from the last addition point or as otherwise specified.

23. "Solvent" is defined as an organic substance capable of dissolving another to form a uniformly dispersed mixture. Organic solvents include but are not limited to aromatic hydrocarbons, aliphatic hydrocarbons, esters, ethers, ketones, amines, and nitrated and chlorinated hydrocarbons

24. "Temperature Difference" is a calculated value found by subtracting the effluent temperature or the temperature of the receiving water at the edge of a mixing zone, whichever is lower, from the temperature of the ambient receiving water or receiving water quality standard, whichever is higher.

25. "Total Residual Chlorine (TRC)" means the total amount of chlorine present in a sample. This is the sum of the free chlorine residual and the combined available chlorine residual.

26. "Upset" means an exceptional incident where unintentional and temporary noncompliance with technology-based permit effluent limitations occurs due to factors beyond the reasonable control of the permittee. An upset does not include noncompliance caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

## C. TOXIC POLLUTANT REPORTING

The permittee shall notify the Department as soon as it is known or suspected that any toxic pollutants which are not specifically limited by this permit have been discharged in excess of notification levels specified in 40 CFR Part 122.42(a).

D. REMOVED SUBSTANCES

1. Within 30 days after notification the permittee shall provide the Department with information on the disposal of any removed substances defined above under General Condition B.7. Requested information may include, but may not be limited to:

   a. A map clearly showing all areas used for disposal of removed substances.

   b. A description of physical, chemical, and biological characteristics of any removed substances as well as their quantities and methods of disposal.

   c. The identity of any contractor or subcontractor, their mailing address and information specified in a and b above, if disposal is handled by persons other than the permittee.

2. The Department's notification may also require the permittee to provide the above information prior to use of new or additional disposal areas, contractors, or subcontractors.

E. ANALYTICAL LABORATORY

Within 30 days after the effective date of this permit, the permittee shall submit to the Department the name and address of the analytical laboratory (including the permittee's own laboratory) used to perform the monitoring required by this permit.

If the laboratory changes during the effective period of this permit, the permittee shall notify the Department of the new laboratory within 30 days after the change.

F. WASTEWATER OPERATOR CERTIFICATION – [Reserved]

G. FLOW MONITORING

In lieu of providing measured flow (defined under Special Conditions in section B above) at Outfalls 001 and 002, the permittee may estimate flows and submit the following information when submitting the initial discharge monitoring report and/or upon any change in methodology:

1. A description of the methodology used to estimate flow at each outfall where flow measurement equipment is not present.

2. Documentation appropriate to the methodology utilized which provides information to support the validity of the reported flow estimate. If actual measurements or observations are made, a description of typical sampling times, locations, and persons performing the measurements/observations must also be provided.

3. A description of factors (e.g., batch discharges, intermittent operation, etc.) which caused flow at the outfall to fluctuate significantly from the previously provided estimate.

H. FLOW BASIS FOR ANNUAL DISCHARGE PERMIT FEE

The Department will calculate permit fees annually and invoice the permittee based on annual average discharge flow. Permit fees are payable to the Department in advance by July 1 of each fiscal year (July 1 through June 30).

The permittee shall provide notification of any flow revision to the Department's Industrial and General Permits Division by May 1 of each year to update the annual average discharge flow value used for the next billing period, if the flow volume used to calculate the most recent annual permit fee (or application fee if the permit was renewed within the past year) differs significantly from either of the following flow determinations:

1. Average flow data reported on the permittee's discharge monitoring reports for the current fiscal year, or

2. Estimated flow volume for the next billing period based on recent changes at the facility.

The flow revision notification shall include a summary of flow data reported on discharge monitoring reports for the previous year and any other supporting documentation to be used as the basis for the revised flow determination.

I. REAPPLICATION FOR A PERMIT

The Department is implementing a revised schedule for issuance of discharge permits grouped by geographical areas (watersheds). To implement the new watershed-based schedule the Department may revoke and reissue this permit concurrently with other permits in the watershed.

Unless the Department grants permission for a later date the permittee shall submit a permit renewal application no later than 12 months prior to the expiration date of the current permit, or notify the Department of their intent to cease discharging by the permit's expiration date.

In the event that a timely and sufficient reapplication has been submitted and through no fault of the permittee the Department is unable to issue a new permit before the expiration date, the terms and conditions of this permit are automatically continued and remain in full force and effect.

J. PERMIT REOPENER FOR TOTAL MAXIMUM DAILY LOAD (TMDL)

This permit may be reopened as a major modification to implement any applicable requirements associated with a Total Maximum Daily Load (TMDL) issued or approved for the Baltimore Harbor watershed (basin code 02130903), including but not limited to nutrients and sediments.

This permit is consistent with the terms and conditions of the Chesapeake Bay Total Maximum Daily Load (TMDL) for Sediments, Nitrogen and Phosphorus established December 29, 2010 (76 Fed. Reg.549, January 5, 2011).

Based on facility operations and/or discharge characteristics this permit does not limit discharges of total suspended solids to prevent water quality degradation of receiving waters and ultimately the Chesapeake Bay, but does not impose limits for total nitrogen and total phosphorus.

To ensure the Chesapeake Bay and its tributaries are protected from discharges of sediments, nitrogen and phosphorus this permit may be reopened as a major modification to implement any future

requirements associated with the Chesapeake Bay TMDL. At that time the permittee may become subject to a Department-issued General Permit for the discharge of such pollutants.

K. BIOMONITORING PROGRAM – [Reserved]

L. TOXICITY REDUCTION EVALUATION

A Toxicity Reduction Evaluation (TRE) is an investigation conducted to identify the causative agents of effluent toxicity, isolate the source(s), determine the effectiveness of control options, implement necessary control measures and confirm the reduction in toxicity. The permittee shall conduct a TRE when a review of toxicity test data by the Department indicates unacceptable, acute, or chronic effluent toxicity.

1. Within 90 days following notification by the Department that a TRE is required the permittee shall submit a study plan and schedule for conducting the TRE. The permittee shall conduct the TRE in a manner consistent with the plan and schedule submitted to the Department.

2. The plan should follow the framework set forth in *Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations* (EPA/600/2-88/070, April 1989).

3. Beginning 60 days following the date of the Department's acceptance of a TRE study plan and every 60 days thereafter the permittee shall submit progress reports including all relevant test data to the Department. The permittee shall continue to submit progress reports every 60 days until the toxicity reduction confirmation is completed.

   All TRE-related materials shall be submitted electronically to the Department if the permittee has already been approved for the NetDMR tool. The material shall be attached as a separate single file and labeled as "TRE" in the NetDMR tool. Otherwise, the permittee shall submit all pertinent physical documents to:

   Attention: Whole Effluent Toxicity Coordinator
   Compliance Program
   Water and Science Administration
   Maryland Department of the Environment
   Montgomery Park Business Center
   1800 Washington Boulevard, Suite 420
   Baltimore, MD 21230-1708

   The permittee shall notify the Department at the above address or via email at mde.biomonitoring@maryland.gov immediately upon electronic submission of TRE material through NetDMR tool.

4. Within 60 days following completion of the toxicity identification (source isolation) phase of the TRE the permittee shall submit a plan and schedule to the Department for implementing measures necessary to eliminate acute toxicity and/or reduce chronic toxicity to acceptable levels. Implementation of the measures identified shall begin immediately upon submission of this plan.

5. Within 60 days after completing the implementation of control measures to eliminate or reduce toxicity the permittee shall submit a study plan to the Department for approval, to

confirm the elimination or reduction of toxicity using biomonitoring.

6. If for any reason the implemented measures do not result in compliance with the Department's toxicity limitations the permittee shall continue the TRE.

M. MIXING ZONES AND POLLUTION PREVENTION--[Reserved]

N. PROTECTION OF WATER QUALITY

It is a violation of this permit to discharge any substance not otherwise listed under this permit's "Effluent Limitations and Monitoring Requirements" at levels which would cause or contribute to any exceedance of the numerical water quality standards set forth in COMAR 26.08.02.03, unless the level and substance were disclosed in writing in the permit application prior to issuance of the permit. If a discharge regulated by this permit causes or contributes to an exceedance of water quality standards in COMAR 26.08.02.03, including but not limited to general water quality standards, or if the discharge includes a pollutant not disclosed or addressed in the public record for the permit determination; the Department is authorized to modify, suspend or revoke this permit or take enforcement action to address unlawful discharges.

