

**MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4)
STORMWATER MANAGEMENT PLAN
NPDES PERMIT NO. PA132232**



**Dallas Township
Luzerne County, PA
2919 SR 309 Highway / P.O. Box 518
Dallas, PA 18612
(570)-674-2007**

March 2016

Table of Contents

Introduction/Overview	5
Minimum Control Measures	6
I. <i>Public Education and Outreach</i>	6
Control Measure Requirements	6
Existing Program	7
Public Education and Outreach BMPs	7
BMP 1: Develop, implement and maintain a written Public Education and Outreach Program (PEOP)	7
BMP 2: Develop and maintain lists of target audience groups that are present within The areas served by regulated MS4.....	8
BMP 3: Permittees must publish and distribute a newsletter, pamphlet or flyer on Stormwater management program or post on website	9
BMP 4: Distribute stormwater educational material and/or information to target Audience using a variety of distribution methods.	10
BMP Summary Table	11
II. <i>Public Involvement/Participation</i>	12
Control Measure Requirements	12
Existing Program	12
Public Involvement/Participation BMPs	13
BMP 1: Develop, implement and maintain Public Involvement and Participation Program.....	13
BMP 2: Prior to adoption of any ordinance required by the permit, provide adequate Public notice and opportunities for public review, input, and feedback	13
BMP 3: Regularly solicit public involvement and participation from the target audience.....	14
BMP Summary Table	15
III. <i>Illicit Discharge Detection and Elimination (IDD&E)</i>	16
Control Measure Requirements:.....	16
Existing Program	17
IDD&E BMPs	17
BMP 1: Develop and implement a written IDD&E Program for the detection, elimination, And prevention of illicit discharges in your regulated MS4.....	17
BMP 2: Develop and maintain a map of your regulated small MS4. The map must also Show the location of all outfalls and the locations and names of all surface Waters of the Commonwealth that receive discharges from those outfalls	18
BMP 3: In junction with the maps created under BMP#2, new permittees shall show, and renewal permittees shall update, the entire storm sewer collection system, including roads, inlets, piping, swales, catch basins, channels, basins, and any other features of the permittee's stormwater sewer system.....	18
BMP 4: The permittee shall conduct outfall screening, identify the source of any illicit Discharges, and remove or correct any illicit discharges	19
BMP 5: Enact a stormwater management ordinance	20
BMP 6: Provide education outreach to public employees, business owners and employees property owners, and general public and elected officials about the program.....	20
BMP Summary Table	21
IV. <i>Construction Site Stormwater Runoff Control</i>	22

Control Measure Requirements:	22
Existing Program	22
Construction Site Stormwater Runoff Control BMPs	23
BMP 1: Develop a construction site stormwater runoff control program.	23
BMP 2: The permittee shall enact, implement, and enforce an ordinance to require the Implementation or erosion and sediment control BMPs as well as Sanctions to ensure compliance.	24
BMP 3: Develop and implement requirements for construction site operators to control Waste at the construction site that may cause adverse impacts to water quality.	24
BMP 4: Develop and implement procedures for the receipt and consideration of public Inquiries, concerns, and information submitted by the public regarding Local construction activities.	25
BMP Summary Table:	26
V. <i>Post-Construction Stormwater Management</i>	27
Control Measure Requirements	27
Existing Program	27
Post-Construction Stormwater Management BMPs	28
BMP 1: Develop a written PCSM procedure.	28
BMP 2: Require implementation of combination of structural and/or non-structural BMP	28
BMP 3: Ensure that controls are installed to prevent or minimize water quality impacts	29
BMP 4: Enact, implement, and enforce a post-construction stormwater ordinance.	29
BMP 5: Encourage and expand the use of Low Impact Development (LID)	30
BMP 6: Ensure adequate operation and maintenance of PCSM BMPs.	30
BMP Summary Table:	31
VI. <i>Pollution Prevention/Good Housekeeping for Municipal Operations</i>	32
Control Measure Requirements	32
Pollution Prevention/Good Housekeeping for Municipal Operations BMPs	33
BMP 1: Identify and document all MS4-related facilities and activities.	33
BMP 2: Develop, implement, and maintain a written Operation and Maintenance program.	33
BMP 3: Develop and implement an employee training program.	34
BMP Summary Table:	34

Tables

Table 1: Public Education and Outreach BMP Summary.....	11
Table 4: Public Involvement/Participation BMP Summary.....	15
Table 5: IDD&E BMP Summary	21
Table 6: Construction Site Stormwater Runoff Control BMP Summary	26
Table 7: Post-Construction Stormwater Management BMP Summary	31
Table 8: Pollution Prevention/Good Housekeeping for Municipal Operations BMP Summary.....	34

INTRODUCTION/OVERVIEW

The following document represents Dallas Township's proposed Stormwater Management Program to comply with the Pennsylvania General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (MS4 General Permit). This MS4 Program Plan enables the Township to meet the following goals:

- Reduce the discharge of pollutants to the "maximum extent practicable"
- Protect water quality
- Ensure compliance with water quality standards
- Satisfy the appropriate water quality requirements of the Clean Water Act

The MS4 Program Plan addresses all six minimum control measures (MCMs) in addition to detailing the best management practices (BMPs) for each MCM. To arrive at appropriate and cost-effective BMPs, the Township reviewed existing stormwater management operations, ordinances, and programming as they relate to the compliance requirements of the MS4 Individual Permit. The Township's financial considerations included potential budget implications for each proposed BMP, such as the resources required and availability of grant/outside funds. Based on those findings and current budget allocations, the Township will need to rely on grants to support all elements of the program.

For each selected BMP, the Township has identified measurable goals, responsible parties, timelines, and evaluation methods. This MS4 Program Plan has seven sections, covering each of the six MCMs in the MS4 General Permit and a Chesapeake Bay Pollution Reduction Plan (CBPRP). Each section details control measure requirements, an existing program summary, a BMPs inventory, and a BMP summary table.

