

ANNUAL REPORTS

ANNUAL MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) STATUS REPORT

FOR THE PERIOD July 1, 2023 TO JUNE 30, 2024

GENERAL INFORMATION

Permittee Name: Springdale Borough	NPDES Permit No.: PA 136163
Mailing Address: 325 School Street	Effective Date: March 16, 2018
City, State, Zip: Springdale, PA 15144	Expiration Date: March 15, 2023
MS4 Contact Person: Jason Overly	Renewal Due Date: N/A
Title: Council Chairperson of Streets	Municipality: Springdale Borough
Phone: 724-274-6800	County: Allegheny
Email: sb@springdaleborough.com	

Co-Permittees (if applicable): N/A

Appendix(ces) that permittee is subject to (select all that apply):
 Appendix A Appendix B Appendix C Appendix D Appendix E Appendix F

WATER QUALITY INFORMATION

Are there any discharges to waters within the Chesapeake Bay Watershed? Yes No

Identify all surface waters that receive stormwater discharges from the permittee's MS4 and provide the requested information (see instructions).

Receiving Water Name	Ch. 93 Class.	Impaired?	Cause(s)	TMDL?	WLA?
Allegheny River	WWF	N	N/A	N	N
Tawney Run	WWF	N	N/A	N	N

GENERAL MINIMUM CONTROL MEASURE (MCM) INFORMATION

Have you completed all MCM activities required by the permit for this reporting period? Yes No

List the current entity responsible for implementing each MCM of your SWMP, along with contact name and phone number.

MCM	Entity Responsible	Contact Name	Phone
#1 Public Education and Outreach on Storm Water Impacts	Springdale Borough	Jason Overly	724-274-6800
#2 Public Involvement/Participation	Springdale Borough	Jason Overly	724-274-6800
#3 Illicit Discharge Detection and Elimination (IDD&E)	Springdale Borough	Jason Overly	724-274-6800
#4 Construction Site Storm Water Runoff Control	Springdale Borough	Springdale Code Enforcement	724-274-6800
#5 Post-Construction Storm Water Management in New Development and Redevelopment	Springdale Borough	Springdale Code Enforcement	724-274-6800
#6 Pollution Prevention / Good Housekeeping	Springdale Borough	Jason Overly	724-274-6800

MCM #1 – PUBLIC EDUCATION AND OUTREACH ON STORM WATER IMPACTS

BMP #1: Develop, implement and maintain a written Public Education and Outreach Program.

- For new permittees only, has the written PEOP been developed and implemented within the first year of permit coverage?
 Yes No
- Date of latest annual review of PEOP: **June 2024** Were updates made? Yes No
- What were the plans and goals for public education and outreach for the reporting period?
 - **Silent complaint form is available on the Borough website & at Borough office to report illegal activity.**
 - **Springdale Borough's website has MS4 information dedicated to stormwater management. In addition, informational materials are posted on two (2) bulletin boards in the Springdale Borough Municipal building.**
- Did the MS4 achieve its goal(s) for the PEOP during the reporting period? Yes No
- Identify specific plans and goals for public education and outreach for the upcoming year:
 - Continue with current practices and include more stormwater informational materials that will help manage stormwater and pollution control.
 - Include on building permits information promoting good erosion and sediment controls.

BMP #2: Develop and maintain lists of target audience groups present within the areas served by your MS4.

- For new permittees only, have the target audience lists been developed and implemented within the first year of permit coverage?
 Yes No
- Date of latest annual review of target audience lists: **June 2024** Were updates made? Yes No

BMP #3: Annually publish at least one educational item on your Stormwater Management Program.

- For new permittees only, were stormwater educational and informational items produced and published in print and/or on the Internet within the first year of permit coverage?

3800-FM-BCW0491 9/2017
Annual MS4 Status Report

Yes No

2. Date of latest annual review of educational materials: **June 2024** Were updates made? Yes No

3. Do you have a municipal website? Yes No (URL:
springdaleborough.com)

If Yes, what MS4-related material does it contain?

- Letter to Springdale Residents, Property Owners, Businesses and Industrial Facilities, and Schools regarding NPDES permit

-Pamphlets: "Be Storm Water Smart", "When it Rains in Drains" "12 Tips to Prevent Storm Water Pollution", "Take the Stormwater Runoff Challenge", which are informative materials in regards to stormwater management & how to manage stormwater runoff and implementation of best management practices

-Annual Reports from the past three years

-All MCM related documents specific to Springdale Borough

4. Describe any other method(s) used during the reporting period to provide information on stormwater to the public:

- The Borough Engineer discussed MS4 information at the public Council Meeting on Tuesday July 19, 2022, which is included in the official, written Springdale Borough Minutes.

- There is informational material on two (2) bulletin boards in the Municipal Borough building concerning keeping trash, paint, oil, etc out of the storm drains.

5. Identify specific plans for the publication of stormwater materials for the upcoming year:

- Will continue to post informational MS4 material on the Springdale Borough website.

- Will continue to post informational MS4 material on the two (2) bulletin boards in the Municipal Springdale Borough building.

- Will make stormwater educational materials available at monthly Borough Council meetings.

- Will include MS4 information with sewer bill to customers annually.

BMP #4: Distribute stormwater educational materials to the target audiences.

Identify the two additional methods of distributing stormwater educational materials during the previous reporting period (e.g., displays, posters, signs, pamphlets, booklets, brochures, radio, local cable TV, newspaper articles, other advertisements, bill stuffers, posters, presentations, conferences, meetings, fact sheets, giveaways, or storm drain stenciling).

- At the July 19, 2022 and July 16, 2024 public Council Meeting, the Borough Engineer discussed MS4 Public Awareness. Written Council Minutes details the discussion

- The Borough website & bulletin boards in the Borough building were updated with storm water education materials

MCM #1 Comments:

MCM #2 – PUBLIC INVOLVEMENT/PARTICIPATION

BMP #1: Develop, implement and maintain a written Public Involvement and Participation Program (PIPP)

1. For new permittees only, was the PIPP developed and implemented within one year of permit coverage?

Yes No

2. Date of latest annual review of PIPP: **June 2024**

Were updates made? Yes No

BMP #2: Advertise to the public and solicit public input on ordinances, SOPs, Pollutant Reduction Plans (PRPs) (if applicable) and TMDL Plans (if applicable), including modifications thereto, prior to adoption or submission to DEP:

1. Was an MS4-related ordinance, SOP, PRP or TMDL Plan developed during the reporting period? Yes No

2. If Yes, describe how you advertised the draft document(s) and how you provided opportunities for public review, input and feedback:

3. If an ordinance, SOP or plan was developed or amended during the reporting period, provide the following information:

Ordinance / SOP / Plan Name	Date of Public Notice	Date of Public Hearing	Date Enacted or Submitted to DEP

BMP #3: Regularly solicit public involvement and participation from the target audience groups using available distribution and outreach methods.

1. At least one public meeting or other MS4 event must be held during the 5-year permit coverage period to solicit participation and feedback from target audience groups. Was this meeting or event held during the reporting period?

Yes No If Yes, Date of Meeting or Event: **July 19, 2022 & July 16, 2024**

2. Report instances of cooperation and participation in MS4 activities; presentations the permittee made to local watershed and conservation organizations; and similar instances of participation or coordination with organizations in the community.

The general public had the opportunity to engage in the MS4 program during public presentations held July 19, 2022 and July 16, 2024.

3. Report activities in which members of the public assisted or participated in the meetings and in the implementation of the SWMP, including education activities or efforts such as cleanups, monitoring, storm drain stenciling, or others.

At the July 19, 2022 and July 16, 2024 regular Council Meeting, the Borough Engineer discussed Springdale Borough MS4 Permit and the Public Education and Outreach portion of the Permit. The Springdale Borough written Minutes reflect the discussion.

MCM #2 Comments:

MCM #3 – ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDD&E)

BMP #1: Develop and implement a written program for the detection, elimination, and prevention of illicit discharges into the regulated small MS4.

1. For new permittees only, was the written IDD&E program developed within one year of permit coverage?

Yes No

2. Date of latest annual review of IDD&E program: **June 2024** Were updates made? Yes No

BMP #2: Develop and maintain map(s) that show permittee and urbanized area boundaries, the location of all outfalls and, if applicable, observation points, and the locations and names of all surface waters that receive discharges from those outfalls. Outfalls and observation points shall be numbered on the map(s).

1. Have you completed a map(s) that includes all components of BMP #2? Yes No

If Yes and you are a new permittee and have not submitted the map(s) previously, attach the map(s) to this report.

If No, date by which permittee expects map(s) to be completed:

2. Date of last update or revision to map(s): **2024**

3. Total No. of Outfalls in MS4: 13 Total No. of Outfalls Mapped: 13

4. Total No. of Observation Points: 13 Total No. of Observation Points Mapped: 13

5. During the reporting period, have you identified any existing outfalls that have not been previously reported to DEP in an NOI, application or annual report, or are any new MS4 outfalls proposed for the next reporting period?

Yes No If Yes, select: Existing Outfall(s) Identified New Outfall(s) Proposed

BMP #3: In conjunction with the map(s) created under BMP #2 (either on the same map or on a different map), the permittee shall develop and maintain map(s) that show the entire storm sewer collection system within the permittee's jurisdiction that are owned or operated by the permittee (including roads, inlets, piping, swales, catch basins, channels, and any other components of the storm sewer collection system), including privately-owned components of the collection system where conveyances or BMPs on private property receive stormwater flows from upstream publicly-owned components.

1. Have you completed a map(s) that includes all components of BMP #3? Yes No

If Yes and you are a new permittee and have not submitted the map(s) previously, attach the map(s) to this report.

If No, date by which permittee expects map(s) to be completed:

2. If Yes to #1, is the map(s) on the same map(s) as for outfalls and receiving waters? Yes No

3. Date of last update or revision to map(s): **2024**

BMP #4: Conduct dry weather screenings of MS4 outfalls to evaluate the presence of illicit discharges. If any illicit discharges are present, the permittee shall identify the source(s) and take appropriate actions to remove or correct any illicit discharges. The permittee shall also respond to reports received from the public or other agencies of suspected or confirmed illicit discharges associated with the storm sewer system, as well as take enforcement action as necessary. The permittee shall immediately report to DEP illicit discharges that would endanger users downstream from the discharge, or would otherwise result in pollution or create a danger of pollution or would damage property.

For new permittees, all identified outfalls (and if applicable observation points) must be screened during dry weather at least twice within the 5-year period following permit coverage. For existing permittees, all identified outfalls (and if applicable observation points) must be screen during dry weather at least once within the 5-year period following permit coverage and, for areas where past problems have been reported or known sources of dry weather flows occur on a continual basis, outfalls must be screened annually during each year of permit coverage.

1. How many unique outfalls (and if applicable observation points) were screened during the reporting period? 0

2. Indicate the percentage of all outfalls screened in the past five years. 0%

3. Indicate the percent of outfalls screened during the reporting period that revealed dry weather flows: 0%

4. Did any dry weather flows reveal color, turbidity, sheen, odor, floating or submerged solids? Yes No

5. If Yes for #4, attach all sample results to this report with a map identifying the sample location. Explain the corrective action(s) taken in the attachment.

6. Do you use the MS4 Outfall Field Screening Report form (3800-FM-BCW0521) provided in the permit?

Yes No

If No, attach a copy of your screening report form.

BMP #5: Enact a Stormwater Management Ordinance or SOP to implement and enforce a stormwater management program that includes prohibition of non-stormwater discharges to the regulated small MS4.

