



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
Four Penn Center
1600 John F. Kennedy Boulevard
Philadelphia, Pennsylvania 19103-2852

Report Title: Clean Water Act Compliance Inspection Report
Inspection Date(s): October 19 and 20, 2022
Regulatory Program(s): National Pollutant Discharge Elimination System (NPDES)
Type of Activity: Municipal Separate Storm Sewer System (MS4) Program
Site/Facility Name: City of Harrisburg MS4
Permittee(s): Capital Region Water
Site/Facility Address: 3003 North Front Street, Harrisburg PA 17110
Latitude: 37.2545N **Longitude:** 77.4093W
County/Parish: Dauphin County
Specific Permit #: PAI133524
NAICS Code: 924110 **SIC:** 9511
Unique Project #: 3E23WN005A

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List of Attachments

Attachment 1:	NPDES MS4 Permit No. PAI133524
Attachment 2:	2022 MS4 Annual Report
Attachment 3:	Draft Memorandum of Understanding Between the Dauphin County Conservation District, City of Harrisburg, and Capital Region Water
Attachment 4:	Photo Log – Capital Region Water Facilities
Attachment 5:	Photo Log – City of Harrisburg Facilities
Attachment 6:	Riverfront Office Lot As-Built Plans
Attachment 7:	Salvation Army As-Built Plans

I. Introduction

On October 19 and 20, 2022, an inspection team comprised of staff from the U.S. Environmental Protection Agency (“EPA”) Region III (hereinafter, “EPA Inspection Team”) met with representatives of the Pennsylvania Department of Environmental Protection (“PADEP”), Capital Region Water (“CRW”), and the City of Harrisburg (“City”). The purpose of the inspection was to review the City’s compliance with their PADEP National Pollutant Discharge Elimination System (“NPDES”) Individual Permit to Discharge Stormwater from Small Municipal Separate Storm Sewer Systems (MS4s) Permit No. PAI133524 (“Permit”).

Prior to the inspection, the EPA Inspection Team reviewed the Attachment 1 – NPDES MS4 Permit No. PAI133524 and Attachment 2 – 2022 MS4 Annual Report. The EPA Inspection Team also requested and reviewed: Attachment 6 – Riverfront Office Lot As-Built Plans, and Attachment 7 – Salvation Army As-Built Plans.

As part of the inspection, the EPA Inspection Team reviewed efforts regarding minimum control measures (“MCMs”) for illicit discharge detection and elimination (“IDD&E”); post-construction stormwater management (“PCSM”); and pollution prevention and good housekeeping for facilities owned or operated by CRW and the City within the MS4 service area. The EPA Inspection Team inspected three PCSM facilities that were selected by the EPA Inspection Team prior to the inspection, the City’s maintenance facility, and CRW’s maintenance yard.

The photographs for this report have been processed in order to assign to each photo the original camera-generated file name. The camera-generated file name is used to identify each photo in the main narrative of this inspection report. Unused photos are digitally stored and maintained in the inspection file. Unused photos are available upon request.

A. Inspection Opening Conference

The EPA Inspection Team arrived at the CRW maintenance yard at approximately 9:00 a.m. on October 19, 2022. The maintenance yard is located at 1051 Elliot Street, Harrisburg, Pennsylvania. The EPA Inspection Team identified themselves to the CRW representatives, displayed their credentials and described the purpose of the compliance inspection. The EPA Inspection Team, with the CRW representatives, then inspected the maintenance yard and the three structural stormwater management facilities. The EPA Inspection Team’s observations are listed later in this document and are grouped by type of observation. The inspection ended at approximately 11:35 a.m. on October 19, 2022.

B. Weather and Precipitation Conditions

During the inspection, weather was sunny. National Oceanic and Atmospheric Administration (NOAA) National Weather Service precipitation data for the date of the inspection and 5 days prior are provided in the table below:

Precipitation Data

Station Name	Date	Precipitation Amount (inches) ¹
HARRISBURG 1 NE, PA US	10/15/22	0.01
HARRISBURG 1 NE, PA US	10/16/22	0.00
HARRISBURG 1 NE, PA US	10/17/22	0.00
HARRISBURG 1 NE, PA US	10/18/22	0.00
HARRISBURG 1 NE, PA US	10/19/22	0.00
HARRISBURG 1 NE, PA US	10/20/22	0.00

II. MS4 Activity

The City of Harrisburg is the capital of the Commonwealth of Pennsylvania, and the county seat of Dauphin County. The city had a population of approximately 50,099 people as of the 2020 census. The City has a total area of 11.86 square miles (30.73 km²), of which 8.12 square miles (21.03 km²) is land and 3.75 square miles (9.70 km²) (31.6%) is water. The city is located on the east bank of the Susquehanna River. Water bodies in the city include Paxton Creek (which discharges into the Susquehanna River), Wildwood Lake (which empties into Paxton Creek), and Italian Lake.

