MORGAN STATE UNIVERSITY MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) PROGRAM INSPECTION REPORT

Field Inspection Date: July 26, 2023

Report Date: September 13, 2023

Unique Project Identifier: 3E23WN103A

U.S. Environmental Protection Agency, Region III
Enforcement and Compliance Assurance Division
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Table 1. Summary of Permit Requirements and Inspection Observations

Program Element	Observations
Overall Program Management	Observation 1: The University did not submit completed Annual MS4 Progress Reports for all years under the current Permit.
Illicit Discharge Detection and Elimination (IDDE)	Observation 2: The University had not developed an MS4 map that includes all Permit-required components. Observation 3: At the time of the inspection, the University had not provided a policy or other agency directive that prohibits illicit discharges into their MS4. Observation 4: At the time of the inspection, the University had not provided standard operating procedures (SOPs) for implementing the illicit discharge detection and elimination program that include all Permit-required components. Observation 5: At the time of the inspection, the University was not conducting or documenting illicit discharge screening efforts.
Post-Construction Stormwater Management (PCSM)	Observation 6: The University did not have documentation that verified BMPs are maintained in accordance with Maryland Department of the Environment (MDE) requirements outlined on approved plans. Observation 7: The University had not provided PCSM training to stormwater program staff. Observation 8: The University had not updated their BMP database since 12/3/2020 and included this information in their Annual MS4 Progress Reports.
Pollution Prevention / Good Housekeeping (PPGH)	Observation 9: At the time of the inspection, the University was not ensuring that stormwater program staff and contractors receive PPGH training. Observation 10: The University had not developed, implemented, or maintained a good housekeeping plan for University-owned/operated properties.
Chesapeake Bay Restoration and Meeting Total Maximum Daily Loads	Observation 11: The University had not developed and submitted to MDE a revised Impervious Area Restoration Work Plan. Observation 12: The University had not submitted to MDE a revised Restoration Activity Schedule.

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INTRODUCTION

On July 26, 2023, EPA Region III representatives and EPA contractor PG Environmental (hereinafter, EPA Inspection Team) performed a compliance inspection of Morgan State University's (hereinafter, Permittee, or the University) Municipal Separate Storm Sewer System (MS4). The inspection was conducted to assess the University's compliance with the requirements of the Commonwealth of Maryland's *National Pollutant Discharge Elimination System General Permit For Discharges From State And Federal Small Municipal Separate Storm Sewer Systems* (General Discharge Permit No. 13-SF-5501; General NPDES No. MDR055501); hereinafter, the "Permit"). A copy of the Permit is provided in Appendix A.

The purpose of the inspection was to obtain information to assist EPA Region III in assessing the University's compliance with the requirements of the Permit, as well as the implementation status of its MS4 program. The presentation of observations in this report does not constitute a formal compliance determination or notice of violation.

The inspection focused on overall program management and the following Permit components:

- Illicit Discharge Detection and Elimination (IDDE);
- Post-Construction Stormwater Management (PCSM);
- Pollution Prevention / Good Housekeeping (PPGH); and
- Chesapeake Bay Restoration and Meeting Total Maximum Daily Loads

The EPA Inspection Team obtained information through records review and interviews with University staff. Interviews were conducted during the field inspection. The following primary representatives participated in the inspection:

University Representatives:	Kim McCalla – Associate Vice President, Facilities, Design & Construction Management Gerard Zeller, Jr. – Manager of Grounds and Landscape Romie Prince – Director, Physical Plant Rodney Anderson – Physical Plant Superintendent
EPA Representative:	Chuck Schadel – EPA Region III Ingrid Hopkins – EPA Region III
State Representatives:	Christina Lyerly – Maryland Department of Environment (MDE) Michelle Crawford – MDE
EPA Contractors:	Taylor Fontaine – PG Environmental Mariah Papac – PG Environmental

PRE-INSPECTION CONFERENCE CALL

On July 7, 2023, EPA Region III contacted the University's MS4 representative to provide notification of the MS4 inspection that was to take place on July 26, 2023 and to schedule a pre-inspection conference call for the week of July 17th. The University representative was nonresponsive despite repeated email correspondence on July 7th, July 18th, and July 20th. Consequently, there was no pre-inspection conference call.

