pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

BUREAU OF CLEAN WATER

Application Type	**Renewal**	Application No.	**PA0063665**
Facility Type	**MS4**	APS ID	**464503**
Permit Type	**Individual**	Authorization ID	

NPDES PERMIT FACT SHEET
MS4s

Applicant and Facility Information

Applicant Name	**City of Allentown**	Facility Name	**City of Allentown MS4**
Applicant Address	435 Hamilton Street	Facility Address	435 Hamilton Street
	Allentown, PA 18101		Allentown, PA 18101
Applicant Contact	Angela DiBuo	Facility Contact	Angela DiBuo
Applicant Phone	(610)437-7587	Facility Phone	(610)437-7587
Client ID	**76667**	Site ID	**247978**
SIC Code	**9511-04**	Municipality	City of Allentown
SIC Description	**Local Government Air & Water Resource & Solid Waste Management**	County	Lehigh
Date Application Received	**9/20/2010**		
Date Application Accepted	9/21/2010		

Purpose of Application: Renewal of the Municipal Separate Storm Sewer System (MS4) NPDES permit

Internal Review and Recommendations

On 9/20/2010, DEP received an application to renew the individual NPDES permit for the City of Allentown to authorize continuation of stormwater discharges from its regulated municipal separate storm sewer system (MS4). As the population within the municipal jurisdiction of the City of Allentown is greater than 100,000 (but less than 250,000), the City is designated as a Phase 1 medium MS4 and is required to obtain an Individual NPDES permit. MS4s defined or designated as large or medium regulated MS4s must apply for and obtain NPDES permit coverage as specified at 25 Pa. Code § 92a.32(a) and 40 CFR § 122.26(a)(3).

As a Phase 1 permittee, the MS4 permit has been tailored to the City; however, the stormwater management requirements of the permittee's Stormwater Management Program (SWMP) largely parallel those of municipalities and other entities regulated as Phase 2, small MS4 permittees. The City of Allentown has an area of approximately 11,500 acres, all of which is defined as urban area according to both the 2010 and 2020 U.S. Census Bureau designations.

The original Allentown MS4 NPDES permit was issued on 8/1/1997, expired on 7/31/2002, and was administratively extended due to the submission of a timely renewal application and was replaced by a permit issued on 5/1/04, expired on 4/30/09. That permit was also administratively extended due to the submission of a timely renewal application and will be replaced by the permit renewal discussed in this Fact Sheet.

The City of Allentown will provide Annual MS4 Status Reports (AMSRs) to DEP to document ongoing compliance under this permit.

Approve	Deny	Signatures	Date
X		*Paul R. Grella* (signed) Paul R. Grella: NERO MS4 Program Coordinator	3/27/24
X		*Amy Bellanca* (signed) Amy Bellanca, PE : NERO Clean Water Program Manager	3/27/24
X		*Jamie Eberl* (signed) Jamie Eberl, PE: Central Office MS4 EGM	3/27/24

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Individual Permit Requirements

Authorized Discharges

This permit authorizes stormwater discharges to surface waters of the Commonwealth from the permittee's regulatedMS4. In addition, the following non-stormwater discharges are authorized as long as such discharges do not cause or contribute to pollution as defined in Pennsylvania's Clean Streams Law:

a. Discharges or flows from emergency firefighting activities.

b. Discharges from potable water sources including water line flushing and fire hydrant flushing, if such discharges do not contain detectable concentrations of Total Residual Chlorine (TRC).

c. Non-contaminated irrigation water, water from lawn maintenance, landscape drainage and flows from riparian habitats and wetlands.

d. Diverted stream flows and springs.

e. Non-contaminated pumped ground water and water from foundation and footing drains and crawl space pumps.

f. Non-contaminated HVAC condensation and water from geothermal systems.

g. Residential (i.e., not commercial) vehicle wash water where cleaning agents are not utilized.

h. Non-contaminated hydrostatic test water discharges, if such discharges do not contain detectable concentrations of TRC.