O. USE OF SUFFICIENTLY SENSITIVE TEST METHODS

In accordance with 40 C.F.R. § 122.44(i)(1)(iv), the permittee shall use sufficiently sensitive test procedures (i.e., methods) approved under 40 C.F.R. Part 136 or required under 40 C.F.R. Chapter I, Subchapter N or O, for the analysis of pollutants or pollutant parameters limited in this permit. A method is considered "sufficiently sensitive" when either: (1) the method minimum level (ML) is at or below the level of the effluent limit established in this permit for the measured pollutant or pollutant parameter; or (2) the method has the lowest ML of the analytical methods approved under 40 C.F.R. Part 136 or required under 40 C.F.R. Chapter I, Subchapter N or O for the measured pollutant or pollutant parameter. The ML is not the minimum level of detection, but rather the lowest level at which the test equipment produces a recognizable signal and acceptable calibration point for a pollutant or pollutant parameter, representative of the lowest concentration at which a pollutant or pollutant parameter can be measured with a known level of confidence. For the purposes of this permit, the detection limit is the lowest concentration that can be reliably measured within specified limits of precision and accuracy for a specific laboratory analytical method during routine laboratory operating conditions (i.e., the level above which an actual value is reported for an analyte, and the level below which an analyte is reported as non-detect).

P. USE OF CHEMICAL CONDITIONERS IN COOLING WATER

If not already submitted with the permit application, no later than 30 days after the effective date of coverage under this permit, the permittee shall submit to the Department (Industrial and General Permit Division) the name of all authorized water treatment additives currently in use at the facility and potentially discharging to surface water of the State. No later than ten days after changing or adding any water treatment chemicals, the permittee shall submit the names of the new products to the Department. Accompanying this list shall be corresponding aquatic toxicity data, manufacture's information on chemical composition of the product, and the concentrations that will exists in the effluent (note: material safety data sheets seldom provide all of this information). Based on this information, if the Department determines that wastewater containing the additive is likely to cause toxicity, use of additives will be prohibited. The Department, however, will approve its use if the permittee preforms biomonitoring of the effluent and demonstrates that the effluent is nontoxic.

Q. STORMWATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY – [Reserved]

## II. GENERAL CONDITIONS

### A. MONITORING AND REPORTING

#### 1. REPRESENTATIVE SAMPLING

Samples and measurements taken as required herein shall be taken at such times as to be representative of the quantity and quality of the discharges during the specified monitoring periods.

#### 2. REPORTING-MONITORING RESULTS SUBMITTED QUARTERLY

Monitoring results obtained during each calendar quarter shall be summarized and submitted electronically using NetDMR. For each effluent characteristic monitored at a frequency of less than once per month the results obtained during the reporting period shall be summarized on a single report for each quarter. More frequently monitored effluent characteristics and effluent characteristics limited as a monthly average shall be reported on a separate report for each calendar month of the reporting period. Results shall be submitted to the Department via NetDMR no later than the 28th of the month following the end of the reporting period. Specific requirements regarding submittal of data and reports using NetDMR are described below:

a. NetDMR is a U.S. EPA tool allowing regulated Clean Water Act permittees to submit monitoring reports electronically via a secure Internet application. The permittee must apply for access to NetDMR at www.epa.gov/netdmr and register for a NetDMR Webinar. Before the permittee can submit official DMRs using NetDMR the permittee must attend a training Webinar and successfully set-up and submit test monitoring results electronically.

b. The permittee may be eligible for a temporary waiver by MDE from NPDES electronic reporting requirements if the permittee has no current internet access and is physically located in a geographic area (i.e., zip code) that is identified as under-served for broadband internet access in the most recent National Broadband Map from the Federal Communications Commission (FCC); or if the permittee can demonstrate that such electronic reporting of the monitoring data and reports would pose an unreasonable burden or expense to the NPDES-permitted facility. Waiver requests must be submitted in writing to the Department for written approval at least 120 days prior to the date the permittee would be required under this permit to begin using NetDMR. This demonstration shall be valid for one (1) year from the date of the Department approval and shall thereupon expire. At such time, DMRs and reports shall be submitted electronically to the Department unless the permittee submits a renewed waiver request and such request is approved by the Department.

#### 3. SAMPLING AND ANALYSIS METHODS

The analytical and sampling methods used shall conform to procedures for the analysis of pollutants as identified in Title 40 CFR Part 136 - "Guidelines Establishing Test Procedures for the Analysis of Pollutants" unless otherwise specified.

4. DATA RECORDING REQUIREMENTS

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

a. the exact place, date, and time of sampling or measurement;
b. the person(s) who performed the sampling or measurement;
c. the dates and times the analyses were performed;
d. the person(s) who performed the analyses;
e. the analytical techniques or methods used; and
f. the results of all required analyses.

5. MONITORING EQUIPMENT MAINTENANCE

The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation to insure accuracy of measurements.

6. ADDITIONAL MONITORING BY PERMITTEE

If the permittee monitors any pollutant, using approved analytical methods as specified above, at the locations designated herein more frequently than required by this permit, the results of such monitoring, including the increased frequency, shall be included in the calculation and reporting of the values required in the Discharge Monitoring Report form (EPA No. 3320-1).

7. RECORDS RETENTION

All records and information resulting from the monitoring activities required by this permit, including all records of analyses performed, calibration and maintenance of instrumentation, and original recordings from continuous monitoring instrumentation shall be retained for a minimum of three years. This period shall be automatically extended during the course of litigation, or when requested by the Department.

B. MANAGEMENT REQUIREMENTS

1. CHANGE IN DISCHARGE

All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant identified in this permit at a level in excess of that authorized shall constitute a violation of the terms and conditions of this permit. The permittee shall report any anticipated facility expansions, production increases, or process modifications which will result in new, different or an increased discharge of pollutants by submitting a new application at least 180 days prior to the commencement of the changed discharge except that if the change only affects a listed pollutant and will not violate the effluent limitations specified in this permit, by providing written notice to the Department. Following such notice, the permit may be modified by the Department to include new effluent limitations on those pollutants.

2. NONCOMPLIANCE WITH EFFLUENT LIMITATIONS

If, for any reason, the permittee does not comply with or will be unable to comply with any daily maximum or daily minimum effluent limitation specified in this permit, the permittee shall notify the Inspection and Compliance Program by telephone at (410) 537-3510 within 24

hours of becoming aware of the noncompliance. Within five calendar days, the permittee shall provide the Department with the following information in writing:

a. a description of the non-complying discharge including its impact upon the receiving waters;

b. cause of noncompliance;

c. anticipated time the condition of noncompliance is expected to continue or if such condition has been corrected, the duration of the period of noncompliance;

d. steps taken by the permittee to reduce and eliminate the non-complying discharge;

e. steps to be taken by the permittee to prevent recurrence of the condition of noncompliance; and

f. a description of the accelerated or additional monitoring by the permittee to determine the nature and impact of the noncomplying discharge.

3. FACILITIES OPERATION

All treatment, control and monitoring facilities, or systems installed or used by the permittee, are to be maintained in good working order and operated efficiently.

4. ADVERSE IMPACT

The permittee shall take all reasonable steps to minimize or prevent any adverse impact to waters of the State or to human health resulting from noncompliance with any effluent limitations specified in this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

5. BYPASSING

Any bypass of treatment facilities necessary to maintain compliance with the terms and conditions of this permit is prohibited unless:

a. the bypass is unavoidable to prevent a loss of life, personal injury or substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources;

b. there are no feasible alternatives;

c. notification is received by the Department within 24 hours (if orally notified, then followed by a written submission within five calendar days of the permittee's becoming aware of the bypass). Where the need for a bypass is known (or should have been known) in advance, this notification shall be submitted to the Department for approval at least ten calendar days before the date of bypass or at the earliest possible date if the period of advance knowledge is less than ten calendar days; and

d. the bypass is allowed under conditions determined by the Department to be necessary to minimize adverse effects.

6. CONDITIONS NECESSARY FOR DEMONSTRATION OF AN UPSET

An upset shall constitute an affirmative defense to an action brought for noncompliance with technology-based effluent limitations only if the permittee demonstrates, through properly signed, contemporaneous operating logs, or other relevant evidence, that:

a. an upset occurred and that the permittee can identify the specific cause(s) of the upset;

b. the permitted facility was at the time being operated in a prudent and workman-like manner and in compliance with proper operation and maintenance procedures;

c. the permittee submitted a 24-hour notification of upset in accordance with the reporting requirements of General Condition II.B.2 above;

d. the permittee submitted, within five (5) calendar days of becoming aware of the upset, documentation to support and justify the upset; and

e. the permittee complied with any remedial measures required to minimize adverse impact.