1. Do you have an ordinance (municipal) or SOP or other mechanism (non-municipal) that prohibits non-stormwater discharges? Yes No

If Yes, indicate the date of the ordinance or SOP: Stormwater Ord. #1263 9/18/2018

Cross Connection #1162 7/1993

Dye Test #1198 12/1998

2. If Yes to #1, is the ordinance or SOP consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j) with respect to authorized non-stormwater discharges? Yes No

If Yes to #2 and the ordinance or SOP has not been submitted to DEP previously, attach the ordinance or SOP.

3. Were there any violations of the ordinance or SOP during the reporting period? Yes No

If Yes to #3, complete the table below (attach additional sheets as necessary).

Violation Date	Nature of Violation	Responsible Party	Enforcement Taken

4. Did you approve any waiver or variance during the reporting period that allowed an exception to non-stormwater discharge provisions of an ordinance or SOP? Yes No

If Yes to #4, identify the entity that received the waiver or variance and the type of non-stormwater discharge approved.

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 to detect and eliminate illicit discharges.

1. Was IDD&E-related information distributed to public employees, businesses, and the general public during the reporting period? Yes No

If Yes, what was distributed? Springdale Borough has numerous articles on their website regarding preventing stormwater pollution.

2. Is there a well-publicized method for employees, businesses and the public to report stormwater pollution incidents?

Yes No

3. Do you maintain documentation of all responses, action taken, and the time required to take action? Yes No

MCM #3 Comments:

Outfalls are regularly screened. Dry weather screening reports anticipated to be completed by June 2025.

MCM #4 – CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

Are you relying on PA's statewide program for stormwater associated with construction activities to satisfy this MCM?

Yes No

(If Yes, respond to questions for BMP Nos. 1, 2 and 3 only in this section. If No, respond to questions for all BMPs in this section)

BMP #1: The permittee 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.

During the reporting period, did you comply with 25 Pa. Code § 102.43 (relating to withholding building or other permits or approvals until DEP or a county conservation district (CCD) has approved NPDES permit coverage)?

Yes No Not Applicable (no building permit applications received)

BMP #2: A municipality or county which issues building or other permits shall notify DEP or the applicable 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 § 102.42.

During the reporting period, did you comply with 25 Pa. Code § 102.42 (relating to notifying DEP/CCD within 5 days of receiving an application involving an earth disturbance activity of one acre or more)?

Yes No Not Applicable (no building permit applications received)

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.

1. Do you have an ordinance (municipal) or SOP or other mechanism (non-municipal) that requires implementation and maintenance of E&S control BMPs? Yes No

If Yes, indicate the date of the ordinance or SOP: Adopted Allegheny County Stormwater Ord. - September 18, 2018

2. If Yes to #1, is the ordinance or SOP consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j)? Yes No

3. If Yes to #2 and the ordinance or SOP has not been submitted previously, attach a copy of the ordinance or SOP.

BMP #4: Review Erosion and Sediment (E&S) control plans to ensure that such plans adequately consider water quality impacts and meet regulatory requirements.

Specify the number of E&S Plans you reviewed during the reporting period: 0

BMP #5: Conduct inspections regarding installation and maintenance of E&S control measures during earth disturbance activities. Maintain records of site inspections, including dates and inspection results, in accordance with the record retention requirements in this permit.

Specify the number of E&S inspections you completed during the reporting period: 0

BMP #6: Conduct enforcement when installation and maintenance of E&S control measures during earth disturbance activities does not comply with permit and/or regulatory requirements.

Specify the number of enforcement actions you took during the reporting period for improper E&S: 0

BMP #7: Develop and implement requirements for construction site operators to control waste at construction sites that may cause adverse impacts to water quality. The permittee shall provide education on these requirements to construction site operators.

Specify the method(s) by which you are educating construction site operators on controlling waste at construction sites:

BMP #8: 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.

1. A tracking system has been established for receipt of public inquiries and complaints. Yes No

2. Specify the number of inquiries and complaints received during the reporting period:

MCM #4 Comments:

No new construction in Springdale Borough within the reporting period.

MCM #5 – POST-CONSTRUCTION STORM WATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT

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.

1. Do you have an ordinance (municipal) or SOP or other mechanism (non-municipal) that requires implementation and maintenance of post-construction stormwater management (PCSM) BMPs? Yes No
If Yes, indicate the date of the ordinance or SOP: September 18, 2018
2. If Yes to #1, is the ordinance or SOP consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j)? Yes No
3. If Yes to #2 and the ordinance or SOP has not been submitted previously, attach a copy of the ordinance or SOP.

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. Enact ordinances consistent with LID practices and repeal sections of ordinances that conflict with LID practices.

1. Do you have an ordinance (municipal) or SOP or other mechanism (non-municipal) that encourages and expands the use of LID in new development and redevelopment? Yes No
If Yes, indicate the date of the ordinance or SOP: September 18, 2018
2. If Yes to #1, is the ordinance or SOP consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j)? Yes No
3. If Yes to #2 and the ordinance or SOP has not been submitted previously, attach a copy of the ordinance or SOP.

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.

1. Do you have an inventory of all PCSM BMPs that were installed to meet requirements in NPDES Permits for Stormwater Discharges Associated with Construction Activities approved since March 10, 2003? Yes No
If Yes to #1, complete Table 1 on the next page.
2. Has proper O&M occurred during the reporting period for all PCSM BMPs? Yes No
3. If No to #2, explain what action(s) the permittee has taken or plans to take to ensure proper O&M.

No PCSM BMPs have been installed in Springdale Borough to meet the requirement of the NPDES Permit for Stormwater Discharges Associated with Construction Activities since 3/10/2003.

If you are relying on PA's statewide program for stormwater associated with construction activities, you may skip to MCM #6, otherwise complete all questions for BMPs #4 - #6 in this section.

BMP #4: Require the implementation of a combination of structural and/or non-structural BMPs that are appropriate to the local community, that minimize water quality impacts, and that are designed to maintain pre-development runoff conditions.

1. Specify the number of PCSM Plans reviewed during the reporting period for projects disturbing 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): 0
2. Has a tracking system been established and maintained to record qualifying projects and their associated BMPs?
 Yes No

PCSM BMP INVENTORY

Table 1. To complete the information needed for MCM #5, BMP #3, list all existing structural BMPs that discharge stormwater to the permittee's MS4 that were installed to satisfy PCSM requirements for earth disturbance activities under Chapter 102, and provide the requested information (see instructions).

BMP No.	BMP Name	DA (ac)	Entity Responsible for O&M	Latitude	Longitude	Date Installed	O&M Requirements	NPDES Permit No.
1				o ' "	o ' "			
2				o ' "	o ' "			
3				o ' "	o ' "			
4				o ' "	o ' "			
5				o ' "	o ' "			
6				o ' "	o ' "			
7				o ' "	o ' "			
8				o ' "	o ' "			
9				o ' "	o ' "			
10				o ' "	o ' "			
11				o ' "	o ' "			
12				o ' "	o ' "			
13				o ' "	o ' "			
14				o ' "	o ' "			
15				o ' "	o ' "			
16				o ' "	o ' "			

BMP #5: Ensure that controls are installed that shall prevent or minimize water quality impacts. The permittee shall inspect all qualifying development or redevelopment projects during the construction phase to ensure proper installation of the approved structural PCSM BMPs. A tracking system (e.g., database, spreadsheet, or written list) shall be implemented to track the inspections conducted and to track the results of the inspections (e.g., BMPs were, or were not, installed properly).

1. During the reporting period have you inspected all qualifying development and redevelopment projects during the construction phase to ensure proper installation of approved structural BMPs?
 Yes No Not Applicable (no qualifying projects during reporting period)
2. Has a tracking system been established and maintained to record results of inspections?
 Yes No

BMP #6: Develop a written procedure that describes how the permittee shall address all required components of this MCM.

Have you developed a written plan that addresses: 1) minimum requirements for use of structural and/or non-structural BMPs in plans for development and redevelopment; 2) criteria for selecting and standards for sizing stormwater BMPs; and 3) implementation of an inspection program to ensure that BMPs are properly installed? Yes No

MCM #5 Comments:

No new construction or development during the reporting period.

MCM #6 – POLLUTION PREVENTION / GOOD HOUSEKEEPING

BMP #1: Identify and document all operations that are owned or operated by the permittee and have the potential for generating pollution in stormwater runoff to the MS4. This includes activities conducted by contractors for the permittee.

1. Have you identified all facilities and activities owned and operated by the permittee that have the potential to generate stormwater runoff into the MS4? Yes No
2. When was the inventory last reviewed? June 2024
3. When was it last updated? September 2024

BMP #2: Develop, implement and maintain a written O&M program for all operations that could contribute to the discharge of pollutants from the MS4, as identified under BMP #1. This program shall address stormwater collection or conveyance systems within the regulated MS4.

1. Have you developed a written O&M program for the operations identified in BMP #1? Yes No
2. Date of last review or update to written O&M program: Reviewed June 2024 and updated September 2024

BMP #3: Develop and implement an employee training program that addresses appropriate topics to further the goal of preventing or reducing the discharge of pollutants from operations to the regulated small MS4. All relevant employees and contractors shall receive training.

1. Have you developed an employee training program? Yes No
2. Date of last review or update to training program: June 2024 Date of latest training: 2022

3. Training topics covered:

In-house operations

4. Name(s) of training presenter(s):

Carmen Canonico, Working Operations Foreman

5. Names of training attendees:

Public Works Employees

MCM #6 Comments:

POLLUTANT CONTROL MEASURES (PCMs)

Indicate the status of implementing PCMs in Appendices A, B and/or C by completing the table below. Skip this section if PCMs are not applicable.

Task	Date Completed	Attached	Anticipated Completion Date
Storm Sewershed Map(s)	September 2024	<input type="checkbox"/>	
Source Inventory	September 2024	<input type="checkbox"/>	
Investigation of Suspected Sources		<input type="checkbox"/>	June 2025
Ordinance/SOP for Controlling Animal Wastes		<input type="checkbox"/>	June 2025

PCM Comments:

The source inventory was completed September 2024.

POLLUTANT REDUCTION PLANS (PRPs) AND TMDL PLANS

1. Complete this section if the development and submission of a PRP and/or TMDL Plan was required as an attachment to the latest NOI or application or was required by the permit, regardless of whether DEP has approved the plan(s).

Type of Plan	Submission Date	DEP Approval Date	Surface Waters Addressed by Plan
<input type="checkbox"/> Chesapeake Bay PRP (Appendix D)			Chesapeake Bay
<input type="checkbox"/> Impaired Waters PRP (Appendix E)			
<input type="checkbox"/> TMDL Plan (Appendix F)			
<input type="checkbox"/> Combined Chesapeake Bay / Impaired Waters PRP			Chesapeake Bay,
<input type="checkbox"/> Combined PRP / TMDL Plan			

Joint Plan (if checked, list the name of the MS4 group or names of all entities participating in the joint plan below)

Joint Plan Participants:

2. Identify the pollutants of concern and pollutant load reduction requirements under the permit (see instructions).

Type of Plan	TSS Load Reduction (lbs/yr)	TP Load Reduction (lbs/yr)	TN Load Reduction (lbs/yr)
<input type="checkbox"/> Chesapeake Bay PRP (Appendix D)			
<input type="checkbox"/> Impaired Waters PRP (Appendix E)			
<input type="checkbox"/> TMDL Plan (Appendix F)			
<input type="checkbox"/> Combined Chesapeake Bay / Impaired Waters PRP			
<input type="checkbox"/> Combined PRP / TMDL Plan			

3. Date Final Report Demonstrating Achievement of Pollutant Load Reductions Due:

4. Have any modifications to the plan(s) occurred since DEP approval? Yes No

If Yes to #4, was the updated plan(s) submitted to DEP? Yes No

If Yes to #4, did you comply with the public participation requirements of the applicable appendix? Yes No

If Yes to #4, describe the plan modifications.