Stormwater Management Program (SWMP)

The permittee will continue to implement and enforce a SWMP designed to reduce the discharge of pollutants from the MS4 to the maximum extent practicable, to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act and Pennsylvania Clean Streams Law. The required components of the SWMP include:

1. Source Identification
2. Construction Site and Post-Construction Stormwater Management (PCSM) From Areas of New Development and Development on Prior Developed Lands
3. Roadways, Streets, and Parking Lots
4. Pesticide, Herbicide, and Fertilizer (PHF) Application
5. Illicit Discharge Detection and Elimination (IDD&E)
6. Spill Prevention and Response (SPR)
7. Industrial High-Risk Runoff (IHRR)
8. Stormwater Infrastructure Management
9. City Properties
10. Public Education and Outreach
11. Public Involvement / Participation
12. Pollution Prevention / Good Housekeeping for Municipal Operations
13. Training
14. Watershed Restoration Strategy (WRS) to Address Impairments in Local Streams
15. Total Maximum Daily Load (TMDL) Plan for Little Cedar Creek
16. Fiscal Analysis

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The required SWMP components contained in the City of Allentown's permit have been customized to the unique activities and responsibilities of the City as a Phase 1 permittee. However, these permit requirements are consistent with the minimum control measure (MCM) requirements of municipalities and other entities regulated as Phase 2 MS4 permittees.

Public Education and Outreach, Public Involvement / Participation

These SWMP components meet the goals of the MCM #1, public education and outreach on stormwater impacts (40 CFR § 122.34(b)(1)), and MCM #2, public involvement/participation (40 CFR § 122.34(b)(2)), requirements for Phase 2 permittees.

The permittee will maintain and implement a written public education and outreach plan that targets a diverse audience including residents, businesses, developers, schools, elected officials, policy makers, planning staff, and other employees of the permittee. Through this plan, the permittee will distribute educational materials to the community, conduct outreach activities about the impacts of stormwater discharges on water bodies, and provide information on the steps that the public can take to reduce or eliminate behaviors that cause or contribute pollutants in stormwater runoff. The permittee will utilize at least two distribution methods per year to make stormwater educational materials available to target audiences. At least one annual distribution method must include information on the proper application of fertilizer under Pennsylvania's Fertilizer Law, as amended (P.L. 146, No. 20). The permittee will reevaluate the public education and outreach plan and make revisions, if necessary, at least once per year. Specific distribution methods and the type of information shared with the public will be reported to DEP in each AMSR.

The permittee will maintain and prepare a written public involvement and participation plan (PIPP) that describes various types of possible participation activities and the methods that will be used to solicit public input and encourage the public's involvement in the permittee's stormwater management program. The PIPP will include opportunities for the public to participate in the decision-making process associated with the development, implementation, and update of programs and activities related to this permit, methods of routine communication with groups and environmental organizations that operate within proximity to the permittee, and the ways in which permit-related documentation will be made available to the public. As the permittee's jurisdiction contains environmental justice (EJ) areas (as identified through DEP's website, https://gis.dep.pa.gov/PennEnviroScreen/), the PIPP must also include targeted outreach for EJ areas.

The permittee will develop at least three public involvement and participation activities per year and report in each AMSR an explanation of the activities performed and a description of how these efforts will reduce pollution loadings to meet the requirements of the permit. The permittee will evaluate annually the effectiveness of the public education and participation programs using methods including, but not limited to, reporting the estimated number of individuals reached through a stormwater related activity, providing the number of voluntary retrofits completed on private, city, state, and/or federal property. This input will be used to direct education and outreach resources most effectively, as well as to evaluate changes in adoption of the targeted behaviors.