7. REMOVED SUBSTANCES

Wastes such as solids, sludges, or other pollutants removed from or resulting from treatment or control of wastewaters, or facility operations, shall be disposed of in a manner to prevent any removed substances or runoff from such substances from entering or from being placed in a location where they may enter the waters of the State.

8. POWER FAILURE

In order to maintain compliance with the effluent limitations and prohibitions of this permit, the permittee shall either:

a. provide an alternative power source sufficient to operate the wastewater collection and treatment facilities or,

b. halt, reduce or otherwise control production and all discharges upon the reduction, loss, or failure of the primary source of power to the wastewater collection and treatment facilities.

C. RESPONSIBILITIES

1. RIGHT OF ENTRY

The permittee shall permit the Secretary of the Department, the Regional Administrator for the Environmental Protection Agency, or their authorized representatives, upon the presentation of credentials to:

a. enter upon the permittee's premises where an effluent source is located or where any records are required to be kept under the terms and conditions of this permit;

b. access and copy, at reasonable times, any records required to be kept under the terms and conditions of this permit;

c. inspect, at reasonable times, any monitoring equipment or monitoring method required in this permit;

d. inspect, at reasonable times, any collection, treatment, pollution management, or discharge facilities required under this permit; and

e. sample, at reasonable times, any discharge of pollutants.

2. TRANSFER OF OWNERSHIP OR CONTROL OF FACILITIES

In the event of any change in ownership or control of facilities from which the authorized discharge emanates, the permit may be transferred to another person if:

a. the permittee notifies the Department in writing, of the proposed transfer;

b. a written agreement, indicating the specific date of proposed transfer of permit coverage and acknowledging responsibilities of current and new permittees for compliance with the liability for the terms and conditions of this permit, is submitted to the Department; and

c. neither the current permittee nor the new permittee receive notification from the Department, within 30 calendar days, of intent to modify, revoke, reissue or terminate the existing permit.

3. REAPPLICATION FOR A PERMIT –[Reserved]

4. AVAILABILITY OF REPORTS

Except for data determined to be confidential under Section 308 of the Clean Water Act, 33 U.S.C. § 1318, all submitted data shall be available for public inspection at the offices of the Department and the Regional Administrator of the Environmental Protection Agency.

5. PERMIT MODIFICATION

A permit may be modified by the Department upon written request of the permittee and after notice and opportunity for a public hearing in accordance with and for the reasons set forth in 40 CFR § 122.62 and 122.63.

6. PERMIT MODIFICATION, SUSPENSION, OR REVOCATION

After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked and reissued in whole or in part during its term, in accordance with the provisions set forth in COMAR 26.08.04.10, for causes including, but not limited to, the following:

a. violation of any terms or conditions of this permit;

b. obtaining this permit by misrepresentation or failure to disclose fully all relevant facts;

c. a change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge; or

d. a determination that the permitted discharge poses a threat to human health or welfare or to the environment and can only be regulated to acceptable levels by permit modification or termination.

e. upon a final, unreviewable determination that the permittee lacks, or is in violation, of any federal, state, or local approval necessary to conduct the activities by this permit.

7. TOXIC POLLUTANTS

If a toxic effluent standard or prohibition (including any schedule of compliance specified in such toxic effluent standard or prohibition) is established by the U.S. Environmental Protection Agency, or pursuant to Section 9-314 of the Environment Article, Annotated Code of Maryland, for a toxic pollutant which is present in the discharges authorized herein and such standard is more stringent than any limitation upon such pollutant in this permit, this permit shall be revoked and reissued or modified in accordance with the toxic effluent standard or prohibition and the permittee so notified. Any effluent standard established in this case for a pollutant which is injurious to human health is effective and enforceable by the time set forth in the promulgated standard, even absent permit modification.

8. OIL AND HAZARDOUS SUBSTANCES PROHIBITED

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibility, liability, or penalties to which the permittee may be subject under Section 311 of the Clean Water Act (33. U.S.C. § 1321), or under the Annotated Code of Maryland.

9. CIVIL AND CRIMINAL LIABILITY

Except as provided in permit conditions on "bypassing," "upset," and "power failure," nothing in this permit shall be construed to preclude the institution of any legal action nor relieve the permittee from civil or criminal responsibilities and/or penalties for noncompliance with Title 9 of the Environment Article, Annotated Code of Maryland or any federal, local, or other State law or regulation.

10. PROPERTY RIGHTS/COMPLIANCE WITH OTHER REQUIREMENTS

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, State or local laws or regulations.

11. SEVERABILITY

The provisions of this permit are severable. If any provisions of this permit shall be held invalid for any reason, the remaining provisions shall remain in full force and effect. If the application of any provision of this permit to any circumstances is held invalid, its application to other circumstances shall not be affected.

12. WATER CONSTRUCTION AND OBSTRUCTION

This permit does not authorize the construction or placing of physical structures, facilities, or debris, or the undertaking of related activities in any waters of the State.

13. COMPLIANCE WITH WATER POLLUTION ABATEMENT STATUTES

The permittee shall comply at all times with the provisions of the Environment Article, Title 7, Subtitle 2 and Title 9, Subtitle 3 of the Annotated Code of Maryland and the Clean Water Act, 33 U.S.C. § 1251 et seq.

14. ACTION ON VIOLATIONS

The issue or reissue of this permit does not constitute a decision by the State not to proceed in administrative, civil, or criminal action for any violations of State law or regulations occurring before the issue or reissue of this permit, nor a waiver of the State's right to do so.

15. CIVIL PENALTIES FOR VIOLATIONS OF PERMIT CONDITIONS

In addition to civil penalties for violations of State water pollution control laws set forth in Section 9-342 of the Environment Article, Annotated Code of Maryland, the Permittee shall be subject to civil penalty set forth in 33 U.S.C. § 1319 (d) of the Clean Water Act as adjusted for inflation according to 40 CFR, §19.4.

16. CRIMINAL PENALTIES FOR VIOLATIONS OF PERMIT CONDITIONS

In addition to criminal penalties for violations of State water pollution control laws set forth in Section 9-343 of the Environment Article, Annotated Code of Maryland, the Permittee shall be subjected to criminal penalty set forth in 33 U.S.C. § 1319 (c).

17. DUTY TO PROVIDE INFORMATION

The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

18. SIGNATORY REQUIREMENTS

All applications, reports, or information submitted to the Director shall be signed and certified as required by 40 CFR 122.22.

19. REOPENER CLAUSE FOR PERMITS

This permit shall be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved under Sections 301, 304, and 307 of the Clean Water Act [33 USCS §§ 1311, 1314, 1317] if the effluent standard or limitation so issued or approved:

a. contains different conditions or is otherwise more stringent than any effluent limitation in this permit or

b. controls any pollutant not limited in this permit. This permit, as modified or reissued under this paragraph, shall also contain any other requirements of the Act then applicable.