CRW owns and operates a Municipal Separate Storm Sewer System (MS4) that consists of manmade and natural components of a stormwater management infrastructure to both limit and manage the volume of stormwater to mitigate flood events and to minimize degradation of the City's waterways through stormwater quality management. CRW is authorized to discharge stormwater runoff from the MS4 under the Pennsylvania Stormwater Management Program regulations and a NPDES permit. CRW has sole responsibility of the stormwater inlets, piping, and outfalls, while Harrisburg City is responsible for all other municipally owned facilities covered under the MS4 permit requirements. CRW also conducts street sweeping within the city on a regular basis. Street sweepings are disposed of in a lined lagoon at the Harrisburg Advanced Wastewater Treatment Plant (AWTF) and when dried are stored under roof until transported to a landfill. According to Claire Maulhardt, City Beautiful H₂O Program Manager (stormwater manager), CRW is working on a map of the stormwater drainage system. CRW has the needed digital information and expects to finalize the drainage map by July 2024. Within the City, stormwater is intertwined with the combined sewage conveyances. CRW is continuing to CCTV all conveyances and laterals in order to maintain up-to-date mapping.

III. Observations

The following are observation based on the EPA Inspection Team's review of documentation related to the MS4 Program and physical inspection of the MS4-related structures and activities.

MCM 3 - Dry Weather Screening

The General Permit requires "all the identified regulated small MS4 outfalls shall be screened during dry weather at least twice within the 5-year period following approval of coverage under this General Permit" and that "...existing permittees, each of the identified regulated small MS4 outfalls shall be screened during dry weather at least once by March 15, 2023."

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

Observation #1:

CRW's 2022 MS4 Annual Report (Attachment 2) contains documentation of CRW's inventory of outfalls and the City's efforts to conduct dry weather screening. It is not clear if all outfall screenings have been conducted for the reporting year, as the 2022 MS4 Annual Report states that 0 outfalls were screened during the reporting period and 0% of all outfalls were screened in the past five years.

MCM 5 - Operation and Maintenance of PCSM BMPs

Best Management Practice (BMP) 3 of MCM 5 of the General Permit requires municipalities to "Ensure adequate O&M of all post-construction stormwater management BMPs that have been installed at development or redevelopment projects that disturb greater than or equal to one acre..."

An inventory of Post Construction Stormwater Management (PCSM) BMPs shall be developed by new permittees by the end of the first year of General Permit coverage and shall be continually updated during the term of coverage under the General Permit as development projects is reviewed, approved, and constructed. Existing permittees shall update and maintain its current inventory during the term of coverage under the General Permit. The permittee must track the following information in its PCSM BMP inventory:

- ...
- *The exact location of the PCSMBMP (e.g., latitude and longitude, with street address).*
- *Information (e.g., name, address, phone number(s)) for BMP owners and entities responsible*
- *The type of BMP and the year it was installed*
- ...
- *The actual inspection/maintenance activities conducted for each BMP.*
- *An assessment by the permittee if proper O&M has occurred during the year and if not, what actions the permittee has taken, or shall take, to address compliance with O&M requirements.*

Observation #2:

CRW provided the EPA Inspection Team with its Stormwater Management Facility Maintenance (SWMF) Inventory for 2022, which is part of the 2022 MS4 Annual Report (Attachment 2). The SWMF describes their efforts regarding post-construction stormwater management facilities. According to Attachment 3, CRW has a Memorandum of Understanding with Dauphin County Conservation District (DCCD) and an updated Memorandum of Understanding with Dauphin County, and the city is in draft form and awaiting final execution. CRW has a draft PCSM BMP Inventory, which is included in Attachment #7 of the 2022 MS4 Annual Report (Attachment 2). As a new MS4 permittee, CRW is coordinating with the City of Harrisburg and DCCD to obtain historical records on additional existing PCSM BMPs prior to 2017. The MOU will allow the three entities to jointly work together to implement the requirements of the MS4 permit; specifically, DCCD will assist in the implementation of MCMs #1, #4 and #5, while the City will assist in the implementation of MCM #6. For MCM #5, CRW provided an inventory of PCSM BMPs from about 2018-present. These BMPs are from land development projects, which were

reviewed by CRW. Ms. Maulhardt said they are planning to work toward developing a full historical list by reviewing deeds. The inventory lists whether the project is within the combined system or MS4 system. To align with the permit requirements, as the inventory is expanded, maintenance requirements need to be added as per the O&M agreements as well as the frequency of maintenance.