5. Summary of progress achieved during reporting period.

6. Anticipated activities for next reporting period.

PRP/TMDL Plan Comments:

NEW BMPs FOR PRP/TMDL PLAN IMPLEMENTATION

Table 2. List all new structural BMPs installed and ongoing non-structural BMPs implemented during the reporting period that are being used toward achieving load reductions in the permittee's PRP and/or TMDL Plan (see instructions).

BMP No.	BMP Name	DA (ac)	% Imp.	BMP Extent	Units	Latitude	Longitude	Date Installed or Implemented	Planning Area?	Ch. 102?	Annual Sediment Load Reduction (lbs/yr)
						o ' "	o ' "		<input type="checkbox"/>	<input type="checkbox"/>	
						o ' "	o ' "		<input type="checkbox"/>	<input type="checkbox"/>	
						o ' "	o ' "		<input type="checkbox"/>	<input type="checkbox"/>	
						o ' "	o ' "		<input type="checkbox"/>	<input type="checkbox"/>	
						o ' "	o ' "		<input type="checkbox"/>	<input type="checkbox"/>	

BMP INVENTORY FOR PRP/TMDL PLAN IMPLEMENTATION

Table 3. List all existing structural BMPs that have been installed in prior reporting periods and are eligible to use toward achieving load reductions in the permittee's PRP and/or TMDL Plan (see instructions).

BMP No.	BMP Name	DA (ac)	% Imp.	BMP Extent	Units	Latitude	Longitude	Date Installed	Annual Sediment Load Reduction (lbs/yr)	Date of Latest Inspection	Satisfactory?
						o ' "	o ' "				<input type="checkbox"/>
						o ' "	o ' "				<input type="checkbox"/>
						o ' "	o ' "				<input type="checkbox"/>
						o ' "	o ' "				<input type="checkbox"/>
						o ' "	o ' "				<input type="checkbox"/>
						o ' "	o ' "				<input type="checkbox"/>

CERTIFICATION

For PAG-13 Permittees: I have read the latest PAG-13 General Permit issued by DEP and agree and certify that (1) the permittee continues to be eligible for coverage under the PAG-13 General Permit and (2) the permittee will continue to comply with the conditions of that permit, including any modifications thereto. I understand that if I do not agree to the terms and conditions of the PAG-13 General Permit, I will apply for an individual permit within 90 days of publication of the General Permit. I also acknowledge that any facility construction needed to comply with the General Permit requirements shall be designed, built, operated, and maintained in accordance with operative laws and regulations.

For All Permittees: I certify under penalty of law that this report was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

JASON OVERLY

Name of Responsible Official

Signature

9-25-24

Date

Telephone No.



ANNUAL MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) STATUS REPORT

FOR THE PERIOD July 1, 2022 TO JUNE 30, 2023

GENERAL INFORMATION

Permittee Name: Springdale Borough	NPDES Permit No.: PA 136163
Mailing Address: 325 School Street	Effective Date: March 16, 2018
City, State, Zip: Springdale, PA 15144	Expiration Date: March 15, 2023
MS4 Contact Person: Jason Overly	Renewal Due Date: N/A
Title: Council Chairperson	Municipality: Springdale Borough
Phone: 724-274-6800	County: Allegheny
Email: sb@springdaleborough.com	

Co-Permittees (if applicable): N/A

Appendix(ces) that permittee is subject to (select all that apply):
 Appendix A Appendix B Appendix C Appendix D Appendix E Appendix F

WATER QUALITY INFORMATION

Are there any discharges to waters within the Chesapeake Bay Watershed? Yes No

Identify all surface waters that receive stormwater discharges from the permittee's MS4 and provide the requested information (see instructions).

Receiving Water Name	Ch. 93 Class.	Impaired?	Cause(s)	TMDL?	WLA?
Allegheny River	WWF	N	N/A	N	N
Tawney Run	WWF	N	N/A	N	N

3800-FM-BCW0491 9/2017
Annual MS4 Status Report

Yes No

2. Date of latest annual review of educational materials: **July 2022** Were updates made? Yes No

3. Do you have a municipal website? Yes No (URL:
springdaleborough.com)

If Yes, what MS4-related material does it contain?

- Letter to Springdale Residents, Property Owners, Businesses and Industrial Facilities, and Schools regarding NPDES permit

-Pamphlets: "Be Storm Water Smart", "When it Rains in Drains" "12 Tips to Prevent Storm Water Pollution", "Take the Stormwater Runoff Challenge", which are informative materials in regards to stormwater management & how to manage stormwater runoff and implementation of best management practices

4. Describe any other method(s) used during the reporting period to provide information on stormwater to the public:
 - The Borough Engineer discussed MS4 information at the public Council Meeting on Tuesday July 19, 2022, which is included in the official, written Springdale Borough Minutes.
 - There is informational material on two (2) bulletin boards in the Municipal Borough building concerning keeping trash, paint, oil, etc out of the storm drains.
5. Identify specific plans for the publication of stormwater materials for the upcoming year:
 - Will continue to post informational MS4 material on the Springdale Borough website.
 - Will continue to post informational MS4 material on the two (2) bulletin boards in the Municipal Springdale Borough building.

BMP #4: Distribute stormwater educational materials to the target audiences.

Identify the two additional methods of distributing stormwater educational materials during the previous reporting period (e.g., displays, posters, signs, pamphlets, booklets, brochures, radio, local cable TV, newspaper articles, other advertisements, bill stuffers, posters, presentations, conferences, meetings, fact sheets, giveaways, or storm drain stenciling).

- At the July 19, 2022 public Council Meeting, the Borough Engineer discussed MS4 Public Awareness. Written Council Minutes details the discussion
- The Borough website & bulletin boards in the Borough building were updated with storm water education materials

MCM #1 Comments:

MCM #2 – PUBLIC INVOLVEMENT/PARTICIPATION

BMP #1: Develop, implement and maintain a written Public Involvement and Participation Program (PIPP)

1. For new permittees only, was the PIPP developed and implemented within one year of permit coverage?

Yes No

2. Date of latest annual review of PIPP: **July 2022** Were updates made? Yes No

BMP #2: Advertise to the public and solicit public input on ordinances, SOPs, Pollutant Reduction Plans (PRPs) (if applicable) and TMDL Plans (if applicable), including modifications thereto, prior to adoption or submission to DEP:

1. Was an MS4-related ordinance, SOP, PRP or TMDL Plan developed during the reporting period? Yes No

2. If Yes, describe how you advertised the draft document(s) and how you provided opportunities for public review, input and feedback:

3. If an ordinance, SOP or plan was developed or amended during the reporting period, provide the following information:

Ordinance / SOP / Plan Name	Date of Public Notice	Date of Public Hearing	Date Enacted or Submitted to DEP

BMP #3: In conjunction with the map(s) created under BMP #2 (either on the same map or on a different map), the permittee shall develop and maintain map(s) that show the entire storm sewer collection system within the permittee's jurisdiction that are owned or operated by the permittee (including roads, inlets, piping, swales, catch basins, channels, and any other components of the storm sewer collection system), including privately-owned components of the collection system where conveyances or BMPs on private property receive stormwater flows from upstream publicly-owned components.

1. Have you completed a map(s) that includes all components of BMP #3? Yes No

If Yes and you are a new permittee and have not submitted the map(s) previously, attach the map(s) to this report.

If No, date by which permittee expects map(s) to be completed:

2. If Yes to #1, is the map(s) on the same map(s) as for outfalls and receiving waters? Yes No

3. Date of last update or revision to map(s): 2016

BMP #4: Conduct dry weather screenings of MS4 outfalls to evaluate the presence of illicit discharges. If any illicit discharges are present, the permittee shall identify the source(s) and take appropriate actions to remove or correct any illicit discharges. The permittee shall also respond to reports received from the public or other agencies of suspected or confirmed illicit discharges associated with the storm sewer system, as well as take enforcement action as necessary. The permittee shall immediately report to DEP illicit discharges that would endanger users downstream from the discharge, or would otherwise result in pollution or create a danger of pollution or would damage property.

For new permittees, all identified outfalls (and if applicable observation points) must be screened during dry weather at least twice within the 5-year period following permit coverage. For existing permittees, all identified outfalls (and if applicable observation points) must be screen during dry weather at least once within the 5-year period following permit coverage and, for areas where past problems have been reported or known sources of dry weather flows occur on a continual basis, outfalls must be screened annually during each year of permit coverage.

1. How many unique outfalls (and if applicable observation points) were screened during the reporting period? 0

2. Indicate the percentage of all outfalls screened in the past five years. 100%

3. Indicate the percent of outfalls screened during the reporting period that revealed dry weather flows: 0%

4. Did any dry weather flows reveal color, turbidity, sheen, odor, floating or submerged solids? Yes No

5. If Yes for #4, attach all sample results to this report with a map identifying the sample location. Explain the corrective action(s) taken in the attachment.

6. Do you use the MS4 Outfall Field Screening Report form (3800-FM-BCW0521) provided in the permit?

Yes No

If No, attach a copy of your screening report form.

BMP #5: Enact a Stormwater Management Ordinance or SOP to implement and enforce a stormwater management program that includes prohibition of non-stormwater discharges to the regulated small MS4.

1. Do you have an ordinance (municipal) or SOP or other mechanism (non-municipal) that prohibits non-stormwater discharges? Yes No

If Yes, indicate the date of the ordinance or SOP: Stormwater Ord. #1263 9/18/2018

Cross Connection #1162 7/1993

Dye Test #1198 12/1998

2. If Yes to #1, is the ordinance or SOP consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j) with respect to authorized non-stormwater discharges? Yes No

If Yes to #2 and the ordinance or SOP has not been submitted to DEP previously, attach the ordinance or SOP.

3. Were there any violations of the ordinance or SOP during the reporting period? Yes No

If Yes to #3, complete the table below (attach additional sheets as necessary).

Violation Date	Nature of Violation	Responsible Party	Enforcement Taken

4. Did you approve any waiver or variance during the reporting period that allowed an exception to non-stormwater discharge provisions of an ordinance or SOP? Yes No

If Yes to #4, identify the entity that received the waiver or variance and the type of non-stormwater discharge approved.

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 to detect and eliminate illicit discharges.

1. Was IDD&E-related information distributed to public employees, businesses, and the general public during the reporting period? Yes No

If Yes, what was distributed? Springdale Borough has numerous articles on their website regarding preventing stormwater pollution.

2. Is there a well-publicized method for employees, businesses and the public to report stormwater pollution incidents?

Yes No

3. Do you maintain documentation of all responses, action taken, and the time required to take action? Yes No

MCM #3 Comments:

MCM #4 – CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

Are you relying on PA's statewide program for stormwater associated with construction activities to satisfy this MCM?

Yes No

(If Yes, respond to questions for BMP Nos. 1, 2 and 3 only in this section. If No, respond to questions for all BMPs in this section)

BMP #1: The permittee 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.