Source Identification, Illicit Discharge Detection and Elimination (IDD&E), Industrial High-Risk Runoff (IHRR), Stormwater Infrastructure Management

Collectively these SWMP components meet the goals of the MCM #3, illicit discharge detection and elimination (IDD&E) (40 CFR § 122.34(b)(3)) requirements for Phase 2 permittees. To meet the goal of reducing illicit discharges from the permittee's MS4 to surface waters, the permittee will continue to implement its written program to detect and impose appropriate abatement requirements for illicit discharges and improper disposal to the MS4. The permittee will maintain and improve its stormwater sewer collection system mapping and conduct dry weather screenings of all MS4 outfalls and observation points. The permittee will create a strategic plan for the investigation and abatement of illicit discharge sources that considers multiple factors when prioritizing investigations including the severity of the pollution (if any) in dry weather flows, the health risk and nuisance to the community posed by that pollution, and areas with older infrastructure, concentration of high-risk activities, or past history of water pollution problems. Educational outreach to target audiences about identification and reporting of suspected illicit discharges will be included in the strategic plan.

The permittee will compile an update on its illicit connection program and submit a summary of program accomplishments to DEP in each AMSR. The program summary will include results of outfall inspections and sampling, the number of properties investigated for potential illicit connections, and the number of source corrections (abatements) achieved through homeowner notification, enforcement, or City-sponsored construction. The permittee will use this information to evaluate the need for

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updates to the Standard Operating Procedure/Methods (SOP) for illicit connection detection and identification and update the SOP annually.

Construction Site and Post-Construction Stormwater Management (PCSM) From Areas of New Development and Development on Prior Developed Lands

This SWMP component meets the goals of MCM #4, Construction Site Stormwater Runoff Control (40 CFR § 122.34(b)(4)), and MCM #5, Post-Construction Stormwater Management (PCSM) (40 CFR § 122.34(b)(5)), requirements for Phase 2 permittees.

The permittee will continue to enforce erosion and sediment control (E&S) and stormwater management requirements consistent with the Pennsylvania Clean Streams Law as implemented through Article 1387 of the City Code. This will include continued enforcement of the provisions of Section 13.87.03.2 of the City Code requiring activities subject to the permit requirements under 25 Pa. Code Chapter 102 to document compliance prior to commencement of regulated and earth disturbance activities as well as enforcement, when needed, during construction. The permittee may partner with the Lehigh County Conservation District through ongoing terms and conditions of a Memorandum of Understanding (MOU) executed by both parties, detailing roles and responsibilities related to construction site runoff control. All inspections for E&S control measures, enforcement actions resulting from non-compliance with permit and/or regulatory requirements, and information/concerns/complaints received from the public will be reported in each AMSR.

The permittee will continue to implement and maintain a program and regulations to require PCSM for new development and redevelopment projects, including sanctions for non-compliance. The permittee will maintain an inventory of all PCSM BMPs and continue to ensure adequate operation and maintenance (O&M) through local ordinances and regulations of all PCSM 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 permittee will initiate enforcement for non-compliance with NPDES Construction Stormwater permit conditions and copy DEP on all correspondence regarding non-compliance cases. A copy of the PCSM BMP inventory will be reported in each AMSR.

Pollution Prevention / Good Housekeeping for Municipal Operations, Roadways, Streets, and Parking Lots, Pesticide, Herbicide, and Fertilizer (PHF) Application, Spill Prevention and Response (SPR), City Properties, Training

Collectively these SWMP comments meet the goals of MCM #6, pollution prevention/good housekeeping for municipal operations (40 CFR § 122.34(b)(6)).

The permittee will identify all facilities and operations that are permittee-owned or operated that have the potential for generating pollution in stormwater runoff to the regulated MS4. The permittee will maintain and implement a written O&M program for all identified operations that includes management practices, policies, and procedures to prevent the discharge of pollutants to the regulated MS4. The permittee will provide a copy of the written O&M program in the first AMSR due following permit issuance date, and review and update of the program each year thereafter or more frequently as necessary.