CRW has implemented a stormwater fee credit system. Ms. Maulhardt provided the list of BMPs accrued for the credit system, which she said will receive monthly inspection of the PCSM when the inspection program is fully in place. In addition to CRW's inspection program, CRW could consider a self-reporting inspection program for the BMP owners to demonstrate compliance with the maintenance and inspection program.

Observation #3:

As-built plans for three PCSM BMPs were requested and reviewed by the EPA Inspection Team for the inspection. The EPA Inspection Team inspected a total of five facilities, three of which were PCSM BMPs and two of which were maintenance facilities. The first of the PCSM BMPs inspected is owned by the Pennsylvania Department of Transportation ("PennDOT") (Attachment 4 – Photos DSCN3382 – DSCN3395). The EPA Inspection Team arrived at approximately 10:00 a.m. on October 19, 2022. The PennDOT BMP is called the Riverfront Office Lot (see the As-built plans for the Riverfront Office PCSM BMP in Attachment 6). The BMP is bound by Sycamore Street to the north, the Susquehanna River to the east, Amtrak rail lines to the west, and Phoenix Park to the south. In 2021, PennDOT installed an infiltration bed that treats 2.57 acres of stormwater runoff. This is a combined sewer area, but stormwater flows from this BMP directly to the river. When the BMP overflows, it goes through a 48-inch pipe that discharges to the Susquehanna River. The EPA Inspection Team observed swales that were not fully stabilized (Attachment 4 – Photos DSCN3389, DSCN3390, DSCN3392, and DSCN3395). PennDOT will conduct the maintenance on this BMP. EPA left the location at approximately 10:15 a.m. on October 19, 2022.

Observation #4:

The second PCSM BMP inspected is Cloverly Heights Park (Attachment 4 – Photos DSCN3399 – DSCN 3409). EPA arrived at the facility at approximately 10:20 a.m. on October 19, 2022. As part of CRW's City Beautiful H2O Program, numerous Green Stormwater Infrastructure (GSI) projects have been implemented. Many of the projects are located within the Combine Sewer System (CSS) area (such as the corner planting on 3rd Street), but the Cloverly Heights project was installed within an MS4 area at a City Park. Several measures were implemented for stormwater treatment and control including porous pavement for the basketball courts, two underground storage tanks, and a rain garden. Ms. Maulhardt explained that additional stormwater inlets in the area were added to collect stormwater. The stormwater tanks then discharge back into the stormwater system, which discharges to Spring Creek around 19th Street. CRW maintains these Storm Control Measures (SCMs), while the city owns the park. CRW contracts out the landscaping maintenance on GSI, but the CRW Field Maintenance staff handle the cleaning of inlets. CRW completed the construction of this site in 2019. The retrofitted part of the park is bound with Pemberton Street to the north, Rolleston Street on the east side, South 18th Street on the west side, and Lowell Street to the south. The park is in the separate MS4 part of the city. CRW built a storage chamber under the basketball court and in a grassy area along

Rolleston Street. The storage chamber consists of a gravel infiltration bed under the basketball court and the grassed area. CRW built this facility in cooperation with the city. CRW installed several storm drains to alleviate street flooding. The catch basins drain into the underground infiltration beds and then discharge to Spring Creek. CRW gets TMDL reduction credit in the MS4. CRW pays a private contractor to provide operation and maintenance (O&M) of the facility. The EPA Inspection Team did not observe any issues at Cloverly Heights Park. EPA left the facility at approximately 10:40 a.m. on October 19, 2022.

Observation #5:

The EPA Inspection Team arrived at the Salvation Army facility, located at 506 South 29th Street, Harrisburg, at approximately 10:45 a.m. on October 19, 2022 (Attachment 4 – Photos DSCN3413 – DSCN3423). This facility is located in the separate MS4 section of the city. See the As-built plans for the Salvation Army PCSM BMP in Attachment 7. When EPA arrived, the facility was under winter O&M procedures. The EPA Inspection Team observed dirt in the parking lot in the northeast corner along Rudy Road, approximately 20 feet in diameter (Attachment 4 – Photo DSCN3414). EPA observed green infrastructure (bioswale) at the facility that used to be a parking lot. The facility is 6.8 acres in size and drains into the bioswale. The bioswale drains to a retention pond along South 29th Street, that subsequently drains to Outfall 070 and then into Spring Creek. The facility was built with funding by an EPA grant. This facility receives stormwater credit under the Chesapeake Bay TMDL. CRW has an O&M agreement with Salvation Army, and the Salvation Army receive stormwater credits from CRW, which helps reduce the Salvation Army's stormwater fee to CRW. EPA left the site approximately at 11:15 a.m. on October 19, 2022.