FIELD INSPECTION PROCESS

On July 26, 2023, the EPA Inspection Team conducted field inspections of nine operations subject to MS4 program requirement and oversight: seven (7) best management practices (BMPs) including one (1) permeable pavement location, two (2) stormwater basins and three (3) vegetated swales/bioretention areas, one (1) green roof, and two (2) maintenance facilities.

Inspection observations based on the field inspection are documented in the sections below.

FIELD INSPECTION OPENING CONFERENCE

The EPA Inspection Team arrived and met at the Morgan Commons Garage on the University campus at 9:00 AM (EDT) on July 26, 2023. This location served as the EPA Inspection Team's meeting place for the field inspections. Upon arrival, the EPA Inspection Team proceeded to the Washington Service Center to meet with the University representatives. Taylor Fontaine of PG Environmental displayed his EPA-issued Clean Water Act inspector credential and Chuck Schadel and Ingrid Hopkins showed their EPA Identification to the University representatives. During the introduction, the EPA Inspection Team requested to speak with a University representative that could guide them during the field inspection.

The weather during the field inspection on July 26, 2023 was sunny with temperatures averaging approximately 93 degrees Fahrenheit. National Oceanic and Atmospheric Administration (NOAA) National Weather Service precipitation data for the date of the inspection and five (5) days prior are provided in the table below.

Table 2. Total Precipitation Preceding and During Inspection

Station Name	Date	Precipitation Amount (inches)[1]
Maryland Science Center, MD US USW00093784	July 21, 2023	1.15
Maryland Science Center, MD US USW00093784	July 22, 2023	0.00
Maryland Science Center, MD US USW00093784	July 23, 2023	0.00
Maryland Science Center, MD US USW00093784	July 24, 2023	0.66
Maryland Science Center, MD US USW00093784	July 25, 2023	0.00
Maryland Science Center, MD US USW00093784	July 26, 2023	0.00

[1] Source: NOAA National Climatic Data Center (http://www.ncdc.noaa.gov/).

MORGAN STATE UNIVERSITY BACKGROUND

The University is authorized to discharge stormwater through its MS4 under the Permit issued November 1, 2018, until its expiration on October 31, 2023.

The MS4 program is administered and implemented by the University's Facilities, Design and Construction Department with assistance from the Physical Plant Department and Department of Safety, Health & Environment.

The University's MS4 comprises approximately 143 acres. The primary receiving water for the University's MS4 is Herring Run which flows through the University.

INFORMATION OBTAINED RELATIVE TO PERMIT REQUIREMENTS

On July 7, 2023, the EPA Inspection Team provided the University with an inspection notification and a records request that listed documents for review for the inspection, with specific items to be provided prior to the inspection. The University did not respond to this records request with any of the requested documentation.

On July 26, 2023 and August 1, 2023, after the field inspection, the EPA Inspection Team emailed the University a second records request. After the inspection, on August 16, 2023, the University provided some of the requested documents.

In addition to documentation received by from the University, the EPA Inspection Team obtained documentation and other supporting information from MDE to assist in evaluating the University's compliance with the Permit prior to, during, and after the field inspections. Referenced documentation used as supporting information is provided in Appendix C, Exhibit Log.

The following sections of this report describe the University's approach to implementing minimum control measures, the relevant Permit requirements, and observations made during the inspection process.

EVALUATION AND ASSESSMENT, RECORDKEEPING, REPORTING, AND PROGRAM REVIEW

During the current Permit term, the University has not submitted Permit-required documentation to MDE for review and approval (see Observation 1 below for more details). The Permittee has been contacted by MDE via email correspondence on the following dates regarding Permit compliance with little or no response from the University (refer to Appendix C, Exhibits 1 through 5):

- 1/9/2020
- 1/21/2021
- 9/28/2021
- 6/27/2022
- 12/16/2022
- 2/22/2023
- 5/31/2023

Permit Part VI.B states, "The permittee must keep records for at least three years after the termination of this general permit. In addition to the information required in MS4 Progress Reports specified below, permittees must submit any additional supporting documentation at the request of MDE. The permittee must make its MS4 program information, including records, available to the public during regular business hours."