During the reporting period, did you comply with 25 Pa. Code § 102.43 (relating to withholding building or other permits or approvals until DEP or a county conservation district (CCD) has approved NPDES permit coverage)?

Yes No Not Applicable (no building permit applications received)

BMP #2: A municipality or county which issues building or other permits shall notify DEP or the applicable 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 § 102.42.

During the reporting period, did you comply with 25 Pa. Code § 102.42 (relating to notifying DEP/CCD within 5 days of receiving an application involving an earth disturbance activity of one acre or more)?

Yes No Not Applicable (no building permit applications received)

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.

1. Do you have an ordinance (municipal) or SOP or other mechanism (non-municipal) that requires implementation and maintenance of E&S control BMPs? Yes No

If Yes, indicate the date of the ordinance or SOP: Adopted Allegheny County Stormwater Ord. - September 18, 2018

2. If Yes to #1, is the ordinance or SOP consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j)? Yes No

3. If Yes to #2 and the ordinance or SOP has not been submitted previously, attach a copy of the ordinance or SOP.

BMP #4: Review Erosion and Sediment (E&S) control plans to ensure that such plans adequately consider water quality impacts and meet regulatory requirements.

Specify the number of E&S Plans you reviewed during the reporting period:

BMP #5: Conduct inspections regarding installation and maintenance of E&S control measures during earth disturbance activities. Maintain records of site inspections, including dates and inspection results, in accordance with the record retention requirements in this permit.

Specify the number of E&S inspections you completed during the reporting period:

BMP #6: Conduct enforcement when installation and maintenance of E&S control measures during earth disturbance activities does not comply with permit and/or regulatory requirements.

Specify the number of enforcement actions you took during the reporting period for improper E&S:

BMP #7: Develop and implement requirements for construction site operators to control waste at construction sites that may cause adverse impacts to water quality. The permittee shall provide education on these requirements to construction site operators.

Specify the method(s) by which you are educating construction site operators on controlling waste at construction sites:

BMP #8: 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.

1. A tracking system has been established for receipt of public inquiries and complaints. Yes No

2. Specify the number of inquiries and complaints received during the reporting period:

MCM #4 Comments:

No new construction in Springdale Borough within the reporting period.

MCM #5 – POST-CONSTRUCTION STORM WATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT

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.

1. Do you have an ordinance (municipal) or SOP or other mechanism (non-municipal) that requires implementation and maintenance of post-construction stormwater management (PCSM) BMPs? Yes No
If Yes, indicate the date of the ordinance or SOP: September 18, 2018
2. If Yes to #1, is the ordinance or SOP consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j)? Yes No
3. If Yes to #2 and the ordinance or SOP has not been submitted previously, attach a copy of the ordinance or SOP.

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. Enact ordinances consistent with LID practices and repeal sections of ordinances that conflict with LID practices.

1. Do you have an ordinance (municipal) or SOP or other mechanism (non-municipal) that encourages and expands the use of LID in new development and redevelopment? Yes No
If Yes, indicate the date of the ordinance or SOP:
2. If Yes to #1, is the ordinance or SOP consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j)? Yes No
3. If Yes to #2 and the ordinance or SOP has not been submitted previously, attach a copy of the ordinance or SOP.

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.

1. Do you have an inventory of all PCSM BMPs that were installed to meet requirements in NPDES Permits for Stormwater Discharges Associated with Construction Activities approved since March 10, 2003? Yes No
If Yes to #1, complete Table 1 on the next page.
2. Has proper O&M occurred during the reporting period for all PCSM BMPs? Yes No
3. If No to #2, explain what action(s) the permittee has taken or plans to take to ensure proper O&M.

No PCSM BMPs have been installed in Springdale Borough to meet the requirement of the NPDES Permit for Stormwater Discharges Associated with Construction Activities since 3/10/2003.

If you are relying on PA's statewide program for stormwater associated with construction activities, you may skip to MCM #6, otherwise complete all questions for BMPs #4 - #6 in this section.

BMP #4: Require the implementation of a combination of structural and/or non-structural BMPs that are appropriate to the local community, that minimize water quality impacts, and that are designed to maintain pre-development runoff conditions.

1. Specify the number of PCSM Plans reviewed during the reporting period for projects disturbing 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): 0
2. Has a tracking system been established and maintained to record qualifying projects and their associated BMPs?
 Yes No

PCSM BMP INVENTORY

Table 1. To complete the information needed for MCM #5, BMP #3, list all existing structural BMPs that discharge stormwater to the permittee's MS4 that were installed to satisfy PCSM requirements for earth disturbance activities under Chapter 102, and provide the requested information (see instructions).

BMP No.	BMP Name	DA (ac)	Entity Responsible for O&M	Latitude	Longitude	Date Installed	O&M Requirements	NPDES Permit No.
1				o ' "	o ' "			
2				o ' "	o ' "			
3				o ' "	o ' "			
4				o ' "	o ' "			
5				o ' "	o ' "			
6				o ' "	o ' "			
7				o ' "	o ' "			
8				o ' "	o ' "			
9				o ' "	o ' "			
10				o ' "	o ' "			
11				o ' "	o ' "			
12				o ' "	o ' "			
13				o ' "	o ' "			
14				o ' "	o ' "			
15				o ' "	o ' "			
16				o ' "	o ' "			

BMP #5: Ensure that controls are installed that shall prevent or minimize water quality impacts. The permittee shall inspect all qualifying development or redevelopment projects during the construction phase to ensure proper installation of the approved structural PCSM BMPs. A tracking system (e.g., database, spreadsheet, or written list) shall be implemented to track the inspections conducted and to track the results of the inspections (e.g., BMPs were, or were not, installed properly).

1. During the reporting period have you inspected all qualifying development and redevelopment projects during the construction phase to ensure proper installation of approved structural BMPs?
 Yes No Not Applicable (no qualifying projects during reporting period)
2. Has a tracking system been established and maintained to record results of inspections?
 Yes No

BMP #6: Develop a written procedure that describes how the permittee shall address all required components of this MCM.

Have you developed a written plan that addresses: 1) minimum requirements for use of structural and/or non-structural BMPs in plans for development and redevelopment; 2) criteria for selecting and standards for sizing stormwater BMPs; and 3) implementation of an inspection program to ensure that BMPs are properly installed? Yes No

MCM #5 Comments:

No new constuction or development

MCM #6 – POLLUTION PREVENTION / GOOD HOUSEKEEPING

BMP #1: Identify and document all operations that are owned or operated by the permittee and have the potential for generating pollution in stormwater runoff to the MS4. This includes activities conducted by contractors for the permittee.

1. Have you identified all facilities and activities owned and operated by the permittee that have the potential to generate stormwater runoff into the MS4? Yes No
2. When was the inventory last reviewed? 2014
3. When was it last updated? 2014

BMP #2: Develop, implement and maintain a written O&M program for all operations that could contribute to the discharge of pollutants from the MS4, as identified under BMP #1. This program shall address stormwater collection or conveyance systems within the regulated MS4.

1. Have you developed a written O&M program for the operations identified in BMP #1? Yes No
2. Date of last review or update to written O&M program: 2018

BMP #3: Develop and implement an employee training program that addresses appropriate topics to further the goal of preventing or reducing the discharge of pollutants from operations to the regulated small MS4. All relevant employees and contractors shall receive training.

1. Have you developed an employee training program? Yes No
2. Date of last review or update to training program: 2018 Date of latest training: 2022

3. Training topics covered:

In-house operations

4. Name(s) of training presenter(s):

Carmen Canonico, Working Operations Foreman

5. Names of training attendees:

Public Works Employees

MCM #6 Comments:

POLLUTANT CONTROL MEASURES (PCMs)

Indicate the status of implementing PCMs in Appendices A, B and/or C by completing the table below. Skip this section if PCMs are not applicable.

Task	Date Completed	Attached	Anticipated Completion Date
Storm Sewershed Map(s)		<input type="checkbox"/>	
Source Inventory		<input type="checkbox"/>	
Investigation of Suspected Sources		<input type="checkbox"/>	
Ordinance/SOP for Controlling Animal Wastes		<input type="checkbox"/>	

PCM Comments:

POLLUTANT REDUCTION PLANS (PRPs) AND TMDL PLANS

1. Complete this section if the development and submission of a PRP and/or TMDL Plan was required as an attachment to the latest NOI or application or was required by the permit, regardless of whether DEP has approved the plan(s).

Type of Plan	Submission Date	DEP Approval Date	Surface Waters Addressed by Plan
<input type="checkbox"/> Chesapeake Bay PRP (Appendix D)			Chesapeake Bay
<input type="checkbox"/> Impaired Waters PRP (Appendix E)			
<input type="checkbox"/> TMDL Plan (Appendix F)			
<input type="checkbox"/> Combined Chesapeake Bay / Impaired Waters PRP			Chesapeake Bay,
<input type="checkbox"/> Combined PRP / TMDL Plan			

Joint Plan (if checked, list the name of the MS4 group or names of all entities participating in the joint plan below)

Joint Plan Participants:

2. Identify the pollutants of concern and pollutant load reduction requirements under the permit (see instructions).

Type of Plan	TSS Load Reduction (lbs/yr)	TP Load Reduction (lbs/yr)	TN Load Reduction (lbs/yr)
<input type="checkbox"/> Chesapeake Bay PRP (Appendix D)			
<input type="checkbox"/> Impaired Waters PRP (Appendix E)			
<input type="checkbox"/> TMDL Plan (Appendix F)			
<input type="checkbox"/> Combined Chesapeake Bay / Impaired Waters PRP			
<input type="checkbox"/> Combined PRP / TMDL Plan			

3. Date Final Report Demonstrating Achievement of Pollutant Load Reductions Due:

4. Have any modifications to the plan(s) occurred since DEP approval? Yes No

If Yes to #4, was the updated plan(s) submitted to DEP? Yes No

If Yes to #4, did you comply with the public participation requirements of the applicable appendix? Yes No

If Yes to #4, describe the plan modifications.

5. Summary of progress achieved during reporting period.

6. Anticipated activities for next reporting period.

PRP/TMDL Plan Comments:

NEW BMPs FOR PRP/TMDL PLAN IMPLEMENTATION

Table 2. List all new structural BMPs installed and ongoing non-structural BMPs implemented during the reporting period that are being used toward achieving load reductions in the permittee's PRP and/or TMDL Plan (see instructions).

BMP No.	BMP Name	DA (ac)	% Imp.	BMP Extent	Units	Latitude	Longitude	Date Installed or Implemented	Planning Area?	Ch. 102?	Annual Sediment Load Reduction (lbs/yr)
						o ' "	o ' "		<input type="checkbox"/>	<input type="checkbox"/>	
						o ' "	o ' "		<input type="checkbox"/>	<input type="checkbox"/>	
						o ' "	o ' "		<input type="checkbox"/>	<input type="checkbox"/>	
						o ' "	o ' "		<input type="checkbox"/>	<input type="checkbox"/>	
						o ' "	o ' "		<input type="checkbox"/>	<input type="checkbox"/>	

BMP INVENTORY FOR PRP/TMDL PLAN IMPLEMENTATION

Table 3. List all existing structural BMPs that have been installed in prior reporting periods and are eligible to use toward achieving load reductions in the permittee's PRP and/or TMDL Plan (see instructions).