The permittee will ensure the implementation of the O&M program through the development and implementation of an employee training program that addresses appropriate topics to further the goal of preventing or reducing the discharge of pollutants from municipal operations to the MS4. Training will cover all relevant parts of the permittee's stormwater management program that could affect operations, such as illicit discharge detection and elimination, construction sites, and ordinance requirements. Training will be provided each permit year and documented in each AMSR. The training program will be reviewed annually for effectiveness and adjustments will be made as necessary.

Watershed Restoration Strategy to Address Impairments in Local Streams

Similar to the MS4 permit requirements for small, Phase 2 permittees, DEP is proposing to establish a requirement in the City of Allentown's permit to develop and implement a Watershed Restoration Strategy (WRS) for discharges from the City's MS4 to surface waters impaired for sediment/siltation and/or nutrients (nitrogen and/or phosphorus). The permittee will apply DEP's Pollutant Reduction Plan (PRP) Instructions (3800-PM-BCW0100k) to develop its WRS.

The permittee's WRS shall be submitted to DEP for approval no later than one year following the effective date of the permit. DEP will provide notice in the PA Bulletin and accept comments from the public prior to approving the WRS. The WRS shall

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become effective and enforceable upon written notification of approval from DEP. The permittee will submit a report demonstrating compliance with the minimum pollutant load reductions required by the WRS as an attachment to the first AMSR due following the completion of the five-year WRS implementation period. The WRS may address multiple impairments and may be implemented in multiple phases over more than one permit cycle using the adaptive iterative approach. The WRS must include the following components:

- WRS Component 1 – Mapping

  The map(s) will depict the following: 1) the location of all MS4 outfalls and observation points; 2) the locations and names of all surface waters that receive discharges from those outfalls; 3) the entire storm sewer collection system, including roads, inlets, piping, swales, catch basins, channels, basins, and any other features of the storm sewer system; and 4) municipal boundaries and urban area boundaries.

- WRS Component 2 – Pollutant Load Reduction Calculations

  The permittee shall apply the methodology outlined in DEP's PRP Instructions to develop a WRS for stormwater discharges to local surface waters impaired for nutrients and/or sediment. The impaired waters that receive stormwater discharges from the permittee's MS4 are listed by watershed in Table 1. The impairments in the Lower Jordan Creek, and Little Lehigh Creek-Lehigh River watersheds are related to sediment, therefore for these watersheds the permittee will calculate existing sediment loading (in lb/yr); calculate the minimum reduction (in lb/yr) required to reduce the existing sediment loading by 8%; and develop a WRS consisting of BMPs that will achieve the required sediment load reduction no later than five years following DEP's approval of the WRS.

  The impairments in the Lehigh River-Delaware River watershed are related to both sediment and nutrients. For this watershed, the permittee will calculate existing loading of the pollutant(s) of concern (in lb/yr); calculate the minimum reduction (in lb/yr) required to reduce the existing sediment loading by 8% and nutrient load by 5%; and develop a WRS consisting of BMPs that will achieve the required pollutant load reductions no later than five years following DEP's approval of the WRS. Consistent with the permit requirements for Phase 2 permittees, the permittee may use a presumptive approach in which it is assumed that accomplishing the sediment reduction goal will also accomplish the nutrient reduction goal for the Lehigh River watershed.

  Table 1: City of Allentown WRS Requirements

HUC-12 Watershed	Impaired Waters	Permit Required TSS Reduction (%)	Permit Required TP Reduction (%)
Lower Jordan Creek	Lower Jordan Creek	8%	--
Lehigh River-Delaware River HUC-12.	Lehigh River, Little Lehigh Creek	8%	5%
Little Lehigh Creek-Lehigh River HUC-12	Cedar Creek, Jordan Creek, Little Cedar Creek, Little Lehigh Creek, Trout Creek	8%	--

DEP has determined that the pollutant reductions specified above (and in conjunction with the permittee's SWMP) constitute maximum extent practicable (MEP) under Section 402(p)(3)(B)(iii) of the Clean Water Act for the permittee's MS4. Feedback from the permittee as well as other considerations such as the extent of the permittee's regulated area, the opportunity areas for BMP implementation, and the financial resources of the permittee were also considered when making this determination. DEP has determined that although the permittee's percent reduction requirement is lower than what was required from Phase 2 permittees (e.g., 8% sediment reduction instead of 10%), the per acre pollutant load reductions achieved by the permittee will be commensurate with the pollutant load reductions achieved by Phase 2 permittees.