Permit Part VI.C.1 states, "The required information specified in the MS4 Progress Report in Appendix D must be completed as described in this section. The reporting period must be based on State fiscal year, i.e., July 1 – June 30. MS4 Progress Reports are due no later than October 31 of each year with the first report due October 31, 2019."

Permit Part VI.C.2 states, "Annually, the permittee must submit a report to MDE that evaluates progress toward meeting the twenty percent impervious area restoration requirement specified in Part V above. Restoration activity described in the MS4 Progress Report must be completed and include:

a. An impervious area baseline analysis in accordance with Part V.A and the guidance in Appendix B, Section III. This analysis must be submitted with the first year MS4 Progress Report for MDE review and approval;

b. The Impervious Area Restoration Work Plan (Table 1 or other format) must be submitted with the first year MS4 Progress Report and in annual updates. The work plan must include a narrative discussing progress made toward restoration efforts and a description of adaptive management strategies necessary to keep proposed implementation efforts on track;

c. An updated Restoration Activity Schedule in accordance with Table 2 must be submitted annually. By the end of the permit term, a complete list of projects required to meet the twenty percent restoration requirement must be specified in Table 2. The projected implementation year must be no later than 2025; and

d. An updated Urban BMP database in accordance with Appendix B, Tables B.1.a, b, and c in electronic format and a brief narrative discussing progress made toward completing the database and performing routine maintenance and inspections."

Observation 1: The University submitted incomplete Annual MS4 Progress Reports for Permit Years 1, 2, 3, and 4, under the current Permit by the October 31 annual deadlines.

- Permit Year 1:
  - Incomplete Urban best management practice (BMP) database; and
  - Permit Year 1 had incorrect calculations for the Baseline Impervious Area Assessment.
- Permit Year 2:
  - An updated Impervious Area Restoration Work Plan.
- Permit Year 3:
  - An updated Impervious Area Restoration Work Plan;
  - An updated Urban BMP database; and
  - A signed Annual Progress Report submittal form.

- Permit Year 4:
    - An updated Impervious Area Restoration Work Plan;
    - An updated Restoration Activity Schedule; and
    - An updated Urban BMP database.

MINIMUM CONTROL MEASURE 3: ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE)

According to University representatives, the University's Facilities, Design and Construction Department and Department of Safety, Health, and the Environment manage the University's IDDE program. However, during the field inspection, the University representative was unable to describe any elements of the University's IDDE program. Specifically, at the time of the inspection, it did not appear that the University had an IDDE program or was conducting any IDDE-related activities according to Permit requirements. This includes, but is not limited to, MS4 system mapping, IDDE policy development, IDDE SOP development, or screening activities. However, after the inspection, on August 16, 2023, the University provided the EPA Inspection Team with IDDE-related documents titled *Illicit Discharge And Detection Elimination (IDDE) Plan* and *Policy On Stormwater Discharge Detection And Elimination* (refer to Appendix C, Exhibits 6 and 7). These documents are dated July 2023 and August 2023 respectively.

Permit Part IV.C.1 states the Permittee must, "Develop and maintain an updated map of the MS4 that identifies all stormwater conveyances, outfalls, stormwater best management practices (BMPs), and waters of the U.S. receiving stormwater discharges;"

> **Observation 2:** At the time of the inspection, the University had not developed an MS4 map that includes all Permit-required components. The EPA Inspection Team requested a copy of the University's MS4 map via email correspondence on 8/1/2023. Further, MDE requested an MS4 system map from the University via email correspondence on the following dates (refer to Appendix C, Exhibits 1, 3, 4 and 5):
>
> - 9/28/2021
> - 6/27/2022
> - 12/16/2022
> - 2/22/2023
> - 5/31/2023

Permit Part IV.C.2 states the Permittee must, "Establish a policy or other agency directive that prohibits illicit discharges into the MS4."

> **Observation 3:** At the time of the inspection, the University had not provided a policy or other mechanism that prohibits illicit discharges into their MS4. However, after the inspection, on August 16, 2023, the University provided the EPA Inspection Team with a document titled *Policy On Stormwater Discharge Detection And Elimination* (dated August 2023) (refer to Appendix C, Exhibit 7). The policy included language prohibiting illicit discharges into the MS4 as well as enforcement actions.