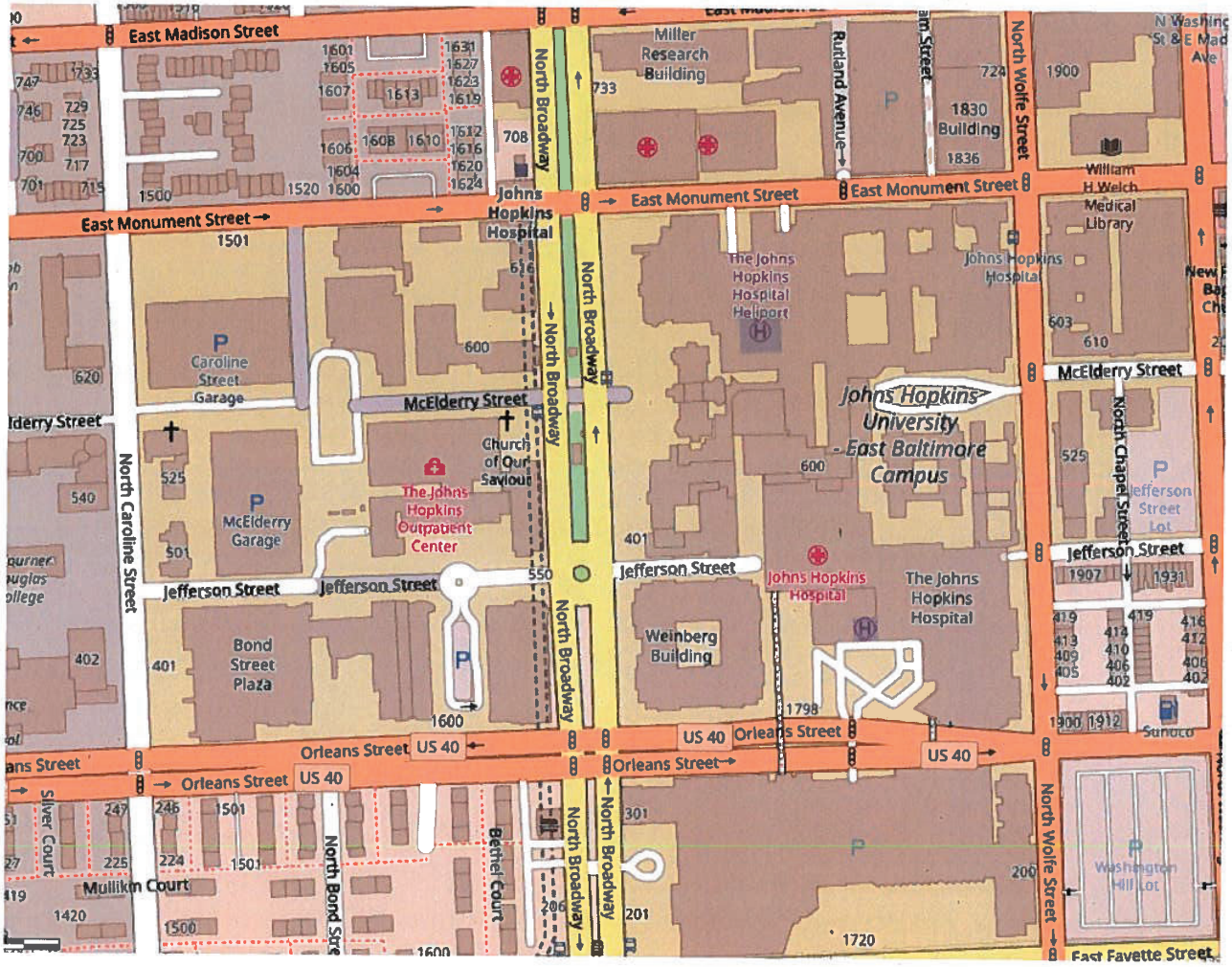
D. AUTHORITY TO ISSUE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMITS

On September 5, 1974, the Administrator of the U.S. Environmental Protection Agency approved the proposal submitted by the State of Maryland for the operation of a permit program for discharges into navigable waters pursuant to Section 402 of the Clean Water Act, 33 U.S.C. Section 1342.

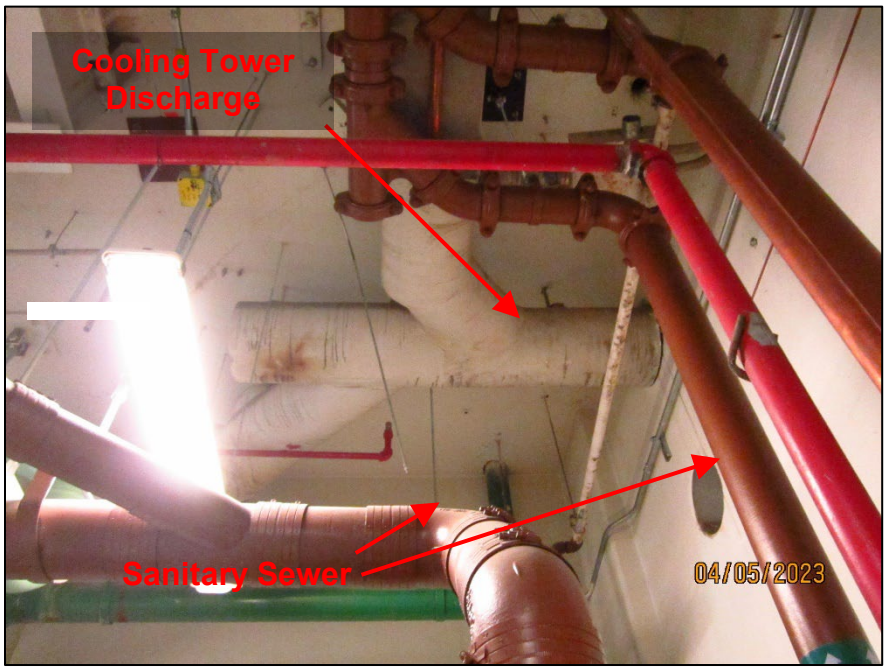
Pursuant to the aforementioned approval, this discharge permit is both a State of Maryland discharge permit and a NPDES permit.

This permit and the authorization to discharge shall expire at midnight on the expiration date. The permittee shall not discharge after that date unless a new application has been submitted to the Department in accordance with the renewal application provisions of this permit.

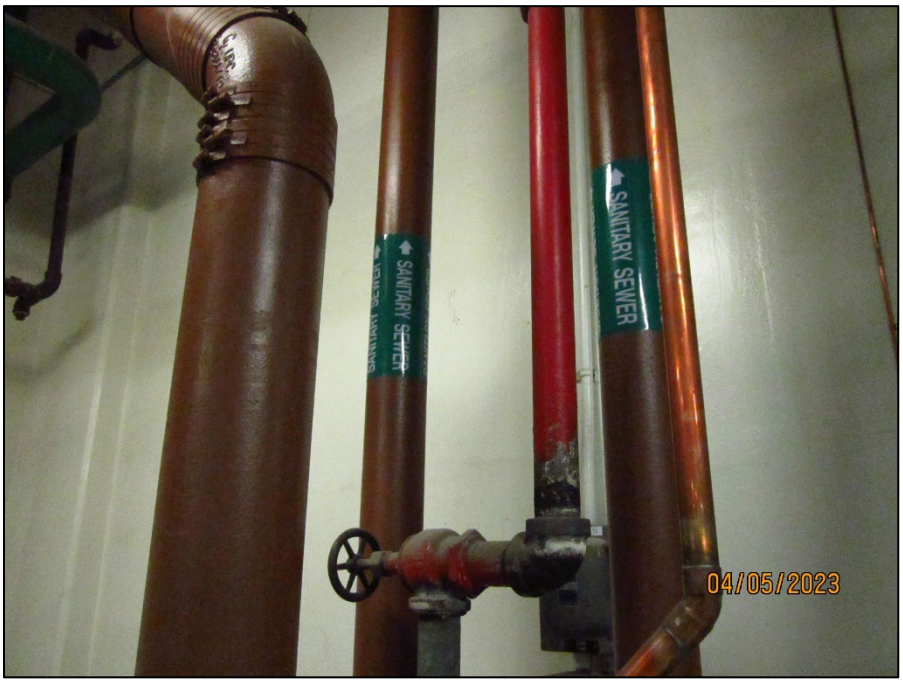
D. Lee Currey, Director
Water and Science Administration


East Madison Street
East Monument Street
Johns Hopkins Hospital
North Broadway
Miller Research Building
Rutland Avenue
1830 Building
North Wolfe Street
William H Welch Medical Library
The Johns Hopkins Hospital Heliport
Johns Hopkins Hospital
Caroline Street Garage
McElderry Street
Church of Our Saviour
The Johns Hopkins Outpatient Center
McElderry Garage
North Caroline Street
Johns Hopkins University - East Baltimore Campus
North Chapel Street
Jefferson Street Lot
Jefferson Street
Bond Street Plaza
Weinberg Building
The Johns Hopkins Hospital
Orleans Street
US 40
Silver Court
Mullikin Court
North Bond Street
Bethel Court
Washington Hill Lot
East Fayette Street

# Appendix B
# Photograph Log




**Photograph 1.** **IMG_0007.JPG** View of cooling tower discharge line (white) exiting the North Energy Plant building and leading to Outfall 001. Note that the brown pipes are sanitary sewer lines.

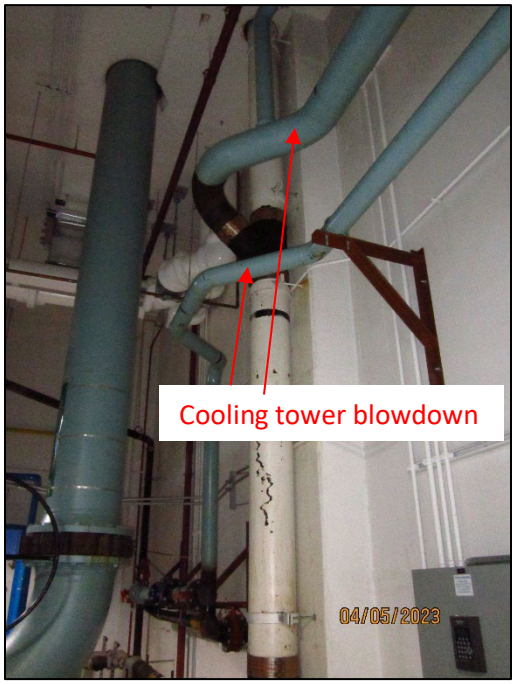



**Photograph 2.** **IMG_0008.JPG** View of a large sanitary sewer line at the North Energy Plant. Note the two smaller sanitary sewer sump discharge lines were reported to lead to the City of Baltimore sanitary sewer system.