MCM 6 - Good Housekeeping

Part C.I.B.6 of the Permit states that “The permittee must develop and implement an O&M program that includes a training component and has the goal of preventing and reducing pollutant runoff from operations, facilities, and activities under the control of the permittee (collectively, “operations”). The program must include employee training to prevent and reduce stormwater pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and stormwater system maintenance” (25 Pa. Code § 92a.32(a) and 40 CFR § 122.34(b)(6)).

EPA inspected two maintenance yards, one operated by CRW and one operated by the city. EPA arrived at the CRW Maintenance Yard at approximately 9:00 a.m. on October 20, 2022. The maintenance yard is located at 1051 Elliot Street, Harrisburg, Pennsylvania. The CRW yard is located in the combined sewer area. The EPA Inspection Team did not observe any maintenance issues at the yard (Attachment 4 – Photos DSCN3377 – DSCN3481).

Observation #6:

On October 20, 2022, EPA arrived at approximately 8:50 a.m. at the City of Harrisburg Municipal Maintenance Yard located at 1820 Paxton Street (Attachment 5 – Photos DSCN3376 and DSCN3425 – DSCN3467). The EPA Inspection Team identified themselves to the CRW representatives, displayed their credentials, and described the purpose of the compliance inspection. According to David West, Public Works Director, the city acquired the facility from Brenner Car Dealership a few years ago. The facility is used for truck maintenance and storage

(Attachment 5 – Photos DSCN3425 – DSCN3426). The city does maintenance of all municipal vehicles at this location, except for fire trucks. In the main maintenance bay, the EPA Inspection Team observed floor drains and a few oil stains on the floor. According to David Baker, Director Parks and Facilities, the floor drains lead to a sanitary sewer line (Attachment 5 – Photos DSCN3427 – DSCN3431). The facility is located within the MS4 area and drains to Spring Creek. The EPA Inspection Team observed absorbent pads in several of the floor drains.

The EPA Inspection Team observed the storage room. There were no floor drains. However, the housekeeping was sloppy; items were not always stored on shelves, and aisles were blocked.

The EPA Inspection Team observed the recycle container area, which included floor drains (Attachment 5 – Photos DSCN3432 – DSCN3433). In the back bay floor drains were also observed. In the back bay, the city stores a tar tack and sealer machines. The EPA Inspection Team observed stains on the ground (Attachment 5 – Photos DSCN3434 – DSCN3438).

Heavy equipment is stored in the large storage bay (Attachment 5 – Photos DSCN3439 – DSCN3443). The EPA Inspection Team observed a hole in the ground, stains on the ground, and a trench drain. According to Mr. Baker, the hole probably leads to a floor drain. The EPA Inspection Team asked if there were any underground storage tanks on site. Mr. Baker stated that he did not know of any at this facility. However, Mr. Baker stated that PennDOT acquired the north and east side of the property to expand I-83 and the 19th Street exit (Exit 44) and they removed an underground tank along 19th Street.

The EPA Inspection Team observed two storm drains in the back parking lot, along with stains on the ground (Attachment 5 – Photos DSCN3444 – DSCN3451). In the west driveway, the EPA Inspection Team observed two storm drains (Attachment 5 – Photos DSCN3452 – DSCN3453). In the east side of the yard four storm drains were observed (Attachment 5 – Photos DSCN3454, DSCN3455, DSCN3458, & DSCN3459). Equipment was stored along the northeast side of the facility. Stains were observed on the ground adjacent to the stored trucks and equipment (Attachment 5 – Photos DSCN3460 – DSCN3464).

The EPA Inspection Team observed road millings along 19th Street. There was no berm to contain the millings (Attachment 5 – Photos DSCN3465 – DSCN3467).

The EPA Inspection Team asked where road salt is stored. Mr. West stated the road salt is stored on school district property.

The EPA Inspection Team requested plans of the City's facility that show that storm drains in the back parking lot go to sanitary lines. Mr. Baker stated they do not have any plans of the facility and they will need to smoke test the drains to see where they go.

The EPA Inspection Team left the facility at approximately 10:20 a.m. on October 20, 2022.

IV. Records Review

As part of this inspection, the EPA Inspection Team reviewed the documents identified in the List of Attachments at Page 2 of this report.

V. Closing Conference

At the conclusion of the field inspection, the EPA Inspection Team conducted a closing conference with City representatives and shared preliminary observations. The EPA Inspection Team reiterated to the city representatives that all preliminary observations discussed were not compliance determinations. Preliminary observations shared with the city are subject to further investigation by EPA, including additional review of records and documentation. As a result, additional observations may be contained in this inspection report that were not identified at the time of the closing conference.

The inspection concluded at approximately 11:25 a.m. (EDT), on October 20, 2022.