MINIMUM CONTROL MEASURES

MCM # 1: Public Education and Outreach

Control Measure Requirements

As an operator of a regulated small MS4, the Township shall develop and implement a Public Education Outreach Plan (PEOP). The PEOP should be designed with consideration of the following goals:

1. Increased target audience knowledge regarding the steps that can be taken to reduce stormwater pollution, placing priority on reducing impacts to impaired waters and other local water pollution concerns
2. Increased target audience knowledge of hazards associated with illegal discharges and improper disposal of waste, including pertinent legal implications
3. Implementing a diverse program with strategies targeted towards audiences most likely to have significant stormwater impacts

The three high-priority water quality issues identified in the Township's 2014 PEOP are as follows:

- Outdated/defective septic/sewage systems
- Illicit discharges from residents and commercial entities
- Nutrient impacts to water quality from lawn fertilizing

Minimum Control Measures (MCMs)

Public Education and Outreach

Existing Program

The Township maintains a Stormwater Management Program webpage on its website, which provides citizens with information about the stormwater program. Page resources include the Township's Stormwater Management Ordinance, annual progress reports, MS4 Program Plan, news releases for upcoming events, useful educational information, and links to other pages with educational and environmental information.

The Township website (<http://dallastownship.com>) allows residents to access maps depicting the entire Township stormwater system, floodplain mapping, planning and zoning districts.

Public Education and Outreach BMPs

Stormwater runoff is generated from various pervious and impervious surfaces (e.g. roads, sidewalks, lawns, managed green spaces such as golf courses, driveways, and roofs) and efforts to control stormwater pollution must consider individual, household, business and public behavior and activities that can generate pollution coming from these and other surfaces. The purpose of outreach is to educate the public about the significance their behaviors can have on stormwater pollution, and encourage changes in behavior to reduce future stormwater pollution. A variety of actions will be conducted to educate the public in attempts to change behavior within the Township's permitted MS4 area. The PEOP is designed to guide the Township through the steps it must take to increase target audience knowledge about stormwater pollution reduction. The PEOP was developed to address the MS4 Permit requirements related directly to the MCM. There are numerous other education and outreach steps that can be taken to supplement other aspects of permit compliance and to improve water quality in the Township. To achieve the Township's goals and objectives, the Township will revise and adapt the PEOP throughout the permit term to address observed weaknesses or shortcomings.

BMP 1: Develop, implement and maintain a written Public Education and Outreach Program (PEOP)

Objective: Ensure the Township has an adequate array of written materials to effectively reach identified target audiences

Measurable Goal(s):

- Increasing target audience knowledge about steps that can be taken to reduce stormwater pollution, placing priority on reducing impacts to impaired waters and other local water pollution concerns.
- Increasing target audience knowledge of the hazard associated with illegal discharges improper disposal of waste, including pertinent legal implications.
- Implementing a diverse program with strategies that are targeted toward audiences most likely to have significant stormwater impacts.

**Minimum Control Measures (MCMs)
Public Education and Outreach**

Necessary Documents: Website, handouts, etc.

Responsible Party: Dallas Township Administration

Schedule: Materials to be developed by the end of August (2016)

Items to Report: List of additional materials developed

Method of Evaluation: Review of the availability and effectiveness of public education materials to target stormwater management, water quality, and stormwater pollution prevention messages to the Township's target audiences.

BMP 2: Develop and maintain lists of target audience groups that are present within the areas served by your regulated MS4s.

Objective: Develop and maintain lists of target audience groups that are present within the areas served by your regulated small MS4s.

Measurable Goal: For new permittees, the lists shall be developed within the first year of coverage under the permit and reviewed and updated as necessary every year thereafter. For renewal permittees, the lists shall continue to be reviewed and updated annually

Necessary Documents: PEOP

Responsible Party: Dallas Township Administration

Schedule: Materials to be developed by the end of August (2016)

Minimum Control Measures (MCMs) Public Education and Outreach

Items to Report: Items required in the MS4 General Permit, as follows:

- Description and estimation of target audience(s)
 1. Residents
 2. Businesses
 3. Developers
 4. Schools
 5. Municipal Employees
- Method of training (take-home training slides, in person training, etc.)
 1. Municipal Watershed Maps
 2. Brochures
 3. Fact Sheets
 4. Short & Engaging Videos
 5. Illicit Discharge Report Forms
- Associated educational and outreach materials
- Number of trainings
- Number of materials distributed/individuals reached
- Planned PEOP activities for next reporting period

Method of Evaluation: Observations and evaluations for the following key points in the process as described in PEOP:

- Planning and Development
- Execution of Actions
- Target Audience Feedback
- Behavior Change and Evaluation Period

BMP 3: Permittees must annually publish at least one issue of a newsletter, a pamphlet, a flyer, or a web site that includes general stormwater educational information, a general description of your Stormwater Management Program, and/or information about your stormwater management activities...

Objective: Reach as wide and diverse an audience as possible using public media to convey basic messages regarding household and public strategies for reducing stormwater pollution impacts and other related topics

Measurable Goal: Review and update and maintain content and items published annually.

Necessary Documents: End of year summary of news letter and materials from the Township's website

Responsible Party: Dallas Township Administration

Schedule: Ongoing program

Minimum Control Measures (MCMs)
Public Education and Outreach

Items to Report: Number of announcements run per year, estimates of listening/viewing audience

Method of Evaluation: Review of website visitors, number of flyers distributed

BMP 4: Distribute stormwater educational materials and/or information to the target audience using a variety of distribution methods.

Objective: Provide a standard delivery and distribution point for printed education materials on proper household strategies for stormwater management, surface water quality improvements, and stormwater pollution prevention.