**Photograph 3.** **IMG_0011.JPG** View of Outfall 001 entering the Baltimore City storm sewer located on the southwestern corner of Wolfe Street and Madison Street.

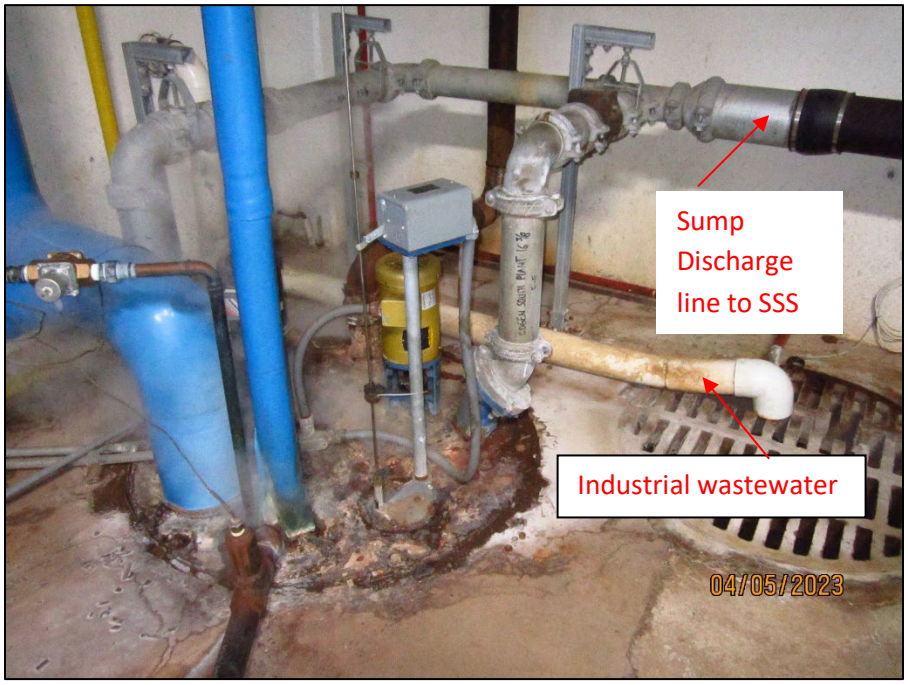

**Photograph 4.** **IMG_0013.JPG** Exterior view of the city curb inlet on the southwestern corner of Wolfe Street. Note Outfall 001 is located underneath the manhole on the sidewalk; however, it appeared that samples were collected through the curb access.


**Photograph 5.** **IMG_020.JPG** View of light blue cooling tower blowdown pipes in the South Energy Plant.




**Photograph 6.** **IMG_021.JPG** View of horizontal light blue cooling tower blowdown pipes in the South Energy Plant.


**Photograph 7.** **IMG_016.JPG** View of the cooling tower sampling location for Outfall 002 (lower right corner).




**Photograph 8.** **IMG_017.JPG** View of the sump in the South Energy Plant combining industrial wastewater from additional processes in the hospital complex with discharge from the blowdowns and sent to the sanitary sewer.


**Photograph 9.** **IMG_019.JPG** View of the sump discharge line in the South Energy Plant. The pipe was described as going through the basement floor and connecting to the sanitary sewer system.


**Photograph 10.** **IMG_022.JPG** View of the cooling tower reservoir in the South Energy Plant.

# Appendix C
# Exhibit Log

# Exhibit 1
# EPA ECHO eDMR Data
# (April 2018 through March 2023)

Effluent Limit Exceedances Report
MD0071196: JOHNS HOPKINS HOSPITAL, BALTIMORE, MD 21287
Monitoring Period Date Range: 04/01/2018 to 03/31/2023