BMP No.	BMP Name	DA (ac)	% Imp.	BMP Extent	Units	Latitude	Longitude	Date Installed	Annual Sediment Load Reduction (lbs/yr)	Date of Latest Inspection	Satisfactory?
						o ' "	o ' "				<input type="checkbox"/>
						o ' "	o ' "				<input type="checkbox"/>
						o ' "	o ' "				<input type="checkbox"/>
						o ' "	o ' "				<input type="checkbox"/>
						o ' "	o ' "				<input type="checkbox"/>
						o ' "	o ' "				<input type="checkbox"/>

CERTIFICATION

For PAG-13 Permittees: I have read the latest PAG-13 General Permit issued by DEP and agree and certify that (1) the permittee continues to be eligible for coverage under the PAG-13 General Permit and (2) the permittee will continue to comply with the conditions of that permit, including any modifications thereto. I understand that if I do not agree to the terms and conditions of the PAG-13 General Permit, I will apply for an individual permit within 90 days of publication of the General Permit. I also acknowledge that any facility construction needed to comply with the General Permit requirements shall be designed, built, operated, and maintained in accordance with operative laws and regulations.

For All Permittees: I certify under penalty of law that this report was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Jason Overly

Name of Responsible Official

724-274-6800

Telephone No.



Signature

9/29/2023

Date

MCM PLANS

MINIMUM CONTROL MEASURE NO. 1

PUBLIC EDUCATION AND OUTREACH PLAN

OBJECTIVES:

- Provide the public as individuals or households information about steps they can utilize to reduced storm water pollution.
- Provide documentation of BMP 1 through BMP 4 being implemented on an annual basis for SPRINGDALE BOROUGH

METHODOLOGY:

- Prepare a target audience list
- Prepare and compile several different types of published information to share with public and target audiences
- Document to who, when, where and what type of information was distributed
- Annually update target audience lists, distribution methods, and materials to be distributed

INDEX:

1. BMP No. 1 – Summary Sheet
 - a. A log recording the annual distribution of educational information to specific parties
2. BMP No. 2 – Target Audience List
 - a. Provides name and contact information regarding Target Audiences specific to SPRINGDALE BOROUGH
3. BMP No. 3 – Annual Publishing
 - a. A log recording what type of information of distributed and how it was distributed
4. BMP No. 4 – Target Audience Education
 - a. Provides tracking method of a minimum of two target audience members that were distributed educational information

MINIMUM CONTROL MEASURE NO. 2

PUBLIC PARTICIPATION AND INVOLVEMENT PLAN

OBJECTIVES:

- Provide opportunities for the public to participate in storm water activities and decisions relating to storm water within the SPRINGDALE BOROUGH
- Provide documentation of BMP 1 through BMP 3 being implemented on an annual basis for SPRINGDALE BOROUGH

METHODOLOGY:

- Provide opportunities for the public to become involved in the SPRINGDALE BOROUGH's storm water activities.
- Provide open communication opportunities between storm water organizations and target audience groups to become involved in the SPRINGDALE BOROUGH's storm water activities.
- Provide public comment periods relating to storm water ordinances
- Provide at minimum one (1) annual meeting to provide the public the opportunity to discuss storm water activities with the SPRINGDALE BOROUGH's BOARD.

INDEX:

1. BMP No. 1 – Summary Sheet
 - a. A log recording the communications between different entities
2. BMP No. 2 – Public Notice and Comments
 - a. A summary of public notices and comments received regarding ordinances or plan requirements
3. BMP No. 3 – Target Audience and Public Involvement
 - a. A log of public events and associated members

MINIMUM CONTROL MEASURE NO. 3

ILLICIT DISCHARGE DETECTION AND ELIMINATION PLAN

OBJECTIVES:

- Implement and enforce a program to detect and eliminate illicit discharges within the MS4 permit area.
- Provide storm sewer mapping of the entire storm sewer system.
- Conduct and record dry weather screening to evaluate the system for illicit discharges.
- Maintain a Stormwater Management Ordinance to current DEP standards.

METHODOLOGY:

- Provide the public and SPRINGDALE BOROUGH the ability to report illicit discharges
- Prepare storm sewer mapping in ArcGIS through field data collection and update mapping annually.
- Provide documentation for dry weather screenings at MS4 outfalls.
- Provide tracking of dry weather screenings and any additional follow up required.
- Review existing Stormwater Management Ordinance to ensure is in compliance with current DEP rules and regulations; revise as necessary.

HIGH PRIORITY AREAS IN SPRINGDALE BOROUGH

- Areas that are not tied into the sewer system
- Places where flooding occurs often
- High traffic areas

INDEX:

1. BMP No. 1 – IDD&E Program
 - a. A log recording the summary of the complaints received and method of resolve.
 - b. Complaint forms
 - c. Right-of-entry request forms (private property)
2. BMP No. 2 & 3 – System Wide Mapping
 - a. A log recording date of mapping and any updates within permit period
 - b. Provide map of SPRINGDALE BOROUGH including the following:
 - i. Municipal Boundary
 - ii. Current Urbanized Area Boundary
 - iii. Outfalls and/or Observation Points
 - iv. Surface Waters
 - c. Provide mapping of the following:
 - i. Roads
 - ii. Inlets, Catchbasins
 - iii. Piping, Swales, Channels
 - iv. BMP control measures
 - v. Connection from Private Systems to Public System
 - vi. Connection BMPs from Public System to Private System

3. BMP No. 4 – Dry Weather Screenings
 - a. A log recording the summary of screening locations
 - b. Dry Weather Screening Form
 - c. Follow Up Information if Screening Detected Illicit Discharges
 - d. Right-of-Way Entry Form
4. BMP No. 5 – Stormwater Ordinance
 - a. Copy of Current Ordinance
 - b. Addendums or Updates, with Date of Enactment

MINIMUM CONTROL MEASURE NO. 4

CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

OBJECTIVES:

- Provide approved Construction Site Stormwater Runoff Control during any earth moving activities within SPRINGDALE BOROUGH

METHODOLOGY:

- Rely on DEP NPDES Permit Program and approvals to satisfy requirements.
- BMP No. 1 – No building or other permit or final approval from SPRINGDALE BOROUGH may be issued until a valid NPDES Permit Coverage has been presented to SPRINGDALE BOROUGH relating to earth disturbance activities.
- BMP No. 2 – SPRINGDALE BOROUGH shall notify DEP or WCCD within 5 days of the receipt of an application for earth disturbance activity for one acre or more.
- BMP No. 3 – SPRINGDALE BOROUGH shall continue to maintain a Stormwater Management Ordinance.

MINIMUM CONTROL MEASURE NO. 5

POST-CONSTRUCTION STORM WATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT

OBJECTIVES:

- BMP 1 through BMP 3 are covered under the Pennsylvania statewide post-construction management permit program.
- BMP 4 requires SPRINGDALE BOROUGH to enact and enforce an ordinance relating to review and non-compliance with municipal applicable post-construction stormwater runoff from new development and redevelopment projects.
- BMP 5 encourages the use of Low Impact Development (LID) relating to Best Management Practices outlined in the PA Stormwater BMP Manual.
- BMP 6 ensures adequate operation and maintenance of all post-construction stormwater management BMPs in municipal applicable projects.

METHODOLOGY:

- Inventory of all construction activities that met NPDES Permit requirements for construction activities since March 10, 2003.
- Assessment and inspection of BMPs at each location.
- Notification or enforcement of inspection and findings to owners of project locations.

INDEX:

1. BMP No. 4 – SPRINGDALE BOROUGH, Stormwater Management Ordinance Number 1263
2. BMP No. 5 – Appendix D – Low Impact Development Approaches
3. BMP No. 6– Inventory of Developments
 - a. Summary of Developments that were constructed post March 10, 2003.
 - b. BMP Summary by Development
 - i. Type of BMPs
 - ii. Recommended Maintenance for BMPs
 - c. Site Inspection Form for Compliance
 - d. Maintain log of correspondence and corrective actions relating to non-compliance of BMPs
 - e. Fee Schedule for non-compliance

MINIMUM CONTROL MEASURE NO. 6

POLLUTION PREVENTION/GOOD HOUSEKEEPING

OBJECTIVES:

- BMP 1: Identify all facilities and activities owned and operated by SPRINGDALE BOROUGH.
- BMP 2: Provide Operation and Maintenance (O&M) Program for all SPRINGDALE BOROUGH facilities relating to stormwater.
- BMP 3: Provide Employee Training Program relating to O&M Program.

METHODOLOGY:

- Inventory of all sites owned by SPRINGDALE BOROUGH and activities associated with the location
- Maintain an Operations and Maintenance Program of all sites owned by SPRINGDALE BOROUGH
- Provide Employee Training and tracking of such training

INDEX:

1. BMP No. 1 – Municipal Facilities
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COMPLAINT FORM

STORMWATER ORDINANCE

STORMWATER MANAGEMENT ORDINANCE

ORDINANCE NO. 1263

MUNICIPALITY OF

Springdale Borough

ALLEGHENY COUNTY, PENNSYLVANIA

Adopted at a Public Meeting Held on

September 18, 2018

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ARTICLE I - GENERAL PROVISIONS

Section 101. Short Title

This Ordinance shall be known and may be cited as the ~~Springdale Borough~~ **Springdale Borough Stormwater Management Ordinance.***

Section 102. Statement of Findings

The governing body of the Municipality finds that:

- A. Inadequate management of accelerated runoff of stormwater resulting from development throughout a watershed increases runoff volumes, flows and velocities, contributes to erosion and sedimentation, overtaxes the carrying capacity of streams and storm sewers, greatly increases the cost of public facilities to carry and control stormwater, undermines flood plain management and flood control efforts in downstream communities, reduces groundwater recharge, threatens public health and safety, and increases nonpoint source pollution of water resources.
- B. A comprehensive program of stormwater management (SWM), including regulation of development and activities causing accelerated runoff, is fundamental to the public health, safety, and welfare and the protection of people of the Commonwealth, their resources, and the environment.
- C. Stormwater is an important water resource that provides groundwater recharge for water supplies and supports the base flow of streams.
- D. The use of green infrastructure (GI) and low impact development (LID) are intended to address the root cause of water quality impairment by using systems and practices which use or mimic natural processes to: 1) infiltrate and recharge, 2) evapotranspire, and/or 3) harvest and use precipitation near where it falls to earth. Green infrastructure practices and LID contribute to the restoration or maintenance of pre-development hydrology.
- E. Federal and state regulations require certain municipalities to implement a program of stormwater controls. These municipalities are required to obtain a permit for stormwater discharges from their separate storm sewer systems under the National Pollutant Discharge Elimination System (NPDES) program.

Section 103. Purpose

The purpose of this Ordinance is to promote health, safety, and welfare within the Municipality and its watershed by minimizing the harms and maximizing the benefits described in Section 102 of this Ordinance, through provisions designed to:

- A. Meet legal water quality requirements under state law, including regulations at 25 Pa. Code 93 to protect, maintain, reclaim, and restore the existing and designated uses of the waters of this Commonwealth.
- B. Preserve natural drainage systems.
- C. Manage stormwater runoff close to the source, reduce runoff volumes and mimic predevelopment hydrology.
- D. Provide procedures and performance standards for stormwater planning and management.
- E. Maintain groundwater recharge to prevent degradation of surface and groundwater quality and to otherwise protect water resources.
- F. Prevent scour and erosion of stream banks and streambeds.
- G. Provide proper operation and maintenance of all stormwater best management practices (BMPs) that are implemented within the Municipality.
- H. Provide standards to meet NPDES permit requirements.