Measurable Goal: Printed materials established and maintained at the Municipal Building
Schools, businesses

Necessary Documents: Make lists of Documents

Responsible Party: Dallas Township Administration

Schedule: Provide printed materials by the conclusion of Permit Year 2 and maintain throughout the remainder of the permit cycle.

Items to Report: Number of distribution points utilized, as well as the number and type of printed materials supplied to each distribution point through the year

Method of Evaluation: Review number and type of materials distributed throughout the year to evaluate utilization of this media

**Minimum Control Measures (MCMs)
Public Education and Outreach**

BMP Summary Table

Table 3: Public Education and Outreach BMP Summary

BMP	Task	Permit Year Implement /Complete	Primary Responsible Party(ies)	Measurable Goal(s)/Report Item(s)
1	Develop, implement and maintain a written Public and Outreach Program (PEOP)	Year 2*	Dallas Township Administration	Increase target audience knowledge about stormwater.
2	Develop and maintain lists of target audience groups that are present within the areas served by your MS4.	Year 2*	Dallas Township Administration	Method of trainings, list of materials, # of trainings, # of distributed/individual reached
3	Publish and distribute a newsletter, pamphlet or flyer on it's stormwater management program, or post this information on website.	Year 1*	Dallas Township Administration	Review and update and maintain content and items published annually.
4	Distribute stormwater educational materials and/or information to the target audience using a variety of distribution methods.	Year 2*	Dallas Township Administration	Printed materials established and maintained at the Municipal Building, Schools, businesses

* Denotes ongoing programming once initiated

Minimum Control Measures (MCMs)
Public Involvement/Participation

MCM # 2: Public Involvement/Participation

Control Measure Requirements

The town will hold annual public meetings on progress in the program, and to solicit public input on how the existing program can be better implemented.

As operator of a regulated small MS4, the Township shall maintain practices that meet the following goals:

1. Maintain an updated MS4 Program Plan, completing required updates at a minimum of once a year in conjunction with each annual report
2. Post the MS4 Program Plan on the Township's webpage at a minimum of once a year and within 30 days of submittal of the annual report
3. Post copies of each annual report on its webpage within 30 days of its submittal and retain these copies on line for the duration of this permit
4. As part of the permit re-application process, the operator shall address how it considered the public comments received in the development of its MS4 Program Plan
5. Participate through promotion, sponsorship, or other involvement in a minimum of four local activities, annually
 - a. Activities shall be aimed at increasing public participation to reduce stormwater pollutant loads and/or improve water quality support of local restoration/clean-up projects, programs, groups, meetings, or other opportunities for public involvement.

Existing Program

The Township added a stormwater page to their website, located at <http://dallastownship.com/stormwater>. The page is used to provide citizens with information about the stormwater program. Available on that page are links to the Stormwater Ordinance, the Stormwater Management Plan, annual progress reports, and other educational and environmental information. There is also a "quick links" feature on this page which includes news releases for upcoming events and useful educational information from other resources.

**Minimum Control Measures (MCMs)
Public Involvement/Participation**

BMP 1: Develop, implement and maintain Public Involvement and Participation Program (PIPP).

Objective: To make the MS4 Program Plan and annual reports available online to the Township citizens in multiple formats and multiple venues.

Measurable Goal: Posting of Downloadable copies of the MS4 Program Plan and annual reports on the Township's Stormwater Management Program webpage.

Necessary Documents: MS4 Program Plan and Annual reports

Responsible Party: Dallas Township Administration

Schedule: Both Documents shall be available online within 30 Days of submittal of each annual report.

Items to Report: Date MS4 Program Plan and annual reports were posted online, and verification of web link to them.

Method of Evaluation: Verification that both documents were posted within the required time frame, verification the web link works, and verification of successful downloads of the posted documents.

BMP 2: Prior to adoption of any ordinance required by the permit, provide adequate public notice and opportunities for public review, input, and feedback.

Objective: Inform Township citizens of the availability of the MS4 Program Plan and provide those potentially affected by the MS4 Program Plan and opportunity to participate in the process via public commentary.

Measurable Goal: Publicly announce that the proposed MS4 Program Plan is available for comment via platforms such as the Township Stormwater Management Program webpage, and that public comment will be accepted.

Public announcement/comment solicitation shall allow sufficient time for public comment and consideration of received comments, prior to the submittal of the MS4 Program Plan and registration statement to DEP for next permit reapplication (at least 90-days prior to permit expiration).

Necessary Documents: MS4 Program Plan

Responsible Party: Dallas Township Administration

Schedule: Implement during Permit Year 4

Minimum Control Measures (MCMs)
Public Involvement/Participation

Items to Report: Copy of public announcement/comment solicitation, list of venues to which announcement/solicitation was submitted, any public comments received and their consideration (last item submitted as part of next permit reapplication process).

Evaluation: Successful posting of public announcement/comment solicitation during Permit Year 4, number and type of public comments received, and evaluation of public comments.

BMP 3: Regularly solicit public involvement and participation from the target audience groups

Objective: Hold meetings/ seminars at Municipal Building

Measurable Goal: To educate residents

Necessary Documents: None

Responsible Party: Dallas Township Administration

Schedule: Once yearly

Items to Report: Meeting Schedule

**Minimum Control Measures (MCMs)
Public Involvement/Participation**

BMP Summary Table

Table 4: Public Involvement/Participation BMP Summary

BMP	BMP/Task	Permit Year Implement /Complete	Primary Responsible Party(ies)	Measurable Goal(s)/Report Item(s)
1	Provide Online Access to the MS4 Program Plan and Annual Reports	Year 1*	Dallas Township Administration	Date program posted, confirmation of formats available, and verification of web link
2	Issue Public Announcement and Comment Solicitation of MS4 Program Plan	Year 2	Dallas Township Administration	Copy of public announcement and where submitted, any public comments received with attendance records
3	Regularly solicit public involvement and participation from the target audience groups	Year 2*	Dallas Township Administration	<ul style="list-style-type: none"> • Seminars held • Attendance record • Proof of meeting