Exceedance Details

| Monitoring Per | Outfall | Parameter | Parameter Average D | Limit Type | DMR Value | dmr_value | DMR Value | Contains P | Limit Value | Limit Value | Limit Value | % Exceeda | Load Over | TWPE Ove | Number of | Days with Exceedances |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | 2 | 1042 | Copper, total (as Cu) | DAILY MX | 0.02 | = | mg/L | | 0.013 | <= | mg/L | 54 | | | 30 | |
| 6/30/2020 | 2 | 1042 | Copper, to 0.188 | MO AVG | 0.02 | = | mg/L | | 0.009 | <= | mg/L | 122 | 0.517781 | 0.322578 | 30 | 30 |
| 9/30/2021 | 1 | 1042 | Copper, total (as Cu) | DAILY MX | 0.04 | = | mg/L | | 0.013 | <= | mg/L | 208 | | | 30 | |
| 9/30/2021 | 1 | 1042 | Copper, to 0.058 | MO AVG | 0.04 | = | mg/L | | 0.009 | <= | mg/L | 344 | 0.450179 | 0.280462 | 30 | 30 |
| 9/30/2021 | 2 | 1042 | Copper, to 0.182 | MO AVG | 0.014 | = | mg/L | | 0.009 | <= | mg/L | 56 | 0.227844 | 0.141947 | 30 | 30 |
| 9/30/2021 | 2 | 1042 | Copper, total (as Cu) | DAILY MX | 0.014 | = | mg/L | | 0.013 | <= | mg/L | 8 | | | 30 | |
| 10/31/2021 | 1 | 1042 | Copper, to 0.0713 | MO AVG | 0.013 | = | mg/L | | 0.009 | <= | mg/L | 44 | 0.073788 | 0.04597 | 31 | 31 |
| 4/30/2022 | 1 | 1042 | Copper, total (as Cu) | DAILY MX | 0.23 | = | mg/L | | 0.013 | <= | mg/L | 1669 | | | 30 | |
| 4/30/2022 | 1 | 1042 | Copper, to 0.001 | MO AVG | 0.23 | = | mg/L | | 0.009 | <= | mg/L | 2456 | 0.055333 | 0.034473 | 30 | 30 |
| 4/30/2022 | 2 | 1042 | Copper, to 0.0524 | MO AVG | 0.086 | = | mg/L | | 0.009 | <= | mg/L | 856 | 1.010224 | 0.62937 | 30 | 30 |
| 4/30/2022 | 2 | 1042 | Copper, total (as Cu) | DAILY MX | 0.086 | = | mg/L | | 0.013 | <= | mg/L | 562 | | | 30 | |
| 5/31/2022 | 1 | 1042 | Copper, total (as Cu) | DAILY MX | 0.085 | = | mg/L | | 0.013 | <= | mg/L | 554 | | | 31 | |
| 5/31/2022 | 1 | 1042 | Copper, to 0.0236 | MO AVG | 0.085 | = | mg/L | | 0.009 | <= | mg/L | 844 | 0.464047 | 0.289101 | 31 | 31 |
| 5/31/2022 | 2 | 1042 | Copper, to 0.124 | MO AVG | 0.072 | = | mg/L | | 0.009 | <= | mg/L | 700 | 2.021149 | 1.259176 | 31 | 31 |
| 5/31/2022 | 2 | 1042 | Copper, total (as Cu) | DAILY MX | 0.072 | = | mg/L | | 0.013 | <= | mg/L | 454 | | | 31 | |
| 6/30/2022 | 1 | 1042 | Copper, total (as Cu) | DAILY MX | 0.018 | = | mg/L | | 0.013 | <= | mg/L | 38 | | | 30 | |
| 6/30/2022 | 1 | 1042 | Copper, to 0.0244 | MO AVG | 0.018 | = | mg/L | | 0.009 | <= | mg/L | 100 | 0.054983 | 0.034254 | 30 | 30 |
| 6/30/2022 | 2 | 1042 | Copper, total (as Cu) | DAILY MX | 0.064 | = | mg/L | | 0.013 | <= | mg/L | 392 | | | 30 | |
| 6/30/2022 | 2 | 1042 | Copper, to 0.185 | MO AVG | 0.064 | = | mg/L | | 0.009 | <= | mg/L | 611 | 2.547594 | 1.587151 | 30 | 30 |
| 7/31/2022 | 1 | 1042 | Copper, to 0.048 | MO AVG | 0.056 | = | mg/L | | 0.009 | <= | mg/L | 522 | 0.583681 | 0.363633 | 31 | 31 |
| 7/31/2022 | 1 | 1042 | Copper, total (as Cu) | DAILY MX | 0.056 | = | mg/L | | 0.013 | <= | mg/L | 331 | | | 31 | |
| 7/31/2022 | 2 | 1042 | Copper, total (as Cu) | DAILY MX | 0.065 | = | mg/L | | 0.013 | <= | mg/L | 400 | | | 31 | |
| 7/31/2022 | 2 | 1042 | Copper, to 0.217 | MO AVG | 0.065 | = | mg/L | | 0.009 | <= | mg/L | 622 | 3.14401 | 1.958718 | 31 | 31 |
| 8/31/2022 | 1 | 1042 | Copper, total (as Cu) | DAILY MX | 0.033 | = | mg/L | | 0.013 | <= | mg/L | 154 | | | 31 | |
| 8/31/2022 | 1 | 1042 | Copper, to 0.0516 | MO AVG | 0.033 | = | mg/L | | 0.009 | <= | mg/L | 267 | 0.320403 | 0.199611 | 31 | 31 |
| 8/31/2022 | 1 | 50060 | Chlorine, total residu | DAILY MX | 0.1 | = | mg/L | | 0.1 | < | mg/L | 0 | | | 31 | |
| 8/31/2022 | 1 | 50060 | Chlorine, t 0.0516 | MO AVG | 0.1 | = | mg/L | | 0.1 | < | mg/L | 0 | 0 | 0 | 31 | 31 |
| 8/31/2022 | 2 | 1042 | Copper, total (as Cu) | DAILY MX | 0.047 | = | mg/L | | 0.013 | <= | mg/L | 262 | | | 31 | |
| 8/31/2022 | 2 | 1042 | Copper, to 0.211 | MO AVG | 0.047 | = | mg/L | | 0.009 | <= | mg/L | 422 | 2.074446 | 1.29238 | 31 | 31 |
| 9/30/2022 | 1 | 1042 | Copper, total (as Cu) | DAILY MX | 0.065 | = | mg/L | | 0.013 | <= | mg/L | 400 | | | 30 | |
| 9/30/2022 | 1 | 1042 | Copper, to 0.0306 | MO AVG | 0.065 | = | mg/L | | 0.009 | <= | mg/L | 622 | 0.429047 | 0.267296 | 30 | 30 |
| 9/30/2022 | 1 | 50060 | Chlorine, t 0.0306 | MO AVG | 0.321 | = | mg/L | | 0.1 | < | mg/L | 221 | 1.693205 | 0.846602 | 30 | 30 |
| 9/30/2022 | 1 | 50060 | Chlorine, total residu | DAILY MX | 0.321 | = | mg/L | | 0.1 | < | mg/L | 221 | | | 30 | |
| 9/30/2022 | 2 | 1042 | Copper, total (as Cu) | DAILY MX | 0.43 | = | mg/L | | 0.013 | <= | mg/L | 3208 | | | 30 | |
| 9/30/2022 | 2 | 1042 | Copper, to 0.24 | MO AVG | 0.43 | = | mg/L | | 0.009 | <= | mg/L | 4678 | 25.29817 | 15.76076 | 30 | 30 |
| 9/30/2022 | 2 | 50060 | Chlorine, total residu | DAILY MX | 0.115 | = | mg/L | | 0.1 | <= | mg/L | 15 | | | 30 | |
| 9/30/2022 | 2 | 50060 | Chlorine, t 0.24 | MO AVG | 0.115 | = | mg/L | | 0.1 | <= | mg/L | 15 | 0.90136 | 0.45068 | 30 | 30 |
| 10/31/2022 | 1 | 1042 | Copper, total (as Cu) | DAILY MX | 0.036 | = | mg/L | | 0.013 | <= | mg/L | 177 | | | 31 | |
| 10/31/2022 | 1 | 1042 | Copper, to 0.045 | MO AVG | 0.036 | = | mg/L | | 0.009 | <= | mg/L | 300 | 0.314349 | 0.19584 | 31 | 31 |
| 10/31/2022 | 1 | 50060 | Chlorine, total residu | DAILY MX | 0.1 | = | mg/L | | 0.1 | < | mg/L | 0 | | | 31 | |
| 10/31/2022 | 1 | 50060 | Chlorine, t 0.045 | MO AVG | 0.1 | = | mg/L | | 0.1 | < | mg/L | 0 | 0 | 0 | 31 | 31 |
| 11/30/2022 | 1 | 1042 | Copper, total (as Cu) | DAILY MX | 0.06 | = | mg/L | | 0.013 | <= | mg/L | 362 | | | 30 | |
| 11/30/2022 | 1 | 1042 | Copper, to 0.016 | MO AVG | 0.06 | = | mg/L | | 0.009 | <= | mg/L | 567 | 0.204308 | 0.127284 | 30 | 30 |
| 11/30/2022 | 1 | 50060 | Chlorine, total residu | DAILY MX | 0.229 | = | mg/L | | 0.1 | < | mg/L | 129 | | | 30 | |
| 11/30/2022 | 1 | 50060 | Chlorine, t 0.016 | MO AVG | 0.229 | = | mg/L | | 0.1 | < | mg/L | 129 | 0.51678 | 0.25839 | 30 | 30 |

# Exhibit 2
# Detailed Facility Report

# Detailed Facility Report

## Detailed Facility Report

## Facility Summary

**JOHNS HOPKINS HOSPITAL**

**600 N WOLFE ST, BALTIMORE, MD 21287**

**FRS (Facility Registry Service) ID:** 110056021585
**EPA Region:** 03
**Latitude:** 39.29742
**Longitude:** -76.59082
**Locational Data Source:** FRS
**Industries:** Hospitals
**Indian Country:** N

### Enforcement and Compliance Summary

| Statute | CAA |
|---|---|
| Compliance Monitoring Activities (5 years) | 3 |
| Date of Last Compliance Monitoring Activity | 04/06/2022 |
| Compliance Status | No Violation Identified |
| Qtrs in Noncompliance (of 12) | 0 |
| Qtrs with Significant Violation | 0 |
| Informal Enforcement Actions (5 years) | -- |
| Formal Enforcement Actions (5 years) | -- |
| Penalties from Formal Enforcement Actions (5 years) | -- |
| EPA Cases (5 years) | -- |
| Penalties from EPA Cases (5 years) | -- |

| Statute | CWA |
|---|---|
| Compliance Monitoring Activities (5 years) | -- |
| Date of Last Compliance Monitoring Activity | -- |
| Compliance Status | Significant/Category I Noncompliance |
| Qtrs in Noncompliance (of 12) | 6 |
| Qtrs with Significant Violation | 4 |
| Informal Enforcement Actions (5 years) | -- |
| Formal Enforcement Actions (5 years) | -- |
| Penalties from Formal Enforcement Actions (5 years) | -- |
| EPA Cases (5 years) | -- |
| Penalties from EPA Cases (5 years) | -- |

### Regulatory Information

**Clean Air Act (CAA):** Operating Major (MD0000002451000001)
**Clean Water Act (CWA):** Minor, Permit Effective (MD0071196)
**Resource Conservation and Recovery Act (RCRA):** No Information
**Safe Drinking Water Act (SDWA):** No Information

Go To Enforcement/Compliance Details
Known Data Problems

### Other Regulatory Reports

**Air Emissions Inventory (EIS):** No Information
**Greenhouse Gas Emissions (eGGRT):** No Information
**Toxic Releases (TRI):** No Information
**Compliance and Emissions Data Reporting Interface (CEDRI):** CEDRI2472

## Facility/System Characteristics

### Facility/System Characteristics

| System | Statute | Identifier | Universe | Status | Areas | Permit Expiration Date | Indian Country | Latitude | Longitude |
|---|---|---|---|---|---|---|---|---|---|
| FRS | | 110056021585 | | | | | N | 39.29742 | -76.59082 |
| ICIS-Air | CAA | MD0000002451000001 | Major Emissions | Operating | CAAGACTM, CAAMACT, CAANSPS, CAANSR, CAASIP, CAATVP | | N | 39.29742 | -76.59082 |
| CEDRI | CAA | CEDRI2472 | | | | | N | | |
| ICIS-NPDES | CWA | MD0071196 | Minor: NPDES Individual Permit | Effective | | 08/31/2027 | N | 39.29746 | -76.59082 |