Section 104. Statutory Authority

The Municipality is empowered to regulate land use activities that affect runoff by the authority of the Act of July 31, 1968, P.L. 805, No. 247, The Pennsylvania Municipalities Planning Code, as amended, and/or the Act of October 4, 1978, P.L. 864 (Act 167), 32 P.S. Section 680.1, et seq., as amended, The Stormwater Management Act.

Section 105. Applicability

All regulated activities and all activities that may affect stormwater runoff, including land development and earth disturbance activity, are subject to regulation by this Ordinance.

Section 106. Repealer

Any other ordinance provision(s) or regulation of the Municipality inconsistent with any of the provisions of this Ordinance is hereby repealed to the extent of the inconsistency only.

Section 107. Severability

In the event that a court of competent jurisdiction declares any section or provision of this Ordinance invalid, such decision shall not affect the validity of any of the remaining provisions of this Ordinance.

Section 108. Compatibility with Other Requirements

Approvals issued and actions taken under this Ordinance do not relieve the applicant of the responsibility to secure required permits or approvals for activities regulated by any other code, law, regulation or ordinance.

Section 109. Erroneous Permit

Any permit or authorization issued or approved based on false, misleading or erroneous information provided by an applicant is void without the necessity of any proceedings for revocation. Any work undertaken or use established pursuant to such permit or other authorization is unlawful. No action may be taken by a board, agency or employee of the Municipality purporting to validate such a violation.

Section 110. Waivers

- A. If the Municipality determines that any requirement under this Ordinance cannot be achieved for a particular regulated activity the Municipality may, after an evaluation of alternatives, approve measures other than those in this Ordinance, subject to Section 110, paragraph B. **The proposed area of disturbance shall be less than one (1) acre.** The request for a modification or waiver shall originate with the Landowner, shall be in writing, and shall accompany the Stormwater Management Site Plan submitted to the Municipality. The request shall provide the facts on which the request is based, the provisions of the Ordinance involved, and the proposed modification. The Designated Plan Reviewer shall review the request to determine if it meets the requirements of the Ordinance, including paragraph B below. If acceptable to the Municipality, the Municipality may grant the waiver or modification.
- B. Waivers or modifications of the requirements of this Ordinance may be approved by the Municipality if enforcement will exact undue hardship because of unique physical circumstances or conditions peculiar to the land in question, provided that the modifications will not be contrary or detrimental to the public interest and will achieve the intended outcome, and that the purpose of the Ordinance is preserved. Hardship must be due to such unique physical circumstances or conditions and not to circumstances or conditions generally created by the provisions of the Stormwater Management Ordinance. Cost or financial burden shall not be considered a hardship. Modifications shall not substantially or permanently impair the appropriate use or development of adjacent property. A request for modifications shall be in writing and accompany the Stormwater Management Site Plan submission, as directed in Section 110, paragraph A above.
- C. No waiver or modification of any regulated stormwater activity involving earth disturbance greater than or equal to one (1) acre may be granted by the Municipality.

Section 111. Version of Regulations and Standards

Any reference to a statute, regulation or standard, shall be interpreted to refer to the latest or most current version of that document.

ARTICLE II – DEFINITIONS

For the purposes of this Ordinance, certain terms and words used herein shall be interpreted as follows:

- A. Words used in the present tense include the future tense; the singular number includes the plural, and the plural number includes the singular; words of masculine gender include feminine gender; and words of feminine gender include masculine gender.
- B. The word "includes" or "including" shall not limit the term to the specific example but is intended to extend its meaning to all other instances of like kind and character.
- C. The words "shall" and "must" are mandatory; the words "may" and "should" are permissive.

These definitions do not necessarily reflect the definitions contained in pertinent regulations or statutes, and are intended for this Ordinance only.

Act 167 - The Municipality is empowered to regulate land use activities that affect runoff and surface and groundwater quality and quantity by the authority of the Act of October 4, 1978, P.L. 864 (Act 167), 32 P.S. Section 680.1, et seq., as amended, the "Storm Water Management Act."

Agricultural Activity – Activities associated with agriculture such as agricultural cultivation, agricultural operation, and animal heavy use areas. This includes the work of producing crops including tillage, land clearing, plowing, disking, harrowing, planting, harvesting crops or pasturing and raising of livestock and installation of conservation measures. Construction of new buildings or impervious area is not considered an agricultural activity.

Applicant – A landowner, developer, or other person who has filed an application to the Municipality for approval to engage in any regulated activity at a project site in the Municipality.

Best Management Practice (BMP) – Activities, facilities, designs, measures, or procedures used to manage stormwater impacts from regulated activities, to meet state water quality requirements, to promote groundwater recharge, and to otherwise meet the purposes of this Ordinance. Stormwater BMPs are commonly grouped into one of two broad categories or measures: "structural" or "non-structural." In this Ordinance, non-structural BMPs or measures refer to operational and/or behavior-related practices that attempt to minimize the contact of pollutants with stormwater runoff, whereas structural BMPs or measures are those that consist of a physical device or practice that is installed to capture and treat stormwater runoff. Structural BMPs include, but are not limited to, a wide variety of practices and devices, from large-scale retention ponds and constructed wetlands, to small-scale underground treatment systems, infiltration facilities, filter strips, low impact design, bioretention, wet ponds, permeable paving, grassed swales, riparian or forested buffers, sand filters, detention basins, and manufactured devices. Structural stormwater BMPs are permanent appurtenances to the project site.

Conservation District – A conservation district, as defined in Section 3(c) of the Conservation District Law (3 P. S. § 851(c)) that has the authority under a delegation agreement executed with DEP to administer and enforce all or a portion of the regulations promulgated under 25 Pa. Code 102.

Design Storm – The magnitude and temporal distribution of precipitation from a storm event measured in probability of occurrence (e.g., a 5-year storm) and duration (e.g., 24 hours) used in the design and evaluation of stormwater management systems. Also see Return Period.

Designated Plan Reviewer – A Qualified Professional as defined herein, or organization such as the Allegheny County Conservation District, that has been designated by the Municipality to be the reviewer of SWM Site Plans for the Municipality, and shall be understood to be the reviewer where indicated as the Municipality within this ordinance.

Detention Basin – An impoundment designed to collect and retard stormwater runoff by temporarily storing the runoff and releasing it at a predetermined rate. Detention basins are designed to drain completely in a designed period after a rainfall event, and to become dry until the next rainfall event.

Detention Volume – The volume of runoff that is captured and released into the waters of the Commonwealth at a controlled rate.

DEP – The Pennsylvania Department of Environmental Protection.

Development Site (Site) – See Project Site.

Disturbed Area – An unstabilized land area where an earth disturbance activity is occurring or has occurred.

Earth Disturbance Activity – A construction or other human activity which disturbs the surface of the land, including, but not limited to: clearing and grubbing; grading; excavations; embankments; road maintenance; building construction; and the moving, depositing, stockpiling, or storing of soil, rock, or earth materials.

Erosion – The natural process by which the surface of the land is worn away by water, wind, or chemical action.

Existing Condition – The dominant land cover during the 5-year period immediately preceding a proposed regulated activity.

FEMA – Federal Emergency Management Agency.

Floodplain – Any land area susceptible to inundation by water from any natural source or delineated by applicable FEMA maps and studies as being a special flood hazard area. Also includes areas that comprise Group 13 Soils, as listed in Appendix A of the Pennsylvania DEP Technical Manual for Sewage Enforcement Officers (as amended or replaced from time to time by DEP).

Floodway – The channel of the watercourse and those portions of the adjoining floodplains that are reasonably required to carry and discharge the 100-year flood. Unless otherwise specified, the boundary of the floodway is as indicated on maps and flood insurance studies provided by FEMA. In an area where no FEMA maps or studies have defined the boundary of the 100-year floodway, it is assumed—absent evidence to the contrary—that the floodway extends from the stream to 50 feet from the top of the bank of the stream.

Forest Management/Timber Operations – Planning and activities necessary for the management of forestland. These include conducting a timber inventory, preparation of forest management plans, silvicultural treatment, cutting budgets, logging road design and construction, timber harvesting, site preparation, and reforestation.

Green Infrastructure – Systems and practices that use or mimic natural processes to infiltrate, evapotranspire, or reuse stormwater on the site where it is generated.

Groundwater – Water beneath the earth's surface that supplies wells and springs and is within the saturated zone of soil and rock.

Groundwater Recharge – The replenishment of existing natural underground water supplies from precipitation or overland flow.

Hydrologic Soil Group (HSG) – Infiltration rates of soils vary widely and are affected by subsurface permeability as well as surface intake rates. Soils are classified into four HSGs (A, B, C, and D) according to their minimum infiltration rate, which is obtained for bare soil after prolonged wetting. The NRCS defines the four groups and provides a list of most of the soils in the United States and their group classification. The soils in the area of the development site may be identified from a soil survey report that can be obtained from local NRCS offices or conservation district offices. Soils become less pervious as the HSG varies from A to D (NRCS^{1,2}).

Impervious Surface (Impervious Area) – A surface that prevents the infiltration of water into the ground. Impervious surfaces (or areas) shall include, but not be limited to: roofs; additional indoor living spaces, patios, garages, storage sheds and similar structures; and any new streets or sidewalks. Decks, parking areas, and driveway areas are counted as impervious areas if they directly prevent infiltration.

Invasive Species – DCNR defines invasive plants as those species that are not native to the state, grow aggressively, and spread and displace native vegetation. (see http://www.dcnr.state.pa.us/cs/groups/public/documents/document/dcnr_010314.pdf for a list of invasive species).

Infiltration – Movement of surface water into the soil, where it is absorbed by plant roots, evaporated into the atmosphere, or percolated downward to recharge groundwater.

Land Development (Development) – Inclusive of any or all of the following meanings: (i) the improvement of one lot or two or more contiguous lots, tracts, or parcels of land for any purpose involving (a) a group of two or more buildings or (b) the division or allocation of land or space between or among two or more existing or prospective occupants by means of, or for the purpose of streets, common areas, leaseholds, condominiums, building groups, or other features; (ii) any subdivision of land; (iii) development in accordance with Section 503(1.1) of the PA Municipalities Planning Code.

Low Impact Development (LID) – Site design approaches and small-scale stormwater management practices that promote the use of natural systems for infiltration, evapotranspiration, and reuse of rainwater. LID can be applied to new development, urban retrofits, and revitalization projects. LID utilizes design techniques that infiltrate, filter, evaporate, and store runoff close to its source. Rather than rely on costly large-scale conveyance and treatment systems, LID addresses stormwater through a variety of small, cost-effective landscape features located on-site.

Municipality – (Municipality Name), Allegheny County, Pennsylvania.

Native Vegetation – Plant species that have historically grown in Pennsylvania and are not invasive species as defined herein.

NRCS – USDA Natural Resources Conservation Service (previously SCS).

Peak Discharge – The maximum rate of stormwater runoff from a specific storm event.

Pervious Area – Any area not defined as impervious.

Project Site – The specific area of land where any regulated activities in the Municipality are planned, conducted, or maintained.

Qualified Professional – Any person licensed by the Pennsylvania Department of State or otherwise qualified under Pennsylvania law to perform the work required by this Ordinance.

Regulated Activities – Any earth disturbance activities or any activities that involve the alteration or development of land in a manner that may affect stormwater runoff.

Regulated Earth Disturbance Activity – Activity involving earth disturbance subject to regulation under 25 Pa. Code 92, 25 Pa. Code 102, or the Clean Streams Law.