* Denotes ongoing programming once initiated

Minimum Control Measures (MCMs)
Illicit Discharge Detection and Elimination (IDD&E)

MCM # 3: Illicit Discharge Detection and Elimination (IDD&E)

As part of the outreach program, the township will encourage citizens to report any illegal tie-ins or toxic waste dumping they observe. Common stormwater pollutants that may be found in Dallas Township MS4 area include chemicals contained in materials used on yards and green spaces such as fertilizers; and chemicals contained in leaked, spilled or dumped materials such as oils, lubricants, and cleaners, and septic system discharges. Illicit discharge detection and elimination (IDD&E) is important because some stormwater runoff from Dallas Township's MS4 flows directly to streams and rivers without additional treatment. Illicit discharges often include pathogens, nutrients, surfactants, and various toxic pollutants.

According to the EPA, one of the most widespread environmental problems is nutrient pollution, caused by excess nitrogen and phosphorus in surface water. Nitrogen and phosphorous are naturally found in surface waters and, under normal circumstances, contribute to the presence of food and habitat for fish, shellfish, and other organisms. When too much nitrogen and phosphorous enter a water body it can cause algae to grow quickly. The algae deplete the water of dissolved oxygen, which can result in the illness and/or death of fish and other aquatic life. Excessive amounts of algae can also be a risk to human health because they produce elevated levels of toxins and bacterial growth.

Control Measure Requirements:

As operator of a regulated small MS4, the Township shall:

1. Maintain an accurate storm sewer system map and associated information table
 - a. The map shall show, the location and unique identifier of all known MS4 outfalls, the names and locations of all surface waters that receive discharges from those outfalls, and the associated Hydrologic Unit Code (HUC).
2. For each MS4 outfall, the associated information table shall include:
 - a. Its unique identifier
 - b. Estimated MS4 acreage served
 - c. Name of the receiving surface water
 - i. Indication if surface water is considered impaired per the 2010 303(d)/305(b) Water Quality Integrated Report
 - d. Name of any applicable TMDL(s)
3. Effectively prohibit, through ordinance or other legal mechanism, non-stormwater discharges into the storm sewer system to the extent allowable under federal, state, or local law, regulation, or ordinance.

Minimum Control Measures (MCMs)
Illicit Discharge Detection and Elimination (IDD&E)

4. Develop, implement and update, when appropriate, written procedures to detect, identify, and address unauthorized non-stormwater discharges, including illegal dumping, to the Township's MS4
5. Promote, publicize, and facilitate public reporting of illicit discharges into or from its MS4
6. Include within their MS4 Program Plan all procedures developed to detect, identify, and address non-stormwater discharges to the Township's MS4.

Existing Program

The Township storm sewer system was initially mapped and outfalls identified. The system is updated approximately every six months to identify new construction, and that process will continue into the foreseeable future. Regulated outfalls have been ranked, based on surrounding land uses, for the likelihood of an illicit discharge. Dry weather screening is conducted on those outfalls with a high ranking. Those outfalls with a moderate ranking are field checked for evidence of illicit discharge activity within the watershed. The Township currently operates a citizen hotline for reporting illicit discharges and related concerns.

IDD&E BMPs

BMP 1: Develop and implement a written IDD&E Program for the detection, elimination, and prevention of illicit discharges in your regulated MS4s.

Objective: Maintain an accurate storm sewer system map in order to identify MS4 outfall discharge points to waters of the Commonwealth

Measurable Goal: Semi-annual updates to the Township Storm Sewer System Map basis shall include:

1. All known MS4 outfalls
2. Their unique identifiers
3. Associated HUCs
4. Names and locations of all waters receiving MS4 outfall discharges

Necessary Documents: None

Responsible Party: Dallas Township Road Department and Engineer

Schedule: Ongoing program

Items to Report: Dates of storm sewer map updates and the current map

Method of Evaluation: Review of system map to confirm it remains accurate and current

**Minimum Control Measures (MCMs)
Illicit Discharge Detection and Elimination (IDD&E)**

BMP 2: Develop and maintain a map of your regulated small MS4. The map must also show the location of all outfalls and the locations and names of all surface waters of the Commonwealth (e.g., creek, stream, pond, lake, basin, swale, channel) that receive discharges from those outfalls.

Objective: Maintain specific and required information related to each MS4 outfall

Measurable Goal: Semi-annual update of the data in the MS4 Outfall Data Information Table, coinciding with the updates of the Township Storm Sewer System Map, to ensure the table is up to date and contains the following data for each MS4 outfall:

1. It's unique identifier
2. Estimated MS4 acreage served
3. Name of the receiving surface water
 - a. Indication if surface water is considered impaired per the 2010 303(d)/305(b) water quality integrated report.

Necessary Documents: 2010 303(d)/305(b) list

Responsible Party: Dallas Township Road Dept/Engineer

Schedule: Data table created by the conclusion of Permit Year 4 with updates continuing as an ongoing program thereafter.

Items to Report: Dates of MS4 Outfall Data Information Table updates. In Permit Year 4 the current Data Information Table is to be included in the Annual Report.

Method of Evaluation: Review of GIS Data Information Tables associated with Township Storm Sewer System Map and MS4 Outfall Data Information.

BMP 3: In conjunction with the map(s) created under BMP #2 (either on the same map or on a different map), new permittees shall show, and renewal permittees shall update, the entire storm sewer collection system, including roads, inlets, piping, swales, catch basins, channels, basins, and any other features of the permittee's storm sewer system including municipal boundaries and or watershed boundaries.

Objective: Identify, illicit discharges to the Township's MS4.