### Facility Address

| System | Statute | Identifier | Facility Name | Facility Address | Facility County |
|---|---|---|---|---|---|
| FRS | | 110056021585 | JOHNS HOPKINS HOSPITAL | 600 N WOLFE ST, BALTIMORE, MD 21287 | |
| ICIS-Air | CAA | MD0000002451000001 | JOHNS HOPKINS HOSPITAL | 600 N WOLFE STREET, BALTIMORE, MD 21287 | Baltimore city |
| CEDRI | CAA | CEDRI2472 | JOHNS HOPKINS HOSPITAL | 600 N WOLFE ST, BALTIMORE, MD 21287 | |
| ICIS-NPDES | CWA | MD0071196 | JHMI UTILITIES, LLC - JOHNS HOPKINS HOSPITAL | 600 NORTH WOLFE STREET, BILLINGS ADMINISTRATION, R, BALTIMORE, MD 21287 | Baltimore city |

### Facility SIC (Standard Industrial Classification) Codes

| System | Identifier | SIC Code | SIC Description |
|---|---|---|---|
| ICIS-NPDES | MD0071196 | 4961 | Steam And Air-Conditioning Supply |

### Facility NAICS (North American Industry Classification System) Codes

| System | Identifier | NAICS Code | NAICS Description |
|---|---|---|---|
| ICIS-Air | MD0000002451000001 | 622110 | General Medical and Surgical Hospitals |

### Facility Industrial Effluent Guidelines

| Identifier | Effluent Guideline (40 CFR Part) | Effluent Guideline Description |
|---|---|---|
| No data records returned | | |

### Facility Tribe Information

| Reservation Name | Tribe Name | EPA Tribal ID | Distance to Tribe (miles) |
|---|---|---|---|
| No data records returned | | | |

## Enforcement and Compliance

### Compliance Monitoring History

Last 5 Years

| Statute | Source ID | System | Activity Type | Compliance Monitoring Type | Lead Agency | Date | Finding (if applicable) |
|---|---|---|---|---|---|---|---|
| *CAA* | *MD0000002451000001* | *ICIS-Air* | *Inspection/Evaluation* | *PCE Off-Site* | *State* | *02/23/2023* | |
| *CAA* | *MD0000002451000001* | *ICIS-Air* | *Inspection/Evaluation* | *PCE Off-Site* | *State* | *12/28/2022* | |
| *CAA* | *MD0000002451000001* | *ICIS-Air* | *Inspection/Evaluation* | *PCE Off-Site* | *State* | *10/27/2022* | |
| CAA | MD0000002451000001 | ICIS-Air | Inspection/Evaluation | FCE On-Site | State | 04/06/2022 | |
| *CAA* | *MD0000002451000001* | *ICIS-Air* | *Inspection/Evaluation* | *PCE Title V CCR* | *State* | *04/01/2022* | *Reviewed: 04/19/2022 Facility Reported No Deviations* |
| *CAA* | *MD0000002451000001* | *ICIS-Air* | *Inspection/Evaluation* | *PCE Off-Site* | *State* | *02/17/2022* | |
| *CAA* | *MD0000002451000001* | *ICIS-Air* | *Inspection/Evaluation* | *PCE Off-Site* | *State* | *09/17/2021* | |
| *CAA* | *MD0000002451000001* | *ICIS-Air* | *Inspection/Evaluation* | *PCE Off-Site* | *State* | *08/09/2021* | |
| *CAA* | *MD0000002451000001* | *ICIS-Air* | *Inspection/Evaluation* | *PCE Title V CCR* | *State* | *03/23/2021* | *Reviewed: 04/20/2021 Facility Reported No Deviations* |
| *CAA* | *MD0000002451000001* | *ICIS-Air* | *Inspection/Evaluation* | *PCE Off-Site* | *State* | *02/11/2021* | |
| *CAA* | *MD0000002451000001* | *ICIS-Air* | *Inspection/Evaluation* | *PCE Stack Test* | *State* | *01/19/2021* | *Findings: Pass* |
| *CAA* | *MD0000002451000001* | *ICIS-Air* | *Inspection/Evaluation* | *PCE Off-Site* | *State* | *08/18/2020* | |
| *CAA* | *MD0000002451000001* | *ICIS-Air* | *Inspection/Evaluation* | *PCE Title V CCR* | *State* | *03/19/2020* | *Reviewed: 03/23/2020 Facility Reported No Deviations* |
| *CAA* | *MD0000002451000001* | *ICIS-Air* | *Inspection/Evaluation* | *PCE Title V CCR* | *EPA* | *03/19/2020* | *Reviewed: 09/08/2020 Facility Reported No Deviations* |
| CAA | MD0000002451000001 | ICIS-Air | Inspection/Evaluation | FCE On-Site | State | 03/11/2020 | |
| *CAA* | *MD0000002451000001* | *ICIS-Air* | *Inspection/Evaluation* | *PCE Title V CCR* | *State* | *04/01/2019* | *Reviewed: 06/06/2019 Facility Reported No Deviations* |
| *CAA* | *MD0000002451000001* | *ICIS-Air* | *Inspection/Evaluation* | *PCE Off-Site* | *State* | *09/19/2018* | |
| *CAA* | *MD0000002451000001* | *ICIS-Air* | *Inspection/Evaluation* | *PCE Off-Site* | *State* | *08/13/2018* | |
| CAA | MD0000002451000001 | ICIS-Air | Inspection/Evaluation | FCE On-Site | State | 05/24/2018 | |

*Entries in italics are not counted as EPA official inspections.*

### Compliance Summary Data

| Statute | Source ID | Current SNC (Significant Noncompliance)/HPV (High Priority Violation) | Current As Of | Qtrs with NC (Noncompliance) (of 12) | Data Last Refreshed |
|---|---|---|---|---|---|
| CAA | MD0000002451000001 | No | 04/29/2023 | 0 | 04/28/2023 |
| CWA | MD0071196 | Yes | 12/31/2022 | 6 | 04/28/2023 |

### Three-Year Compliance History by Quarter

| Statute | Program/Pollutant/Violation Type | QTR 1 | QTR 2 | QTR 3 | QTR 4 | QTR 5 | QTR 6 | QTR 7 | QTR 8 | QTR 9 | QTR 10 | QTR 11 | QTR 12+ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CAA (Source ID: MD0000002451000001) | | 07/01-09/30/20 | 10/01-12/31/20 | 01/01-03/31/21 | 04/01-06/30/21 | 07/01-09/30/21 | 10/01-12/31/21 | 01/01-03/31/22 | 04/01-06/30/22 | 07/01-09/30/22 | 10/01-12/31/22 | 01/01-03/31/23 | 04/01-06/30/23 |
| | Facility-Level Status | No Violation Identified | No Violation Identified | No Violation Identified | No Violation Identified | No Violation Identified | No Violation Identified | No Violation Identified | No Violation Identified | No Violation Identified | No Violation Identified | No Violation Identified | No Violation Identified |
| | HPV History | | | | | | | | | | | | |
| | Violation Type / Agency / Programs / Pollutants | | | | | | | | | | | | |

| Statute | Program/Pollutant/Violation Type | QTR 1 | QTR 2 | QTR 3 | QTR 4 | QTR 5 | QTR 6 | QTR 7 | QTR 8 | QTR 9 | QTR 10 | QTR 11 | QTR 12 | QTR 13+ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CWA (Source ID: MD0071196) | | 01/01-03/31/20 | 04/01-06/30/20 | 07/01-09/30/20 | 10/01-12/31/20 | 01/01-03/31/21 | 04/01-06/30/21 | 07/01-09/30/21 | 10/01-12/31/21 | 01/01-03/31/22 | 04/01-06/30/22 | 07/01-09/30/22 | 10/01-12/31/22 | 01/01-04/28/23 |
| | Facility-Level Status | No Violation Identified | Violation Identified | No Violation Identified | No Violation Identified | No Violation Identified | No Violation Identified | Violation Identified | Significant/Category I Noncompliance | No Violation Identified | Significant/Category I Noncompliance | Significant/Category I Noncompliance | Significant/Category I Noncompliance | Undetermined |