Permit Part IV.C.4 states the Permittee must, "Develop and implement written standard operating procedures (SOPs) that specify the following:

a. An inspection checklist describing how outfalls are screened for dry weather flows (see Appendix B, Figure B.2 for an example of an outfall screening checklist);
b. Frequency of outfall inspections; Screening efforts for State and federal properties may be tiered based on property size. For small properties (i.e., less than 100 acres), all outfalls must be screened each year. Medium size properties (i.e., 100 - 2,000 acres) must screen 50% of total outfalls. Large properties (i.e., more than 2,000 acres) must screen 20% per year, up to 100 outfalls;
c. Procedures for identifying the source, and eliminating spills, illegal dumping, and other suspected illicit discharges;
d. Identification of priority areas for illicit discharge screening based on pollution potential;
e. Permittee policy to ensure illicit discharges are eliminated;
f. Procedures to inform employees, businesses, and the general public of the issues relating to illegal discharges and improper waste disposal; and
g. Coordination with adjacent MS4 operator(s)."

Permit Part IV.C.5 states the Permittee must, "Submit SOPs to MDE for review and approval within two years of permit issuance. MDE will review for consistency with guidance in Appendix B, Section II;"

Observation 4: At the time of the inspection, the University had not provided SOPs for implementing the illicit discharge detection and elimination program that include all Permit-required components. Further, the documents provided to the EPA Inspection Team after the inspection did not contain the following:

- An inspection checklist describing how outfalls are screened for dry weather flows;
  - After the inspection, on August 16, 2023, the University provided the EPA Inspection Team with a document titled *Morgan State University Monthly Inspection/ Visual Evaluation Report* (refer to Appendix C, Exhibit 8). However, the checklist does not identify dry weather flows as a targeted area.
- Identification of priority areas for illicit discharge screening based on pollution potential; and
- Procedures to inform employees, businesses, and the general public of the issues relating to illegal discharges and improper waste disposal.

Further, MDE requested illicit discharge SOPs from the University via email correspondence on the following dates (refer to Appendix C, Exhibits 1, 3, 4, and 5):

- 9/28/2021
- 6/27/2022
- 2/22/2023
- 5/31/2023

The University had not submitted their developed SOPs to MDE for review and approval within two years of Permit issuance.

Permit Part IV.C.6 states the Permittee must, "Document results of illicit discharge screening efforts, including a description of how screening locations were prioritized and any necessary follow-up investigations and remediation measures implemented to address any suspected discharge. Submit to MDE in accordance with reporting requirements;"

Observation 5: During the field inspection, the University representative was unaware of any illicit discharge screening efforts including which staff would be responsible for those efforts and stated that, "there is no real IDDE program." The EPA Inspection Team requested information regarding University IDDE screening efforts via email correspondence on 7/26/2023. Further, MDE requested information regarding University IDDE screening efforts on 12/16/2022 (refer to Appendix C, Exhibit 1).

MINIMUM CONTROL MEASURE 5: POST-CONSTRUCTION STORMWATER MANAGEMENT (PCSM)

The University's Physical Plant Department administers the University's post-construction program. The Physical Plant Department is responsible for the repair, maintenance and operation of University buildings, grounds, and BMPs. The EPA Inspection Team requested a copy of the University's most up to date BMP database on 7/26/2023.

During the field inspection, University representatives stated that University staff regularly maintain the University's BMPs. However, University representatives stated that there is no set maintenance schedule and that maintenance activities are not consistently documented.

Permit Part IV.E.3 states the Permittee must, "Maintain stormwater program implementation information and provide updates in accordance with the MS4 Progress Report that include:

a. Total number of plans submitted to MDE for review and approval;
b. Total number of as-built plans submitted to MDE and approved;
c. Verification that BMPs are maintained in accordance with MDE requirements outlined on approved plans."