Measurable Goal: Continue dry weather screening of MS4 outfall pipes and source reconnaissance per the revised IDD&E procedures.

Necessary Documents: IDD&E Procedure

Minimum Control Measures (MCMs)
Illicit Discharge Detection and Elimination (IDD&E)

Responsible Party: Dallas Township Road Department and Engineer

Schedule: Ongoing program, with implementation of revised IDD&E procedures by the start of Permit Year 3

Items to Report: Total number of outfalls screened, screening results, and detail of any related follow-up actions. Results of the source reconnaissance effort and detail of any related follow-up actions.

Method of Evaluation: Review of IDD&E procedures, including dry weather screening and source reconnaissance techniques, and their success in detecting illicit discharges to the MS4

BMP 4: The permittee shall conduct outfall screening, identify the source of any illicit discharges, and remove or correct any illicit discharges using procedures developed under BMP #1.

Objective: Eliminate, illicit discharges to the MS4 based on the Township's IDD&E procedures established per Section II B 3 c of the MS4 General Permit

Measurable Goal: Implement the Township's IDD&E procedures to address suspected illicit discharges discovered through dry weather screening, observations of Township Road Department, or calls and reports from the general public.

Necessary Documents: IDD&E Procedure, Township Stormwater Management Ordinance

Responsible Party: Dallas Township Administration/Road Department/Engineer

Schedule: Ongoing program, with implementation of revised IDD&E procedures at the start of Permit Year 3

Items to Report: Summary of each investigation of any suspected illicit discharge as follows:

1. Date(s) suspected discharge observed and/or reported
2. Results of the investigation
3. Any follow-ups to the investigation
4. Resolution of investigation
5. Date investigation completed/closed

Method of Evaluation: Review of IDD&E procedures and their success in finding and eliminating illicit discharges to the Township's MS4.

Minimum Control Measures (MCMs)
Illicit Discharge Detection and Elimination (IDD&E)

BMP 5: Enact a stormwater management ordinance.

Objective: Notify downstream MS4 operators, in writing, of any physical interconnections to the Township's MS4.

Measurable Goal: Written notification of any applicable downstream MS4 operators of storm sewer systems physically interconnected with the Dallas Township MS4.

Necessary Documents: Township Storm Sewer System Map

Responsible Party: Dallas Township Administration/Engineer

Schedule: Completion by end of Permit Year 4

Items to Report: List of any written notifications to applicable downstream MS4 operators.

Method of Evaluation: Successful notification of any applicable downstream MS4 operators. Failure to perform this task should trigger a review of the process for improvements/adjustments.

BMP 6: Provide educational outreach to public employees, business owners and employees, property owners, the general public and elected officials (i.e., target audiences) about the program

Objective: Educate audience about illicit discharges through a variety of methods including township website, mailings and public meetings.

Measurable Goal:

- Distribute printed material once a year to target audience
- Have local group stencil inlets throughout township
- Develop webpage educating residents about IDD&E.

Necessary Documents:

- Webpage materials
- Educational flyer
- Volunteer solicitation

Responsible Party: Dallas Township Administration and Road Department

Schedule: Ongoing program

Items to Report: Webpage visits/ number of illicit discharges reported, number of flyers distributed, volunteer program efforts.

Method of Evaluation: Track number of discharges reported and increase in volunteer requests.

Minimum Control Measures (MCMs)
Illicit Discharge Detection and Elimination (IDD&E)

BMP Summary Table

Table 5: IDD&E BMP Summary

BMP	BMP/Task	Permit Year Implement /Complete	Primary Responsible Party(ies)	Measurable Goal(s)/Report Item(s)
1	Maintain Township Storm Sewer System Map	Year 1*	Road Department & Engineer	Dates of storm sewer map updates and the current map
2	Maintain MS4 Outfall Data Information Table	Year 4*	Road Department & Engineer	Dates of MS4 Outfall Data Information Table updates and current data table
3	Conduct System Screening for Illicit Discharge Detection	Year 3*	Road Department	Total number of outfalls screened, screening results, and detail of any related follow-up actions
4	Investigate and Address Illicit Discharges	Year 3*	Road Department	Investigation summary of any suspected illicit discharges
5	Notify Downstream MS4 Operators of Any Physical Interconnections	Year 4*	Administration	List of written notification to applicable downstream MS4 operators

* Denotes ongoing programming once initiated

Minimum Control Measures (MCMs)
Construction Site Stormwater Runoff Control

MCM # 4 Construction Site Stormwater Runoff Control

Control Measure Requirements:

As operator of a regulated small MS4, the Township must develop, implement, and enforce procedures to reduce pollutants in stormwater runoff to the regulated small MS4 from construction activities that result in a land disturbance of greater than or equal to 5,000 square feet or in accordance with the Pennsylvania Erosion and Sediment Control Law requirements. The procedures shall include:

1. A description of the legal authorities utilized to ensure compliance with the MCM related to construction site stormwater runoff control.
2. Written plan review of procedures and all associated documents utilized in the plan review.
3. Written inspection procedures for land disturbing activities, with all associated documents utilized during inspections, including an inspection schedule.
4. Public promotion of a mechanism to receive and follow-up on complaints regarding regulated land-disturbing activities with potential water quality and compliance issues.
5. Written procedures for compliance and enforcement, including a progressive compliance and enforcement strategy, where appropriate.
6. The roles and responsibilities of each of the operator's departments, divisions, or subdivisions in implementing the MCMs related to construction site stormwater runoff control.

Existing Program

The Township currently has a memorandum of understanding with the Luzerne Conservation District for Erosion and Sediment Pollution Control as well as NPDES permit review. (website located at <http://luzernecd.org/>). Construction site operators are required to have an approved E&S plan prior to commencement of land disturbing activities. E&S plans are required to be compliant with the minimum standards of Luzerne Conservation District. For construction activities that result in a land disturbance of greater than one acre, a Pennsylvania Stormwater Manager Program (NPDES) General Permit for Stormwater Discharges from Construction Activities is required. The Township will not allow land disturbance until the NPDES requirements have been met.