Table 2 provides a statewide analysis of the average existing TSS (i.e., sediment) loads and load reduction requirements from small municipal Phase 2 permittees in comparison to the TSS loads and load reduction requirements proposed for the City of Allentown. Because the City of Allentown's regulated MS4 planning area is more impervious than the planning area of the average small Phase 2 permittee, the sediment loading rate for an acre of Allentown's planning area is higher than the sediment loading rate per acre of planning area for the average Phase 2 permittee. This means the City of Allentown will need to remove more sediment load per acre in comparison to the average municipal permittee. Although the percent reduction requirement for the City of Allentown is less than the percent reduction requirement of Phase 2 permittees, the average per

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acre load reduction achieved by the City (80 lb/yr/ac) will exceed the average per acre load reduction achieved by Phase 2 permittees (66 lb/yr/ac).

Table 2. Statewide Small Regulated MS4 TSS Loads and Load Reduction Requirements

Permittee	Planning Area Acres (Est.)	Pollutant Loading (TSS lb/yr)	Average Load (TSS lb/yr/ac)	Permit Required TSS Reduction (%)	Avg Load Reduction (TSS lb/yr/ac)
Allentown	11,537	11,591,902	1,005	8%	80
Statewide	2,776,252	1,827,108,805	658	10%	66

TMDL Plan for Little Cedar Creek

Similar to the Individual Permit requirement for Phase 2 permittees, DEP is proposing to establish a requirement in the City of Allentown's permit to develop and implement a TMDL Plan for the portion of the permittee's planning area that is included within the area covered by the Little Cedar Creek TMDL. The permittee will apply DEP's TMDL Plan Instructions (3800-PM-BCW0200d) to address the EPA-approved TMDL adopted for Little Cedar Creek.

The permittee's TMDL Plan will be submitted to DEP for approval no later than one year following the effective date of the permit. DEP will provide notice in the PA Bulletin and accept comments prior to approving the TMDL Plan. The TMDL Plan shall become effective and enforceable upon written notification of approval from DEP. The permittee shall submit a report demonstrating compliance with the minimum pollutant load reductions required by the TMDL Plan as an attachment to the first AMSR due following the completion of the five year TMDL Plan implementation period. The TMDL Plan must include the following components:

- TMDL Plan Component 1 – Mapping

  The same mapping requirements as specified above for the WRS also apply to the TMDL Plan.

- TMDL Plan Component 2 – Pollutant Load Reduction Calculations

  The permittee shall apply the methodology outlined in DEP's TMDL Plan Instructions to address the EPA-approved TMDL adopted for Little Cedar Creek. There are two objectives for the TMDL Plan:

  1. Long-Term Reduction – plan for the reduction of the sediment load to achieve the WLA in the TMDL. The TMDL Plan must describe a general plan as to how the WLA will ultimately be achieved.
  2. Short-Term Reduction – plan for the short-term reduction of sediment load that will be achieved within five years of DEP's approval of the permittee's TMDL Plan. The permittee must achieve at least one of the following objectives within the five-year implementation period: 1) the WLA in the Little Cedar Creek TMDL, or 2) if the WLA cannot be achieved, a load reduction of at least 10% for sediment, compared to the existing load for the pollutant at the time of TMDL Plan submission.

DEP has determined that the short-term reduction specified in Milestone 2 constitutes MEP under Section 402(p)(3)(B)(iii) of the Clean Water Act for the portion of the permittee's MS4 planning area that is subject to the Little Cedar Creek TMDL. Achieving the entire WLA of the TMDL may not be feasible for the permittee to accomplish within one five-year permit term. Achieving the short-term reduction is progress towards meeting the WLA that will be continued through the general plan laid out in the long-term reduction plan.