Release Rate – The percentage of existing conditions peak rate of runoff from a site or subarea to which the proposed conditions peak rate of runoff must be reduced to protect downstream areas.

Release Rate District – A watershed or portion of a watershed for which a release rate has been established by an adopted Act 167 Stormwater Management Plan.

Retention Volume/Removed Runoff – The volume of runoff that is captured and not released directly into the surface waters of this Commonwealth during or after a storm event.

Return Period – The average interval, in years, within which a storm event of a given magnitude can be expected to occur one time. For example, the 25-year return period rainfall would be expected to occur on average once every 25 years; or stated in another way, the probability of a 25-year storm occurring in any one year is 0.04 (i.e., a 4% chance).

Riparian Buffer – A permanent vegetated area of trees and shrubs located adjacent to streams, lakes, ponds and wetlands.

Runoff – Any part of precipitation that flows over the land.

Sediment – Soils or other materials transported by surface water as a product of erosion.

State Water Quality Requirements – The regulatory requirements to protect, maintain, reclaim, and restore water quality under Title 25 of the Pennsylvania Code and the Clean Streams Law.

Stormwater – Drainage runoff from the surface of the land resulting from precipitation or snow or ice melt.

Stormwater Management Facility – Any structure, natural or man-made, that, due to its condition, design, or construction, conveys, stores, or otherwise affects stormwater runoff. Typical stormwater management facilities include, but are not limited to: detention and retention basins; open channels; storm sewers; pipes; and infiltration facilities.

Stormwater Management Site Plan – The plan prepared by the developer or the developer's representative indicating how stormwater runoff will be managed at the development site in accordance with this Ordinance. **Stormwater Management Site Plan** will be designated as **SWM Site Plan** throughout this Ordinance.

Stream - A channel or conveyance of surface water having a defined bed and banks, whether natural or artificial, with perennial or intermittent flow.

Subdivision – As defined in The Pennsylvania Municipalities Planning Code, Act of July 31, 1968, P.L. 805, No. 247.

USDA – United States Department of Agriculture.

Waters of this Commonwealth – Any and all rivers, streams, creeks, rivulets, impoundments, ditches, watercourses, storm sewers, lakes, dammed water, wetlands, ponds, springs, and all other bodies or channels of conveyance of surface and underground water, or parts thereof, whether natural or artificial, within or on the boundaries of this Commonwealth.

Watercourse – See Stream.

Watershed – Region or land area drained by a river, watercourse, or other surface water of this Commonwealth to a downstream point.

Wetland – Areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, including swamps, marshes, bogs, and similar areas.

ARTICLE III – STORMWATER MANAGEMENT STANDARDS

Section 301. General Requirements

- A. For all regulated activities, unless preparation of an SWM Site Plan is specifically exempted in Section 302:
1. Preparation and implementation of an approved SWM Site Plan is required.
 2. No regulated activities shall commence until the Municipality issues written approval of an SWM Site Plan, which demonstrates compliance with the requirements of this Ordinance.
- B. SWM Site Plans approved by the Municipality, in accordance with Section 406, shall be on site throughout the duration of the regulated activity.
- C. These standards apply to the landowner and any person engaged in regulated activities.
- D. For all regulated earth disturbance activities, erosion and sediment control BMPs shall be designed, implemented, operated, and maintained during the regulated earth disturbance activities (e.g., during construction) to meet the purposes and requirements of this Ordinance and to meet all requirements under Title 25 of the Pennsylvania Code and the Clean Streams Law. Various BMPs and their design standards are listed in the *Erosion and Sediment Pollution Control Program Manual (E&S Manual)*, No. 363-2134-008, as amended and updated.
- E. Impervious areas:
1. The measurement of impervious areas shall include all of the impervious areas in the total proposed development even if development is to take place in stages.
 2. For development taking place in stages, the entire development plan must be used in determining conformance with this Ordinance.
 3. For projects that add impervious area to a parcel, the total impervious area on the parcel is subject to the requirements of this Ordinance; except that the volume controls in Section 303 and the peak rate controls of Section 304 do not need to be retrofitted to existing impervious areas that are not being altered by the proposed regulated activity.
- F. Stormwater flows onto adjacent or downstream property shall not be created, increased, decreased, relocated, impeded, or otherwise altered without written notification of the affected property owner(s). Notification shall include a description of the proposed development and the stormwater flows that are being created, increased, decreased, relocated, impeded, or otherwise altered. Adjacent property shall at a minimum include any property having a shared boundary with the subject property of the SWM Site Plan, however, if in the judgement of the Designated Plan Reviewer additional properties are being affected, additional notifications may be required. Proof of notification (signed postal receipt for example) shall be included as part of the SWM Plan submission to the Municipality. Such stormwater flows shall be subject to the requirements of this Ordinance.
- G. All regulated activities shall include such measures as necessary to:
1. Protect health, safety, and property.
 2. Meet the water quality goals of this Ordinance by implementing measures to:
 - a. Minimize disturbance to floodplains, wetlands, and wooded areas.
 - b. Maintain or extend riparian buffers.
 - c. Avoid erosive flow conditions in natural flow pathways.
 - d. Minimize thermal impacts to waters of this Commonwealth.
 - e. Disconnect impervious surfaces by directing runoff to pervious areas, wherever possible.

3. Incorporate methods described in the *Pennsylvania Stormwater Best Management Practices Manual* (BMP Manual³). If methods other than green infrastructure and LID methods are proposed to achieve the volume and rate controls required under this Ordinance, the SWM Site Plan must include a detailed justification, acceptable to the Designated Plan Reviewer, demonstrating that the use of LID and green infrastructure is not practicable.
- H. Infiltration BMPs should be dispersed throughout the project site at strategic locations, made as shallow as practicable, and located to maximize use of natural on-site infiltration features while still meeting the other requirements of this Ordinance.
- I. Normally dry, open top, storage facilities should completely drain both the volume control and rate control capacities over a period of time not less than 24 and not more than 72 hours from the end of the design storm.
- J. The design storm precipitation depths to be used in the analysis of peak rates of discharge shall be as obtained in PennDOT's Drainage Manual, Publication 584, Appendix 7A; or obtained from the latest version of the Precipitation-Frequency Atlas of the United States, National Oceanic and Atmospheric Administration (NOAA), National Weather Service, Hydrometeorological Design Studies Center, Silver Spring, Maryland. NOAA's Atlas 14⁵ can be accessed at: <http://hdsc.nws.noaa.gov/hdsc/pfds/>.
- K. For all regulated activities, SWM BMPs shall be designed, implemented, operated, and maintained to meet the purposes and requirements of this Ordinance and to meet all requirements under Title 25 of the Pennsylvania Code, the Clean Streams Law, and the Storm Water Management Act.
- L. Various BMPs and their design standards are listed in the BMP Manual³.
- M. The municipality may, after consultation with DEP, approve measures for meeting the state water quality requirements other than those in this Ordinance, provided that they meet the minimum requirements of, and do not conflict with, state law including, but not limited to, the Clean Streams Law.

Section 302. Exemptions

- A. Regulated activities that result in cumulative earth disturbances less than one (1) acre are exempt from the requirements in Section 401 of this ordinance except as provided in paragraph B below.
- B. Earth disturbances between one-quarter (0.25) acre (10,890 square feet) and one (1) acre of earth disturbance must submit a SWM Site Plan to the Municipality which shall consist of the following items and related supportive material needed to determine compliance with Sections 303 through 305. The applicant can use the protocols in the Small Project Stormwater Management Site Plan if Municipality has adopted Appendix C.
 - a. General description of proposed stormwater management techniques, including construction specifications of the materials to be used for stormwater management facilities.
 - b. An erosion and sediment control plan, including all reviews and letters of adequacy from the Conservation District where appropriate.
 - c. Limits of earth disturbance, including the type and amount of impervious area that is proposed; proposed structures, roads, paved areas, and buildings; and a statement, signed by the Applicant, acknowledging that any revision to the approved drainage plan must be approved by the Municipality, and that a revised erosion and sediment control plan must be submitted to the Municipality or Conservation District for approval.
 - d. All stormwater management facilities must be located on a plan and described in detail; and all calculations, assumptions, and criteria used in the design of the stormwater management facilities must be shown.
- C. Agricultural activity is exempt from the SWM Site Plan preparation requirements of this Ordinance provided the activities are performed according to the requirements of 25 Pa. Code Chapter 102.
- D. Forest management and timber operations are exempt from the SWM Site Plan preparation requirements of this Ordinance provided the activities are performed according to the requirements of 25 Pa. Code Chapter 102.
- E. Roadway resurfacing and maintenance projects, which do not increase impervious area, and underground infrastructure projects are exempt from the provisions of this Ordinance, provided the activities meet the requirements of all other Municipal, State and Federal requirements.

- F. Exemptions from any provisions of this Ordinance shall not relieve the applicant from the requirements in Sections 301.D. through J.
- G. The Municipality may deny or revoke any exemption pursuant to this Section at any time for any project that the Municipality believes may pose a threat to public health and safety or the environment.
- H. Voluntary Green Stormwater Infrastructure (GSI) retrofit projects that are solely intended to better manage runoff from existing development and are not part of new development or redevelopment, are exempt from the stormwater management provisions of this Ordinance. This does not exempt such projects from any other municipal, state, or federal regulation.

Section 303. Volume Controls

The green infrastructure and low impact development practices provided in the BMP Manual³ shall be utilized for all regulated activities wherever possible. Water volume controls shall be implemented using the *Design Storm Method* in Subsection A or the *Simplified Method* in Subsection B below. Water volume controls shall be implemented using the *Design Storm Method* in Subsection A or the *Simplified Method* in Subsection B below, or alternative design criteria as allowed by PA Code Title 25, Chapter 102.

- A. The *Design Storm Method* (CG-1 in the BMP Manual³) is applicable as a method to any size of regulated activity. This method requires detailed modeling based on site conditions. The following shall be incorporated into the CG-1 method:
 - 1. Do not increase the post-development total runoff volume for all storms equal to or less than the 2-year 24-hour duration precipitation.
 - 2. At least the first one inch of runoff from the net increase in impervious surfaces shall be permanently removed from the runoff flow, i.e., it shall not be released into the surface waters of this Commonwealth. Removal options include reuse, evaporation, transpiration, and infiltration. If the developer provides justification that the listed removal options are not feasible, and the Designated Plan Reviewer agrees, runoff shall be detained in a facility designed for a 24 to 72 hour dewatering time in an area with a dedicated stormwater system (not contributory to a combined sewer system) and shall be detained in a facility designed for a 72 hour dewatering time in an area contributory to a combined sewer system before discharge to local stormwater systems or the environment.
 - 3. For modeling purposes:
 - a. Existing (predevelopment) non-forested pervious areas must be considered meadow in good condition.
 - b. 20% of existing impervious area, when present, shall be considered meadow in good condition in the model for existing conditions.
- B. The *Simplified Method* (CG-2 in the BMP Manual³) provided below is independent of site conditions and should be used if the *Design Storm Method* is not followed. This method is not applicable to regulated activities greater than one acre or for projects that require design of stormwater storage facilities. For new impervious surfaces:
 - 1. Stormwater facilities shall capture at least the first two (2) inches of runoff from the net increase in impervious surfaces.
 - 2. At least the first one inch of runoff from the net increase in impervious surfaces shall be permanently removed from the runoff flow, i.e., it shall not be released into the surface waters of this Commonwealth. Removal options include reuse, evaporation, transpiration, and infiltration. If the developer provides justification that the listed removal options are not feasible, and the Designated Plan Reviewer agrees, runoff shall be detained in a facility designed for a 24 hour dewatering time in an area with a dedicated stormwater system (not contributory to a combined sewer system) and shall be detained in a facility designed for a 72 hour dewatering time in an area contributory to a combined sewer system before discharge to local stormwater systems or the environment.