The Dallas Township Zoning Officer is available for citizens to call on a variety of issues such as: erosion, sediment control, stormwater management, water quality, and other compliance issues or concerns. Luzerne Conservation District performs both the E&S plan reviews and approvals, E&S inspections, and any related enforcement actions. They also administer the NPDES Permit Program for construction site storm water runoff. Luzerne Conservation District collaborates with PA DEP for NPDES Permit Reviews and enforcement actions.

**Minimum Control Measures (MCMs)
Construction Site Stormwater Runoff Control**

Construction Site Stormwater Runoff Control BMPs

BMP 1: Develop a construction site stormwater runoff control program. Your program shall describe clearly how your efforts will be coordinated with DEP's NPDES Construction Stormwater Permitting program.

Objective: Ensure that administration and implementation of Township E&S Program complies with the Pennsylvania Erosion and Sediment Control Law and attendant Regulations

Measurable Goal: Maintain a relationship with Luzerne Conservation District and Pa DEP for program administration

Necessary Documents: Most current version of documents, as follows:

- a. Memorandum of understanding with LCD
- b. Dallas Township SALDO
- c. Zoning Permits
- d. Building Permits
- e. Driveway Permits

Responsible Party: Dallas Township Administration/ Road Department/ and Engineer

Schedule: Ongoing program

Items to Report: For each annual report, the following shall be tracked and submitted:

- a. Total number of regulated land-disturbing activities.
- b. Total number of acres disturbed.
- c. Total number of inspections conducted.
- d. A summary of the enforcement actions taken, including the type and total number of enforcement actions taken during the reporting period.

Method of Evaluation: Township self-audit procedures and periodic Township program audit by DEP.

**Minimum Control Measures (MCMs)
Construction Site Stormwater Runoff Control**

BMP 2: The permittee shall enact, implement, and enforce an ordinance to require the implementation or erosion and sediment control BMPs, as well as sanctions to ensure compliance.

Objective: Verify compliance with construction site management protocols and BMPs for land disturbing activities, meeting the permit thresholds.

Measurable Goal: Ensure NPDES permits are issued for those projects meeting the NPDES threshold requirements.

Necessary Documents: Copies of the NPDES General Permits issued for Stormwater Discharges from Construction Activities and Land Development approvals.

Responsible Party: Dallas Township Administration and Engineer.

Schedule: Ongoing program.

Items to Report: Number of Land Developments approved and total number of NPDES Permits issued.

Method of Evaluation: N/A

BMP 3: Develop and implement requirements for construction site operators to control waste at the construction site that may cause adverse impacts to water quality.

Objective: Ensure land disturbing activities in the Township are properly permitted.

Measurable Goal: Implementation shall include two conceptual tools:
a. Complaint Form for receipt of information from the public.
b. Township employee program, to note un-permitted land disturbances.

Necessary Documents: Complaint Form records and enforcement/corrective action records.

Responsible Party: Dallas Township Administration and Road Department.

Schedule: Ongoing program.

Items to Report: Number of non-filers identified each year; number of enforcement/corrective actions initiated each year.

Method of Evaluation: Review of established and implemented procedures to evaluate success in identifying non-filers for required Township permits.

Minimum Control Measures (MCMs)
Construction Site Stormwater Runoff Control

BMP 4: Develop and implement procedures for the receipt and consideration of public inquiries, concerns, and information submitted by the public (to the permittee) regarding local construction activities.

Objective: Provide channels for residents to discuss concerns regarding construction activity, such as a "hotline" and webpage.

Measurable Goal: Track number of calls and webpage visits. Discuss with residents effectiveness of these methods respond to concerns.

Necessary Documents: Report Form.

Responsible Party: Dallas Township Administration.

Schedule: Ongoing program.

Items to Report: Total number of calls, report forms filed.

Method of Evaluation: Judge effectiveness by tracking number of calls/reports.

BMP Summary Table:

Table 6: Construction Site Stormwater Runoff Control BMP Summary

BMP	BMP/Task	Permit Year Implement/Complete	Primary Responsible Party(ies)	Measurable Goal(s)/Report Item(s)
1	Develop a construction site stormwater runoff control program.	Year 1*	Dallas Township Administration, Road Department, Engineer.	Maintain a relationship with LCD & DEP. Track: NPDES Permits Land Development & Enforcement Actions.
2	Enact, implement, and enforce a construction stormwater management ordinance.	Ongoing	Dallas Township Administration, Road Department.	Ensure NPDES permits are issued for those projects meeting the NPDES threshold requirements.
3	Develop and implement requirements for site operators to control waste.	Year 1*	Dallas Township Administration, Road Department.	a.) Complaint form, for receipt of information from the public. b.) Township employee to note un-permitted land disturbances.
4	Develop and implement procedures for the receipt and consideration of public input.	Ongoing	Dallas Township Administration.	Total # of calls/reports.

* Denotes ongoing programming once initiated

**Minimum Control Measures (MCMs)
Post-Construction Stormwater Management**

MCM # 5: Post-Construction Stormwater Management

Control Measure Requirements

As operator of a regulated small MS4, the Township shall:

1. Include a list of the applicable legal authorities that ensure compliance with minimum control measures for post construction stormwater management in new development and development on prior developed lands.
2. Include written policies and procedures utilized to ensure that stormwater management facilities are designed and installed in accordance with required design criteria for stormwater runoff controls.
3. Include written inspection policies and procedures utilized in conducting inspections.
4. Include written procedures for inspection, compliance and enforcement to ensure maintenance is conducted on private stormwater facilities to ensure long-term operation in accordance with approved design.
5. Include written procedures for inspection and maintenance of operator-owned stormwater management facilities.
6. Include the roles and responsibilities of divisions, or subdivisions in implementing this minimum control measure effort including any written agreements with other entities implementing portions of it.