| Statute | Program/Pollutant/Violation Type | | | | QTR 1 | QTR 2 | QTR 3 | QTR 4 | QTR 5 | QTR 6 | QTR 7 | QTR 8 | QTR 9 | QTR 10 | QTR 11 | QTR 12 | QTR 13+ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Quarterly Noncompliance Report History | | | | | Other Violation | | | | | Other Violation | Effluent - Monthly Average Limit | Resolved | Effluent - Monthly Average Limit | Effluent - Monthly Average Limit | Effluent - Monthly Average Limit | |
| | Pollutant | Disch Point | Mon Loc | Freq | | | | | | | | | | | | | |
| CWA | Chlorine, total residual | 001 - A | Effluent Gross | Mthly | | | | | | | | | | | 221% | 129% | |
| CWA | Chlorine, total residual | 001 - A | Effluent Gross | NMth | | | | | | | | | | | 221% | 129% | |
| CWA | Copper, total [as Cu] | 001 - A | Effluent Gross | Mthly | | | | | | | 344% | 44% | | 2456% | 622% | 567% | |
| CWA | Copper, total [as Cu] | 001 - A | Effluent Gross | NMth | | | | | | | 208% | | | 1669% | 400% | 362% | |
| CWA | Chlorine, total residual | 002 - A | Effluent Gross | Mthly | | | | | | | | | | | 15% | | |
| CWA | Chlorine, total residual | 002 - A | Effluent Gross | NMth | | | | | | | | | | | 15% | | |
| CWA | Copper, total [as Cu] | 002 - A | Effluent Gross | Mthly | | 122% | | | | | 56% | | | 856% | 4678% | | |
| CWA | Copper, total [as Cu] | 002 - A | Effluent Gross | NMth | | 54% | | | | | 8% | | | 562% | 3208% | | |

### Informal Enforcement Actions

Last 5 Years

| Statute | System | Source ID | Type of Action | Lead Agency | Date |
|---|---|---|---|---|---|

No data records returned

*Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.*

### Formal Enforcement Actions

Last 5 Years

| Statute | System | Law/Section | Source ID | Type of Action | Case No. | Lead Agency | Case Name | Issued/Filed Date | Settlements/Actions | Settlement/Action Date | Federal Penalty Assessed | State/Local Penalty Assessed | Penalty Amount Collected | SEP Value | Comp Action Cost |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

No data records returned

## Environmental Conditions

### Watersheds

| 12-Digit WBD (Watershed Boundary Dataset) HUC (RAD (Reach Address Database)) | WBD (Watershed Boundary Dataset) Subwatershed Name (RAD (Reach Address Database)) | State Water Body Name (ICIS (Integrated Compliance Information System)) | Beach Closures Within Last Year | Beach Closures Within Last Two Years | Pollutants Potentially Related to Impairment | Watershed with ESA (Endangered Species Act)-listed Aquatic Species? |
|---|---|---|---|---|---|---|

No data records returned

### Assessed Waters From Latest State Submission (ATTAINS)

| State | Report Cycle | Assessment Unit ID | Assessment Unit Name | Water Condition | Cause Groups Impaired | Drinking Water Use | Aquatic Life | Fish Consumption Use | Recreation Use | Other Use |
|---|---|---|---|---|---|---|---|---|---|---|

No data records returned

### Air Quality Nonattainment Areas

| Pollutant | Within Nonattainment Status Area? | Nonattainment Status Applicable Standard(s) | Within Maintenance Status Area? | Maintenance Status Applicable Standard(s) |
|---|---|---|---|---|
| Ozone | Yes | 1-Hour Ozone (1979); 8-Hour Ozone (2008); 8-Hour Ozone (2015) | No | -- |
| Lead | No | -- | No | -- |
| Particulate Matter | No | -- | Yes | PM-2.5 (1997) |
| Carbon Monoxide | No | -- | No | -- |

| Pollutant | Within Nonattainment Status Area? | Nonattainment Status Applicable Standard(s) | Within Maintenance Status Area? | Maintenance Status Applicable Standard(s) |
|---|---|---|---|---|
| Sulfur Dioxide | No | -- | No | -- |

## Pollutants

### Toxics Release Inventory History of Reported Chemicals Released in Pounds per Year at Site

| TRI Facility ID | Year | Total Air Emissions | Surface Water Discharges | Off-Site Transfers to POTWs (Publicly Owned Treatment Works) | Underground Injections | Releases to Land | Total On-Site Releases | Total Off-Site Transfers |
|---|---|---|---|---|---|---|---|---|

No data records returned

### Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

| Chemical Name |
|---|

No data records returned

## Community

### Environmental Justice

This section shows indexes from EJScreen, EPA's screening tool for environmental justice (EJ) concerns. EPA uses these indexes to identify geographic areas that may warrant further consideration or analysis for potential EJ concerns. Use of these indexes does not designate an area as an "EJ community" or "EJ facility." EJScreen provides screening level indicators, not a determination of the existence or absence of EJ concerns. For more information, see the EJScreen home page.

**EJScreen Indexes Shown**

Compare to (●) US ( ) State

Index Type ( ) Environmental Justice (●) Supplemental

**Related Reports**

EJScreen Report

Download Data

( ) Facility 1-mile Radius ☐ Facility Census Block Group

| Census Block Group ID: 245100604001 | US (Percentile) | |
|---|---|---|
| Supplemental Indexes | Facility Census Block Group | 1-mile Max |
| **Count of Indexes At or Above 80th Percentile** | **0** | **12** |
| Particulate Matter 2.5 | 56 | ! 96 |
| Ozone | 76 | ! 99 |
| Diesel Particulate Matter | 77 | ! 99 |
| Air Toxics Cancer Risk | 60 | ! 99 |
| Air Toxics Respiratory Hazard Index | 63 | ! 99 |
| Traffic Proximity | 76 | ! 99 |
| Lead Paint | 59 | ! 99 |
| Risk Management Plan (RMP) Facility Proximity | 77 | ! 99 |
| Hazardous Waste Proximity | 79 | ! 99 |
| Superfund Proximity | 77 | ! 99 |
| Underground Storage Tanks (UST) | 74 | ! 99 |
| Wastewater Discharge | 24 | ! 82 |

### Demographic Profile of Surrounding Area (1 mile)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2010 U.S. Census and 2016 - 2020 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. EPA's spatial processing methodology considers the overlap between the selected radii and the census blocks (for U.S. Census demographics) and census block groups (for ACS demographics) in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary.

| General Statistics (U.S. Census) | |
|---|---|
| Total Persons | 54,791 |
| Population Density | 17,534/sq.mi. |
| Housing Units in Area | 25,318 |

| General Statistics (ACS (American Community Survey)) | |
|---|---|
| Total Persons | 49,135 |
| Percent People of Color | 76% |

| Age Breakdown (U.S. Census) - Persons (%) | |
|---|---|
| Children 5 years and younger | 4,138 (8%) |
| Minors 17 years and younger | 12,678 (23%) |
| Adults 18 years and older | 42,114 (77%) |
| Seniors 65 years and older | 4,800 (9%) |

| Race Breakdown (U.S. Census) - Persons (%) | |
|---|---|
| White | 12,509 (23%) |

| General Statistics (ACS (American Community Survey)) | |
|---|---|
| Households in Area | 18,584 |
| Households on Public Assistance | 1,025 |
| Persons With Low Income | 22,399 |
| Percent With Low Income | 48% |

| Geography | |
|---|---|
| Radius of Selected Area | 1 mi. |
| Center Latitude | 39.29742 |
| Center Longitude | -76.59082 |
| Land Area | 100% |
| Water Area | 0% |

| Income Breakdown (ACS (American Community Survey)) - Households (%) | |
|---|---|
| Less than $15,000 | 4,089 (22.01%) |
| $15,000 - $25,000 | 1,820 (9.8%) |
| $25,000 - $50,000 | 3,666 (19.73%) |
| $50,000 - $75,000 | 2,651 (14.27%) |
| Greater than $75,000 | 6,354 (34.2%) |

| Race Breakdown (U.S. Census) - Persons (%) | |
|---|---|
| African-American | 38,206 (70%) |
| Hispanic-Origin | 4,054 (7%) |
| Asian/Pacific Islander | 1,040 (2%) |
| American Indian | 288 (1%) |
| Other/Multiracial | 2,748 (5%) |

| Education Level (Persons 25 & older) (ACS (American Community Survey)) - Persons (%) | |
|---|---|
| Less than 9th Grade | 1,697 (4.96%) |
| 9th through 12th Grade | 4,525 (13.22%) |
| High School Diploma | 10,033 (29.31%) |
| Some College/2-year | 4,810 (14.05%) |
| B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More | 11,715 (34.22%) |

LAST UPDATED ON SEPTEMBER 21, 2022

DATA REFRESH INFORMATION