Observation 6: The University did not have documentation that verified BMPs are maintained in accordance with MDE requirements outlined on approved plans. The EPA Inspection Team requested a copy of the University's records (with dates) of written inspections for completed University-owned/operated BMPs for the past 3 years; this information was not provided by the University. Further, MDE requested this information from the University via email correspondence on the following dates (refer to Appendix C, Exhibits 2 and 5):

- 1/9/2020
- 5/31/2023

Permit Part IV.E.4 states the Permittee must, "Provide training to stormwater program staff and to staff responsible for proper BMP design, performance, inspection, and routine maintenance. Report the number of trainings offered, topics covered, and number of attendees;"

Observation 7: The University had not provided training to staff responsible for proper BMP design, performance, inspection, and routine maintenance. During the inspection, a University representative stated that the University ensures that any University contractors are "credentialed" but did not provide more information on the credentialing or state if the contractors receive stormwater-specific training. Further, at the time of the inspection, a different University representative stated there is no stormwater-based training program for University staff with MS4 program responsibilities.

Permit Part IV.E.5 states the Permittee must, "Maintain and submit an Urban BMP database in accordance with the database structure in Appendix B, Tables B.1.a, b, and c. This information shall be submitted to MDE with annual reports."

Permit Appendix B, Section III.A.2 states, "All municipalities and State and federal agencies are required to develop and maintain an Urban BMP database in accordance with Tables B.1.a, b, and c. The database identifies all existing stormwater BMPs along with design, construction, and inspection information. This database and accompanying field inspections must be used to verify the level of water quality treatment provided for an existing BMP."

Observation 8: The University had not updated their BMP database since 12/3/2020 and included this information in their Annual MS4 Progress Reports. Further, MDE requested an updated BMP database from the University via email correspondence on the following dates (refer to Appendix C, Exhibits 1 and 3):

- 6/27/2022
- 12/16/2022
- 2/22/2023

MINIMUM CONTROL MEASURE 6: POLLUTION PREVENTION / GOOD HOUSEKEEPING (PPGH)

The University's Physical Plant Department administers the University's Pollution Prevention Good Housekeeping (PPGH) program. This department includes University staff responsible for the grounds and landscaping, and the University Motor Pool.

Permit Part IV.F.1 states the Permittee must, "Ensure that appropriate staff and contractors receive training at least annually. The training must be designed to reduce or eliminate the discharge of pollutants during property operations. Training may include in-person, online, toolbox talks, on-the-job, or other formats, and permittees may build on existing training activities to fulfill this requirement. Topics must include spill prevention and response, proper disposal of waste, and periodic visual inspections to detect and correct potential discharges at properties owned or operated by the permittee;"

Observation 9: At the time of the inspection, the University was not ensuring that stormwater program staff and contractors receive annual training designed to reduce or eliminate the discharge of pollutants during property operations.

Permit Part IV.F.2 states the Permittee must, "Develop, implement, and maintain a good housekeeping plan for permittee owned or operated properties where any of the following activities is performed: maintenance of vehicles or heavy equipment, and handling of any of the following materials: deicers, anti-icers, fertilizers, pesticides, road maintenance materials such as gravel and sand, or hazardous materials. A standard plan may be created to address multiple properties where similar activities are conducted, provided the below items are addressed. The plan must include:

a. A description of site activities;
b. A list of potential pollutants including their sources and locations on the site. The plan must consider conveyance of stormwater entering, flowing across, and leaving the site;
c. Written good housekeeping procedures designed to prevent discharge of pollutants off site that include regular visual inspections to detect potential discharges;
d. Written procedures for corrective actions to address any release, spill, or leak on site; and
e. Documentation of any discharge, release, leak, or spill, including date, findings, and response actions."

Observation 10: At the time of the inspection, the University had not developed, implemented, or maintained a good housekeeping plan, including reporting quantified and reported pollution prevention efforts for Facility owned/operated properties. The EPA Inspection Team requested a good housekeeping plan for University-owned/operated properties on 7/26/2023. MDE requested the same information from the University on 5/31/2023 (refer to Appendix C, Exhibit 5). Further, in their Fiscal Year (FY) 2021 MS4 General Permit Progress Report, the University reported not retaining a good housekeeping plan (GHP) (refer to Appendix C, Exhibit 8).

CHESAPEAKE BAY RESTORATION AND MEETING TOTAL MAXIMUM DAILY LOADS

The Permit requires Permittees to develop a Baseline Impervious Area Assessment. The Assessment is used to calculate the twenty percent impervious restoration requirement to meet Chesapeake Bay and local Total Maximum Daily Load (TMDLs). Additionally, the Permit requires the Permittee to develop an Impervious Area Restoration Work Plan that includes a long-term strategy of program development, funding, project identification, and construction scheduling. Further, the Permit requires the development of a Restoration Activity Schedule that identifies retrofit and redevelopment that was implemented between January 1, 2006, and the beginning of the Permit term and lists any projects planned for future implementation.