Existing Program

The Township has an adopted Subdivision And Land Development Ordinance (SALDO) on 07/03/2007 and revised on 08/01/2008 which addresses the design of stormwater conveyance systems and related BMPs. In addition to specific supplemental standards, the SALDO adopts the most current versions of the PADOT Drainage Manual, the Pennsylvania Erosion and Sediment Control Handbook, and Pennsylvania Stormwater BMP manual. Low Impact Design (LID) methods are also encouraged in the ordinance which also created an enforcement capability to certify that those facilities remaining under private control are regularly inspected and maintained.

The Township's current maintenance program includes an annual inspection of all BMPs. Once every two years, a more thorough structural inspection is performed on the wet and dry stormwater management ponds. All other stormwater facilities are inspected on a five-year inspection cycle. The Township Planning Commission and township Engineer are responsible for review, approval, and construction inspection of stormwater management facilities. Post-construction inspection and maintenance of stormwater management facilities, in both new development and re-development, is the responsibility of the Planning Commission and Township Engineer.

**Minimum Control Measures (MCMs)
Post-Construction Stormwater Management**

Post-Construction Stormwater Management BMPs

BMP 1: Develop a written PCSM procedure.

Objective: Develop a written PCSM procedure. Guidance can be found in the Pennsylvania Stormwater Best Management Practices Manual.

Measurable Goal: Ensure post-construction stormwater runoff from land development projects, both quantity and quality, meets the requirements of the SALDO through the current permit cycle.

Necessary Documents: SALDO

Responsible Party: Dallas Township Administration and Engineer

Schedule: Ongoing program

Items to Report: Information required for updating the inventory of permanent post-construction BMPs that discharge to the regulated small MS4.

Method of Evaluation: Review Township's SALDO and stormwater management post-construction BMP report to evaluate effectiveness in requiring post-construction BMPs, both quantity and quality, with adjustments/alternatives to be determined, as needed.

BMP 2: Require implementation of combination and structural and/or non-structural BMPs.

Objective: Ensure that the Township's permanent post-construction stormwater management facilities are functioning as designed for stormwater runoff quality and quantity management.

Measurable Goal: The Township will perform annual inspections of the permanent post-construction stormwater management BMPs within the Township.

Necessary Documents: SALDO and Township Stormwater Facility Inspection Report.

Responsible Party: Dallas Township Administration and Engineer.

Schedule: Ongoing program.

Items to Report: Stormwater management facility inspection reports.

Method of Evaluation: N/A

Minimum Control Measures (MCMs)
Post-Construction Stormwater Management

BMP 3: Ensure that controls are installed to prevent or minimize water quality impacts.

Objective: Provide long-term maintenance, as necessary, so that permanent stormwater facilities for which the Township has primary maintenance responsibility are functioning to their original design capabilities.

Measurable Goal: Maintenance performed, as necessary, so applicable facilities are functioning to original design capabilities.

Necessary Documents: Stormwater management facility inspection reports.

Responsible Party: Dallas Township Administration and Engineer.

Schedule: Ongoing program.

Items to Report: Stormwater management facility maintenance activity.

Method of Evaluation: N/A

BMP 4: Enact, implement, and enforce a post-construction stormwater ordinance.

Objective: Ensure that permanent stormwater facilities for which the property owner has primary maintenance responsibility are receiving adequate long-term maintenance to function at their original design capability.

Measurable Goal: Notify property owners responsible for maintaining stormwater management facilities of any deficiencies discovered during Township inspections and ensure facilities are functioning to their original design capability utilizing enforcement procedures.

Necessary Documents: SALDO, stormwater facility inspection report.

Responsible Party: Dallas Township Administration and Engineer.

Schedule: Ongoing.

Items to Report: Stormwater management facility maintenance inspection reports and enforcement documentation for privately maintained stormwater facilities for the permit year.

Method of Evaluation: Review record of maintenance execution based on requirements conveyed in inspection reports.

**Minimum Control Measures (MCMs)
Post-Construction Stormwater Management**

BMP 5: Encourage and expand the use of Low Impact Development (LID)

Objective: Develop and implement measures to encourage and expand the use of LID in new and redevelopment.

Measurable Goal: Enact ordinances consistent with LID practices or amend existing ordinances that conflict with LID practices.

Necessary Documents: Publication # EPA 841-F-07-006 – Reducing stormwater costs through Low Impact Development (LID) strategies and practices.

Responsible Party: Dallas Township Administration, Engineer.

Schedule: Year 3.

Items to Report: Ordinance amended/enacted.

Method of Evaluation: N/A

BMP 6: Ensure adequate operation and maintenance of PCSM BMPs.

Objective: Develop standardized and enforceable methods for the long-term maintenance of stormwater management facilities designed to treat runoff from individual residential lots.

Measurable Goal: Create the necessary mechanisms for handling the long-term maintenance of stormwater management facilities designed to treat runoff from individual residential lots.

Necessary Documents: MS4 General Permit, MS4 Program Plan, and SALDO.

Responsible Party: Dallas Township Administration, Road Department and Engineer.

Schedule: Ongoing program.

Items to Report: Stormwater management facility inspection reports and enforcement.

Method of Evaluation: Pre- and post-training evaluations for maintenance inspection staff.

