

MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4)

CONSTRUCTION SITE STORMWATER RUNOFF CONTROL & POST CONSTRUCTION STORMWATER MANAGEMENT

**MANUAL 3 OF 4
NPDES PERMIT NO. PAG136194**



**CITY OF DUQUESNE
ALLEGHENY COUNTY, PA
12 SOUTH SECOND STREET
DUQUESNE, PA 15110**

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P. PREFACE

Part C of the MS4 NDPES Permit requires the permittee (City) to develop, implement and enforce a Stormwater Management Program (SWMP). One of the requirements is to develop written plans that describe the goals that should be met and describe the procedures to be followed by the municipality to implement and measure the effectiveness of these procedures. In order to meet these requirements and to educate the necessary personnel, the municipality has developed the following manuals:

1. Public Education and Outreach and Public Involvement/Participation Joint Program
2. Illicit Discharge Detection and Elimination Program
- 3. Construction Site Stormwater Runoff Control & Post Construction Stormwater Management**
4. MS4 Operation and Maintenance & Training Manual

Manual 1 presents the objectives of the PEOP and PIPP requirements (MCM #1 & #2)

Manual 2 addresses the water quality issues involved with IDD&E. (MCM #3)

Manual 3 provides a discussion of the regulatory requirements regarding runoff (MCM #4, MCM #5)

Manual 4 explains operation and maintenance produces as well as employee training. (MCM #6)

I. INTRODUCTION

According to the Environmental Protection Agency (EPA) a Municipal Separate Storm Sewer (MS4) is a conveyance or system of conveyances that is:

- Owned by a state, city, town, village, or other public entity that discharges to waters of the U.S.;
- Designed or used to collect or convey Stormwater (including storm drains, pipes, ditches, etc.);
- Not a combined sewer; and
- Not part of a Publicly Owned Treatment Works (sewage treatment plant)

MS4 are collection systems designed to move stormwater, including rainwater and snow melt, through a conveyance system (drains, pipes, ditches, and open channels) to waterways. As stormwater collects in MS4, contamination is a possibility. For example, if stormwater were to flow through agricultural lands before discharging to an MS4, it may pick up pesticides, fertilizers, and/or sediments. Other sources of stormwater contamination include oil and grease from roadways, discarded trash, and household hazardous waste, like solvents and motor oil. Since Stormwater is not treated, any pollutants carried in stormwater will end up into the conveyance system and ultimately in waterways, potentially threatening public health (contaminated food, drinking water, and recreational waterways), harming freshwater ecosystems, and degrading the aesthetic value of waterways.

Municipalities in urbanized areas (UAs) must obtain NPDES permit coverage and develop a stormwater management program to discharge stormwater from their MS4. After permit coverage approval and as part of the stormwater management program, municipality(s) are required to develop and maintain an active MS4 Program that addresses requirements of the Pennsylvania Department of Environmental Protection (PA DEP), as well as the EPA. These requirements include elements that address the six Minimum Control Measures (MCMs) established by the EPA:

1. Public Education and Outreach on Stormwater Impacts
2. Public Involvement/Participation
3. Illicit Discharge Detection and Elimination
4. Construction Site Stormwater Runoff Control
5. Post-Construction Stormwater Management (PCSM) in New and Re-Development
6. Pollution Prevention/Good Housekeeping for Municipal Operations

The City of Duquesne is committed to continuing in the development, implementation, and enforcement of the MS4 Program that is designed to reduce the discharge of pollutants from the regulated MS4, protect water quality, and closely follow the requirements for PA DEP and the EPA.

City of Duquesne, located in Southwestern Pennsylvania, is a community located in Allegheny County approximately 11 miles from the City of Pittsburgh. The City is bordered by the Monongahela River and the Borough of West Mifflin.

The City itself is composed of approximately 1316 acres. For the sake of the MS4 Program, only the U.S. Census Bureau-designated urbanized areas are considered within the MS4 Program jurisdiction. In this case the designated urbanized area in Duquesne contains all 1316 acres of the municipality.

The following presents the Construction Site Stormwater Runoff Control Program (MCM #4) and the Post Construction Stormwater Management Plan (MCM #5) for Duquesne City. The primary goal of this program is to understand and implement proper controls regarding construction projects to ensure erosion and sediment control (ESC). Unlike the previous manuals, this manual is more focused on general education regarding ESC and measurable goals the City can achieve to comply.

The MS4 in the City collects runoff, conveys the water through a system of pipes and streams, and then discharges it to local surface waters, which include Turtle Creek and the Monongahela River, both of which require management under the City's NPDES permit. As part of the Authorization to Discharge waters from the MS4 to surface waters, there are specific requirements that include illicit discharge management and involvement in water quality improvement issues. The Construction Site Stormwater Runoff Control Program falls under the requirements of Minimum Control Measure #4 (MCM #4), which contains a series of Best Management Practices (BMPs) that must be met as well as MCM #5. The requirements of MCM #4 and the associated BMPs are illustrated in the following section and the MCM #5 requirements are in section III.