Permit Part V.B states, "Permittees must submit a work plan with the first year MS4 Progress Report to describe the activities and milestones that will be performed over the permit term to show progress toward the twenty percent impervious area restoration requirement. This will form the basis of a long term plan; however, the plan may be adjusted and refined as part of the adaptive management process over the course of the permit term. A work plan, recommended in the format of Table 1 below, must be submitted to MDE annually to describe progress and any modifications necessary to remain on track with restoration requirements. A suggested work plan is provided in Table 1. Permittees may use the work plan or develop a custom plan that addresses the unique circumstances of individual permittees for MDE review and approval."

Observation 11: At the time of the inspection, the University had not developed and submitted (to MDE) a revised Impervious Area Restoration Work Plan. As part of their Permit Year 1 submittal, the University submitted an Impervious Area Restoration Work Plan to MDE. However, MDE requested further information regarding the Work Plan for approval via email correspondence on the dates below (refer to Appendix C, Exhibits 1 through 5). Specifically, MDE requested, "Additional information is needed in the work plan, including strategies for eliminating data deficiencies, verifying the impervious area baseline, and ensuring BMP maintenance and inspections are performed." The EPA Inspection Team also requested the most recent Impervious Area Restoration Work Plan on 7/26/2023.

- 1/9/2020
- 9/28/2021
- 6/27/2022
- 12/16/2022
- 2/22/2023
- 5/31/2023

Permit Part V.C states, "Permittees are required to develop a Restoration Activity Schedule (Table 2) and provide annual updates on the status of projects in the planning, construction, and final phase of implementation. A brief narrative must accompany Table 2 and describe progress of planned restoration activities. Table 2 below provides an example of how to submit the required information. The table outlines a schedule for various BMPs under different stages of implementation during the permit term. The impervious acre baseline is indicated as 100 acres and noted in year one. With the implementation of each BMP, the balance toward achieving the restoration requirement is recalculated in the Impervious Acre Restoration Target and Balance ("Imperv Acre Target and Balance") column. This plan must be continuously refined and updated over the duration of the permit term. By the end of the permit term, a complete list of projects required to meet the twenty percent restoration requirement must be provided. The projected implementation year must be no later than 2025.

Observation 12: At the time of the inspection, the University had not submitted (to MDE) a revised Restoration Activity Schedule. The University submitted an initial Restoration Activity Schedule on December 4, 2020 as part of their Permit Year 1 submittal. However, MDE requested the University's revised Restoration Activity Schedule via email correspondence on the dates below (refer to Appendix C, Exhibits 1 and 5). Specifically, MDE requested that the University, "Submit a revised Restoration Activity Schedule that reflects the attached comments, including expanding the RAS to include all planned and completed projects, adding missing information, and correcting acreage reported."

- 6/27/2022
- 12/16/2022
- 2/22/2023
- 5/31/2023

FIELD OBSERVATIONS

MINIMUM CONTROL MEASURE 6: POLLUTION PREVENTION / GOOD HOUSEKEEPING (FIELD INSPECTIONS)

Washington Service Center
Address/Location: East Cold Spring Lane, Baltimore, MD 21218
Relevant Minimum Control Measure (MCM): PPGH
Entry Time: 10:05 AM (EDT) July 26, 2023
Exit Time: 10:35 AM (EDT)

Description: The Washington Service Center stores equipment and materials, has fueling operations, and conducts maintenance on landscaping equipment. The Washington Service Center also includes offices for Physical Plant Department personnel. At the time of the inspection, the University was in the process of relocating the Washington Service Center to separate locations on campus.

Observation 13: The EPA Inspection Team made the following observations at the University's Washington Service Center.