**Minimum Control Measures (MCMs)
Post-Construction Stormwater Management**

BMP Summary Table:

Table 7: Post-Construction Stormwater Management BMP Summary

BMP	BMP/Task	Permit Year Implement /Complete	Primary Responsible Party(ies)	Measurable Goal(s)/Report Item(s)
1	Develop a written PCSM procedure.	Year 1*	Dallas Township Administration.	Ensure post- construction storm-water runoff from land development projects, both quantity and quality, meet the requirements of the SALDO through the current permit cycle.
2	Require implementation of combination of structural and/or non-structural BMPs.	Year 1*	Dallas Township Administration, Engineer.	The Township will perform annual inspections of the permanent post-construction stormwater management BMPs within the Township.
3	Ensure that controls are installed to prevent or minimize water quality impacts.	Year 1*	Dallas Township.	Maintenance performed, as necessary, so applicable facilities are functioning to original design capabilities.
4	Enact, implement, and enforce a post- construction Stormwater ordinance.	Year 1*	Dallas Township Administration, Engineer.	Notify property owners responsible for maintaining stormwater management facilities of any deficiencies discovered during Township inspections and ensure facilities are functioning to their original design capability.
5	Encourage and expand the use of Low Impact Development (LID).	Year 1*	Dallas Township Administration, Engineer.	Enact ordinances consistent with LID practices or amend existing ordinance that conflict with LID practices.
6	Ensure adequate operation and maintenance of PCSM BMPs.	Year 1*	Dallas Township Administration, Road Department.	Inspection reports and enforcement actions.

Denotes ongoing programming once initiated

Minimum Control Measures (MCMs)
Pollution Prevention/Good Housekeeping for Municipal Operations

MCM # 6 Pollution Prevention/Good Housekeeping for Municipal Operations

Control Measure Requirements

As operator of a regulated small MS4, the Township shall develop and implement written procedures designed to minimize or prevent pollution discharge, from daily operations, equipment maintenance, and application, storage, and disposal of pesticides, herbicides, and fertilizers. The written procedures shall be designed to:

1. Prevent illicit discharges.
2. Ensure the proper disposal of waste materials.
3. Prevent the discharge of municipal vehicle wash water into the MS4.
4. Prevent the discharge of wastewater into the MS4 without authorization.
5. Require the implementation of BMPs when discharging pumped water from utility construction and maintenance activities.
6. Minimize the pollutants in stormwater runoff from bulk storage areas through the use of BMPs.
7. Prevent pollutant discharge into the MS4 from leaking municipal automobiles and equipment.
8. Ensure the application of materials, including fertilizers and pesticides, is conducted in accordance with the manufacturer's recommendations.

The operator will provide appropriate training and ensure applicable employees maintain their required certifications. Training shall be per the Township's Training Program and Schedule which contains the appropriate elements of Section II B 6 d of the MS4 General Permit.

(a) Good Housekeeping and Best Management Practices (BMPs).

Housekeeping measures and BMPs (which may include new or existing structural and non- structural controls) must be identified and either continued or implemented with the goal of preventing or reducing pollutant runoff from municipal operations. Municipal operations and municipally owned areas include, but are not limited to:

- (1) street, road, or highway maintenance;
- (2) fleet and building maintenance;
- (3) storm water system maintenance;
- (4) new construction and land disturbances.
- (5) municipal parking lots;
- (6) vehicle and equipment maintenance and storage yards;
- (7) salt/sand storage locations.

(b) Training

A training program must be developed for all employees responsible for municipal operations subject to the pollution prevention/good housekeeping program. The training program must include training materials directed at preventing and reducing storm water pollution from municipal operations. Materials may be developed, or obtained from the EPA, states, or other organizations and sources.

Minimum Control Measures (MCMs)
Pollution Prevention/Good Housekeeping for Municipal Operations

(c) Structural Control Maintenance

If BMPs include structural controls, maintenance of the controls must be performed at a frequency determined by the MS4 operator and consistent with maintaining the effectiveness of the BMP.

(d) Disposal of Waste

Waste removed from the MS4 and waste that is collected as a result of maintenance of storm water structural controls must be properly disposed.

Pollution Prevention/Good Housekeeping for Municipal Operations BMPs

BMP 1: Identify and document all MS4-related facilities and activities.

Objective: Document all Township owned and/or operated facilities and activities.

Measurable Goal: Develop and update list.

Necessary Documents: Facility list.

Responsible Party: Dallas Township Administration and Road Department.

Schedule: Completion by end of Permit Year 2.

Items to Report: N/A

Method of Evaluation: N/A

BMP 2: Develop, implement, and maintain a written Operation and Maintenance Program.

Objective: Require, that municipal contractors use appropriate control measures and procedures for stormwater discharges to the Township's MS4.

Measurable Goal: Develop a program with written handbook.

Necessary Documents: Operation and maintenance handbook.

Responsibility Party: Dallas Township Administration and Road Department.

Schedule: Ongoing program.

Items to Report: Documentation of handbook and record of training.

Method of Evaluation: N/A

Minimum Control Measures (MCMs)
Pollution Prevention/Good Housekeeping for Municipal Operations

BMP 3: Develop and implement an employee training program.

Objective: Develop and implement training program including handbook.

Measurable Goal: Documentation of handbook and record of training.

Necessary Documents: Training program handbook

Responsible Party: Dallas Township Administration and Road Department

Schedule: Complete by end of Permit Year 3

Items to Report: Documentation of handbook and record of training schedule.

Method of Evaluation: N/A

BMP Summary Table:

Table 8: Pollution Prevention/Good Housekeeping for Municipal Operations BMP Summary

BMP	BMP/Task	Permit Year Implement/ Complete	Primary Responsible Party(ies)	Measurable Goal(s)/Report Item(s)
1	Document Facilities.	Complete by end of Year 2.	Dallas Township Administration and Road Department.	Update List.
2	Require Municipal employees to Use Appropriate Control Measures and Procedures for Stormwater Discharges.	Ongoing.	Dallas Township Administration.	Documentation of handbook and record of training.
3	Develop and implement an employee training program and handbook.	Year 3.	Dallas Township Administration, and Road Department.	Documentation of handbook and record of training.

* Denotes ongoing programming once initiated