II. CONSTRUCTION SITE STORMWATER RUNOFF CONTROL (MCM #4)

BMP #1:

The City may not issue a building or other permit or final approval to those proposing or conducting earth disturbance activities requiring an NPDES permit unless the party proposing the earth disturbance has valid NPDES Permit coverage (i.e., not expired) under 25 Pa. Code Chapter 102.

This BMP can be satisfied by passing the ALLEGHENY COUNTY ACT 167 STORMWATER MANAGEMENT PLAN.

BMP #2:

The City which issues building or other permits shall notify DEP or the applicable county conservation district (CCD) within 5 days of the receipt of an application for a permit involving an earth disturbance activity consisting of one acre or more, in accordance with 25 Pa Code Section 102.42.

This BMP can be satisfied by passing the ALLEGHENY COUNTY ACT 167 STORMWATER MANAGEMENT PLAN.

BMP #3:

Enact, implement and enforce an ordinance or SOP to require the implementation and maintenance of E&S control BMPs, including sanctions for non-compliance, as applicable.

The City shall enact, implement, and enforce and ordinance to require the implementation of E&S control BMPs, including sanctions for non-compliance. The City shall submit a copy of an ordinance that is consistent with DEP's 2022 Model Stormwater Management Ordinance as an attachment to an Annual MS4 Status Report by September 30, 2022.

This BMP can be satisfied by passing the ALLEGHENY COUNTY ACT 167 STORMWATER MANAGEMENT PLAN.

III. POST CONSTRUCTION STORMWATER MANGEMENT (PCSM) (MCM #5)

BMP #1:

Enact, implement and enforce an ordinance or SOP to require post-construction stormwater management from new development and redevelopment projects, including sanctions for non-compliance.

This BMP can be satisfied by passing the ALLEGHENY COUNTY ACT 167 STORMWATER MANAGEMENT PLAN.

BMP #2:

Develop and implement measures to encourage and expand the use of Low Impact Development (LID) in new development and redevelopment. Measures should also be included to encourage retrofitting LID into existing development. Guidance on implementing LID practices may be found on DEP's MS4 website, www.dep.pa.gov/MS4. Enact ordinances consistent with LID practices and repeal sections or ordinances that conflict with LID practices.

This BMP can be satisfied by passing the ALLEGHENY COUNTY ACT 167 STORMWATER MANAGEMENT PLAN.

BMP #3:

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, including projects less than one acre that are part of a larger common plan of development or sale.

The City shall update and maintain its current inventory during the term of coverage under the General Permit. The City must track the following information in its PCSM BMP inventory:

- All PCSM BMPs that were installed to meet requirements in NPDES Permits for Stormwater Discharges Associated with Construction Activities approved since March 10, 2003.
- The exact location of the PCSM BMP (e.g., latitude and longitude, with street address).
- Information (e.g., name, address, phone number(s)) for BMP owners and entities responsible for BMP O&M, if different from BMP owners.
- The type of BMP and the year it was installed.
- Maintenance required for the BMP type according to the Pennsylvania Stormwater BMP Manual or other manuals and resources.
- The actual inspection/maintenance activities conducted for each BMP.
- An assessment by the City if proper O&M has occurred during the year and if not, what actions the City has taken, or shall take, to address compliance with O&M requirements.

IV. CONCLUSION

The City of Duquesne is encouraged to pursue the option to enact the Allegheny County Act 167 Stormwater Management Plan. The passing of this plan results in complete compliance with Minimum Control Measure #4 and #5.

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ALLEGHENY COUNTY ACT 167 STORMWATER MANAGEMENT PLAN

Appendix B

LIST OF ABBREVIATIONS AND ACRONYMS

List of Abbreviations and Acronyms

Environmental Protection Agency	EPA
Pennsylvania Department of Environmental Protection	PA DEP
Municipal Separate Storm Sewer System	MS4
National Pollutant Discharge Elimination System	NPDES
Minimum Control Measures	MCM
Public Education and Outreach Program	PEOP
Public Involvement/Participation Program	PIPP
Illicit Discharge Detection & Elimination	IDD&E
Post-Construction Stormwater Management	PCSM
Pollution Prevention/Good Housekeeping	PPGH
Best Management Practices	BMP
Illicit Discharge Potential	IDP
Chemical Oxygen Demand	COD
5-day Biochemical Oxygen Demand	BOD5
Total Suspended Solids	TSS
Total Dissolved Solids	TDS
Total Residual Chlorine	TRC
Outfall Reconnaissance Inventory	ORI
Erosion and Sediment Control	ESC
County Conservation District	CCD