1) The EPA Inspection Team observed five (5) petroleum product storage tank locations (refer to Appendix B, Photographs 1 – 6), notably:
    a. A 300-gallon, double-walled tank containing diesel fuel used for the adjacent generator.
    b. A 2,000-gallon, double walled storage tank containing diesel fuel used for University machinery and equipment. There was no spill kit present in the vicinity of the storage tanks.
    c. A 2,500-gallon, underground storage tank containing unleaded gasoline used to fuel University machinery and equipment.
    d. Two (2) 25,000-gallon storage tanks containing No. 2 fuel oil. The University representatives were unsure if these tanks contained oil or were empty.
2) The EPA Inspection Team observed used batteries stored inside under cover (refer to Appendix B, Photograph 7).
3) The EPA Inspection Team observed four (4) storm inlets (refer to Appendix B, Photographs 8 – 11). University representatives did not know any information regarding MS4 connections.
4) The EPA Inspection Team observed containers of paint stored outside without cover or containment. Three of the containers contained unknown substances and did not have lids (refer to Appendix B, Photographs 12 and 13).
5) The EPA Inspection Team observed an open 55-gallon drum labeled tert butyl acetate that was without cover or containment (refer to Appendix B, Photograph 14). The drum was estimated to be 50% full.

University Motor Pool
Address/Location: Not provided
Relevant Minimum Control Measure (MCM): PPGH
Entry Time: 10:50 AM (EDT) July 26, 2023
Exit Time: 11:05 AM (EDT)

Description: The University Motor Pool is a facility used for maintenance of University vehicles, except for University buses. University representatives stated that maintenance includes anything from routine oil changes to engine rebuilds.

Observation 14: The EPA Inspection Team made the following observations at the University Motor Pool.

1) The EPA Inspection Team observed various vehicle chemicals and lubricants stored inside on top of spill pallets (refer to Appendix B, Photographs 15 and 16). There were no observed drains in the Motor Pool building.
2) The EPA Inspection Team observed a 1,000-gallon, double-walled waste oil storage tank (refer to Appendix B, Photograph 17) with no spill kit in the immediate vicinity of the tank.

MINIMUM CONTROL MEASURE 5: POST-CONSTRUCTION STORMWATER MANAGEMENT (PCSM) (FIELD INSPECTIONS)

North Campus Garage Permeable Pavement and Bioretention Swale
Address/Location: 39.352166°, -76.578746°
Relevant Minimum Control Measure (MCM): PCSM
Entry Time: 11:40 AM (EDT) July 26, 2023
Exit Time: 10:45 AM (EDT)

Description: The University's North Campus Garage contains a section of permeable pavers that, according to the University representative, drain into an adjacent bioretention area. The University representative stated that the Physical Plant Department maintains the bioretention area through regular mowing and weeding practices. However, the representative also stated that there is no regular maintenance schedule and they do not document all maintenance activities.

Observation 15: The EPA Inspection Team made the following observations at the North Campus Garage Permeable Pavement and Bioretention Swale.

1) The EPA Inspection Team observed that the permeable pavers were free of weeds and sediment (refer to Appendix B, Photographs 18 – 20).
2) The EPA Inspection Team observed that the bioretention swale, vegetation was managed, and it was free of debris (refer to Appendix B, Photograph 21).
3) On July 26, 2023, the EPA Inspection Team requested as-built design plans for the bioretention swale to better understand the function and how the swale was designed and if it was configured correctly. However, these records were not received by the EPA Inspection Team as of the date of this report.

North Campus Garage Stormwater Basin
Address/Location: 39.352020°, -76.578309°
Relevant Minimum Control Measure (MCM): PCSM
Entry Time: 11:46 AM (EDT) July 26, 2023
Exit Time: 11:50 AM (EDT)

Description: The North Campus Garage Stormwater Basin is located behind the North Campus Garage. The University representative was unable to provide information on how the basin receives stormwater or where stormwater discharges to when it leaves the basin.

Observation 16: The EPA Inspection Team made the following observations at the North Campus Garage Stormwater Basin.

1) The EPA Inspection Team observed that the basin did not have excessive vegetation in the basin itself and the grass was recently mowed (refer to Appendix B, Photograph 22).
2) The EPA Inspection Team observed what appeared to be a sediment forebay adjacent to the basin. Vegetation covered the forebay (refer to Appendix B, Photograph 23).
3) The EPA Inspection Team was unable to locate the inflow points for the basin and the University representative did not know where stormwater was conveyed into the basin and where it flowed from the basin.
4) On July 26, 2023, the EPA Inspection Team requested as-built design plans for the basin. However, the EPA Inspection Team did not receive the records as of the date of this report.