As the Little Cedar Creek TMDL area is located within the Little Lehigh Creek-Lehigh River HUC-12, the permittee may choose to combine the WRS and TMDL plan obligations for this watershed. If this is done, the permittee must demonstrate that both the required 8% sediment reduction will be achieved in the Lehigh Creek-Lehigh River HUC-12 planning area, and the TMDL short-term 10% sediment reduction in the permittee's portion of the Little Cedar Creek TMDL area will be achieved within five years of WRS/TMDL Plan approval. The permittee must also provide a general plan for how the Little Cedar Creek TMDL WLA will ultimately be achieved.

The City has advised DEP that it plans to conduct stormwater and surface water monitoring. Any stormwater or surface water monitoring and/or sampling that goes above and beyond the requirements listed in the IDD&E section of the permit is voluntary. The scope and duration of any voluntary monitoring will be determined by the permittee. Impaired waters

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designations are made by DEP, therefore the monitoring data collected by the permittee will not impact the WRS or TMDL Plan requirements of this permit. DEP readily accepts and values all data from outside agencies and the public for use in making assessments, therefore the permittee may submit to DEP any monitoring data for consideration in future assessment decisions. Submitted data are placed into different tiers depending on the data type and level of quality assurance used in data collection. The data tier will determine how the submitted data can be used in future assessments. The assessment methods used by DEP to assess water quality data when compiling the biennial Integrated Water Quality Monitoring and Assessment Report, including how the different tiers of outside data are considered, are posted on the Assessment Methodology section of the DEP Bureau of Clean Water website.

Maximum Extent Practicable (MEP) Summary

The approach established in this permit involving the implementation of the SWMP components, development of a WRS to address impairments in the Lower Jordan Creek, Lehigh River-Delaware River, and Little Lehigh Creek-Lehigh River watersheds, and development of a TMDL Plan to make progress toward achieving the WLA of the Little Cedar Creek TMDL is considered MEP for this permit term and represents an incremental improvement in stormwater management consistent with the statewide MS4 program. DEP will evaluate the outcomes from this approach when reviewing the subsequent permit renewal application.

Public Participation

DEP will publish notice of the receipt of the NPDES permit application and a tentative decision to issue the individual NPDES permit in the *Pennsylvania Bulletin* in accordance with 25 Pa. Code § 92a.82. Upon publication in the *Pennsylvania Bulletin*, DEP will accept comments from interested persons for a 30-day period which will be considered in making a final decision on the application. Comments may be submitted to DEP's NPDES resource account, RA-EPNPDES_Permits@pa.gov.

Under DEP's and EPA's regulations, DEP will provide an opportunity for the applicant, any affected State, any affected interstate agency, the Administrator or any interested agency, person or group of persons to request or petition for a public hearing with respect to the application. The request or petition for public hearing filed within the 30-day period allowed for filing of written comments must indicate the interest of the party filing the request and the reasons why a hearing is warranted. A hearing will be held if there is a significant public interest, including the filing of requests or petitions for the hearing. Instances of doubt should be resolved in favor of holding the hearing. Any hearing brought under this subsection will be held in the geographical area of the proposed discharge or other appropriate area and may, as appropriate, consider related groups of permit applications.

The majority of the census blocks that make up the city of Allentown are designated as Environmental Justice (EJ) areas due to their increased pollution burden, and sensitive or vulnerable populations based on demographic and environmental data. As part of the Department's policy to ensure environmental justice in the administration of all DEP's policies and programs, staff from the Environmental Justice Office are available to provide guidance to the permittee on strategies to increase proactive outreach and engagement and build long-lasting relationships with the diverse communities throughout the city. The permittee is encouraged to reach out to the Environmental Justice Office (RA-EPOEJ@pa.gov) when reviewing and updating their Public Education and Outreach and Public Involvement and Participation plans.