Center for Built Environment and Infrastructure Studies (CBEIS) Bioretention Areas
Address/Location: 39.351555°, -76.579074°
Relevant Minimum Control Measure (MCM): PCSM
Entry Time: 11:55 AM (EDT) July 26, 2023
Exit Time: 12:08 PM (EDT)

Description: The CBEIS Bioretention Areas are located directly behind the University's CBEIS building. The first bioretention area appeared to receive excess stormwater flow from the North Campus Garage Stormwater Basin, as it was located downgradient and appeared to have a piped connection to the basin.

Observation 17: The EPA Inspection Team made the following observations at the CBEIS Bioretention Areas.

1) The EPA Inspection Team observed the first bioretention area including a headwall where water appeared to enter the basin (refer to Appendix B, Photographs 24 and 25).
2) The EPA Inspection Team observed that the basin received stormwater from a pipe in the CBEIS building that conveys stormwater via a trench drain into the basin (refer to Appendix B, Photographs 26 and 27).
3) The EPA Inspection Team observed an outlet structure for the bioretention area (refer to Appendix B, Photographs 28 and 29). The University representative did not know where stormwater was discharged from the bioretention area.
4) The EPA Inspection Team observed a secondary bioretention area also located behind the CBEIS building (refer to Appendix B, Photograph 30).
5) Vegetation completely covered the outlet structure for the bioretention (refer to Appendix B, Photograph 31). The University representative did not know where stormwater discharged from the bioretention area.

Calvin And Tina Tyler Hall Bioretention Area and Green Roof
Address/Location: East Cold Spring Lane, Baltimore, MD 21218
Relevant Minimum Control Measure (MCM): PCSM
Entry Time: 12:20 PM (EDT) July 26, 2023
Exit Time: 12:40 PM (EDT)

Description: The Calvin And Tina Tyler Hall Bioretention Area and Green Roof areas were installed in 2020. The location encompasses at least twelve (12) different bioretention areas.

Observation 18: The EPA Inspection Team made the following observations at the Calvin And Tina Tyler Hall Bioretention Area and Green Roof.

1) The EPA Inspection Team observed bioretention area directly in front of Calvin And Tina Tyler Hall (refer to Appendix B, Photographs 32 and 33). The vegetation in the area was maintained and it was free of trash and debris.
2) The EPA Inspection Team observed the green roof on top of Calvin And Tina Tyler Hall that was maintained and free of trash and debris (refer to Appendix B, Photographs 34 and 35).
3) The EPA Inspection Team observed that the roof itself appeared to have permeable tiles for stormwater filtration (refer to Appendix B, Photograph 36).
4) After the field inspection on July 26, 2023, the EPA Inspection Team requested as-built design plans for the green roof and bioretention areas to better understand the function and how these areas were designed and if they were configured correctly. However, the EPA Inspection Team did not receive these records as of the date of this report.

McCallum Drive Stormwater Basin
Address/Location: 39.337512°, -76.581384°
Relevant Minimum Control Measure (MCM): PCSM
Entry Time: 12:45 PM (EDT) July 26, 2023
Exit Time: 12:55 PM (EDT)

Description: The McCallum Drive Stormwater Basin is in the southern portion of the University campus and receives stormwater flow from the adjacent streets McCallum Drive and Herring Run Trail.

Observation 19: The EPA Inspection Team made the following observations at the McCallum Drive Stormwater Basin.

1) The EPA Inspection Team observed the basin had large amounts of vegetation inside and on the edges of the basin (refer to Appendix B, Photograph 37).
2) The concrete outlet structure was approximately 90 percent covered with vegetation and the EPA Inspection Team was unable to see the structure clearly (refer to Appendix B, Photographs 38 and 39). The University representative did not know where stormwater discharged from the basin.
3) After the field inspection on July 26, 2023, the EPA Inspection Team requested as-built design plans for the basin to better understand the function and how the basin was designed and if it was configured correctly. However, the EPA Inspection Team did not receive the records as of the date of this report.