3. Wherever possible, infiltration facilities should be designed to accommodate infiltration of the entire permanently removed runoff; however, in all cases at least the first 0.5 inch of the permanently removed runoff should be infiltrated.
4. This method is exempt from the requirements of Section 304, Rate Controls.

Section 304. Rate Controls

- A. For areas not covered by a release rate map from an approved Act 167 Stormwater Management Plan:

Post-development discharge rates shall not exceed the pre-development discharge rates for the 1-, 2-, 5-, 10-, 25-, 50-, and 100-year, 24-hour storm events. This is the equivalent to a 100% release rate area when compared to those rates shown in the maps contained in Appendix A (New and Existing Release Rate Management Districts). This Pre-development to Post-development control is not to be misconstrued as the same as the "Conditional Direct Discharge" areas on the Release Rate maps. If it is shown that the peak rates of discharge indicated by the post-development analysis are less than or equal to the peak rates of discharge indicated by the pre-development analysis for 1-, 2-, 5-, 10-, 25-, 50-, and 100-year, 24-hour storms, then the requirements of this section have been met. Otherwise, the applicant shall provide additional controls as necessary to satisfy the peak rate of discharge requirement. Peak flows should be computed using the methods included in the Chapter titled "Stormwater Calculations and Methodology" of the PADEP Stormwater Management BMP Manual.

- B. For areas covered by a release rate map from an approved Act 167 Stormwater Management Plan:

For the 1-, 2-, 5-, 10-, 25-, 50-, and 100-year, 24-hour storm events, the post-development peak discharge rates will follow the applicable approved release rate maps. These maps are contained in Appendix A (New and Existing Release Rate Management Districts) of this Model Ordinance. For any areas not shown on the release rate maps, the post-development discharge rates shall not exceed the pre-development discharge rates for the specified design events. Peak flows should be computed using the methods included in Chapter 8 of the PADEP Stormwater Management BMP Manual.

Section 305. Riparian Buffers

- A. In order to protect and improve water quality, a Riparian Buffer Easement shall be created and recorded as part of any subdivision or land development that encompasses a Riparian Buffer. The intent of this ordinance in establishing a Riparian Buffer is to protect and improve stream water quality. The Riparian Buffer is intended to slow overland flow to the stream through the presence of native grasses, trees and shrubs, allowing infiltration/groundwater recharge; causing deposition of sediment, nutrients, pesticides, and other pollutants in the buffer rather than in the stream; and reducing erosion by providing stream bank stabilization. The trees provide shade for streams; keeping waters cooler and reducing evaporation.
- B. Except as required by PA Code Title 25 Chapter 102, the Riparian Buffer Easement shall be required for all streams (as defined in Article II) with a contributing watershed area of greater than 10 acres. The Riparian Buffer Easement shall be measured to be a minimum of 35 feet from the top of the streambank (on each side).
- C. Minimum Management Requirements for Riparian Buffers.
1. No use or construction within the Riparian Buffer shall be permitted that is inconsistent with the intent of the Riparian Buffer as described in Section 305.A.
 2. Existing native vegetation shall be protected and maintained within the Riparian Buffer Easement.
 3. Whenever practicable, invasive vegetation shall be actively removed and the Riparian Buffer Easement shall be planted with native trees, shrubs and other vegetation to create a diverse native plant community appropriate to the intended ecological context of the site.
- D. The Riparian Buffer Easement shall be enforceable by the Municipality and shall be recorded in the appropriate County Recorder of Deeds Office, so that it shall run with the land and shall limit the use of the property located therein. The easement shall allow for the continued private ownership and shall count toward the minimum lot area required by Zoning, unless otherwise specified in the municipal Zoning Ordinance.

- E. Any permitted use within the Riparian Buffer Easement shall be conducted in a manner that will maintain the extent of the existing 100-year floodplain, improve or maintain the stream stability, and preserve and protect the ecological function of the floodplain.
- F. Stormwater drainage pipes shall be permitted within the Riparian Buffer Easement, but they shall cross the Easement in the shortest practical distance. Other structural stormwater management facilities are not permitted within the Riparian Buffer Easement.
- G. The following conditions shall apply when public and/or private recreation trails are permitted by the Municipality within Riparian Buffers:
 - 1. It is preferred that trails be designed to be permeable and for non-motorized use only; however, impermeable trails are permitted provided they have adequate drainage
 - 2. Trails shall be designed to have the least impact on native plant species and other sensitive environmental features.
- H. Septic drainfields and sewage disposal systems shall not be permitted within the Riparian Buffer Easement and shall comply with setback requirements established under 25 Pa. Code Chapter 73.
- I. Underground utilities shall be permitted within the Riparian Buffer Easement; however, work shall be performed to minimize disturbance area and removal of trees. Restoration within the Riparian Buffer Easement shall be with native species of trees, grasses, and other plantings. One tree shall be planted for each tree removed and the restoration shall be designed by a Registered Professional with the requisite experience. Aboveground utilities shall only be permitted to cross the Easement perpendicular to the Easement or in the shortest practical distance. Existing utilities may remain and be maintained as required.

ARTICLE IV – STORMWATER MANAGEMENT (SWM) SITE PLAN REQUIREMENTS

Section 401. Plan Requirements

Appropriate sections from the Municipality's Subdivision and Land Development Ordinance, and other applicable local ordinances, shall be followed in preparing the SWM Site Plans. In instances where the Municipality lacks Subdivision and Land Development regulations, the content of SWM Site Plans shall follow the Allegheny County Subdivision and Land Development Ordinance.

The Municipality shall not approve any SWM Site Plan that is deficient in meeting the requirements of this Ordinance. At its sole discretion and in accordance with this Article, when a SWM Site Plan is found to be deficient, the Municipality may either disapprove the submission and require a resubmission, or in the case of minor deficiencies, the Municipality may accept submission of modifications.

The following items shall be included in the SWM Site Plan:

A. Provisions for permanent access or maintenance easements for all physical SWM BMPs, such as ponds and infiltration structures, as necessary to implement the Operation and Maintenance (O&M) Plan discussed in paragraph C.9 below.

B. The following signature block for the Municipality:

"(Municipal official or Designated Plan Reviewer (Section 403.A)), on this date (Signature date), has reviewed and hereby certifies that the SWM Site Plan meets all design standards and criteria of the Municipal Ordinance No. (number assigned to ordinance), except where waivers have been granted as noted on the Plan. The review is based on a survey and plan prepared by others and assumes that all information is correct and valid as submitted."

C. The SWM Site Plan shall provide the following information:

1. The overall stormwater management concept for the project.
2. A determination of site conditions in accordance with the BMP Manual³. A detailed site evaluation shall be completed for projects proposed in environmentally sensitive areas, such as brownfields.
3. Stormwater runoff design computations and documentation as specified in this Ordinance, or as otherwise necessary to demonstrate that the maximum practicable measures have been taken to meet the requirements of this Ordinance, including the recommendations and general requirements in Section 301.
4. Expected project time schedule.
5. A soil erosion and sediment control plan, where applicable, as prepared for and submitted to the approval authority.
6. The effect of the project (in terms of runoff volumes, water quality, and peak flows) on surrounding properties and aquatic features and on any existing stormwater conveyance system that may be affected by the project.
7. Plan and profile drawings of all SWM BMPs, including drainage structures, pipes, open channels, and swales.
8. SWM Site Plan shall show the locations of existing and proposed on-lot wastewater facilities and water supply wells, property boundaries, existing and proposed topography, point(s) of interest, utilities, and potential utility conflicts.
9. The SWM Site Plan shall include an O&M Plan for all existing and proposed physical stormwater management facilities. This plan shall address long-term ownership and responsibilities for O&M including

type and schedule/frequency of maintenance activities, personnel and equipment requirements, estimated annual maintenance costs, and method of financing continuing O&M.

10. A justification, acceptable to the Designated Plan Reviewer, must be included in the SWM Site Plan if BMPs other than green infrastructure methods and LID practices are proposed to achieve the volume, rate and water quality controls under this Ordinance.

Section 402. Plan Submission

Up to five copies of the SWM Site Plan shall be submitted as follows:

1. Two copies to the Municipality.
2. One copy to the municipal engineer (when applicable).
3. One copy to the Allegheny County Conservation District (when requested by the District).
4. One copy to the Allegheny County Sanitary Authority (in areas with combined sewer systems).

Section 403. Plan Review

- A. The Municipality has designated Municipal Eng as the Designated Plan Reviewer of SWM Site Plans for the Municipality, and shall be understood to be the reviewer where indicated as the Municipality within this ordinance.
- B. SWM Site Plans shall be reviewed by the Municipality for consistency with the provisions of this Ordinance.
- C. The Municipality shall notify the applicant in writing within 45 days whether the SWM Site Plan is approved or disapproved or requires additional documentation. If the SWM Site Plan involves a Subdivision and Land Development Plan, the notification shall occur within the time period allowed by the Municipalities Planning Code (90 days). If a longer notification period is provided by other statute, regulation, or ordinance, the applicant will be so notified by the Municipality.
- D. For any SWM Site Plan that proposes to use any BMPs other than green infrastructure and LID practices to achieve the volume and rate controls required under this Ordinance, the Municipality will not approve the SWM Site Plan unless it determines that green infrastructure and LID practices are not practicable.
- E. If the Municipality disapproves the SWM Site Plan, the Municipality will state the reasons for the disapproval in writing. The Municipality also may approve the SWM Site Plan with conditions and, if so, shall provide the acceptable conditions for approval in writing.
- F. The applicable review fee, in accord with Article VI, must accompany a resubmission of a disapproved SWM site plan.

Section 404. Modification of Plans

A modification to a submitted SWM Site Plan that involves a change in SWM BMPs or techniques, or that involves the relocation or redesign of SWM BMPs, or that is necessary because soil or other conditions are not as stated on the SWM Site Plan, as determined by the Designated Plan Reviewer, shall require a resubmission of the modified SWM Site Plan in accordance with this Article.

Section 405. Resubmission of Disapproved SWM Site Plans

A disapproved SWM Site Plan may be resubmitted, with the revisions addressing the Municipality's concerns, to the Municipality in accordance with this Article. The applicable review fee, in accord with Article VI, must accompany a resubmission of a disapproved SWM Site Plan.

Section 406. Authorization to Construct and Term of Validity

The Municipality's approval of an SWM Site Plan authorizes the regulated activities contained in the SWM Site Plan for a maximum term of validity of 5 years following the date of approval. The Municipality may specify a term of validity shorter than 5 years in the approval for any specific SWM Site Plan. Terms of validity shall commence on the date the Municipality signs the approval for an SWM Site Plan. If an approved SWM Site Plan is not completed according to Section 407 within the term of validity, then the Municipality may consider the SWM Site Plan disapproved and may revoke any and all permits. SWM Site Plans that are considered disapproved by the Municipality shall be resubmitted in accordance with Section 405 of this Ordinance.

Section 407. Record Drawings, Completion Certificate, and Final Inspection

- A. The developer shall be responsible for providing record drawings of all SWM BMPs included in the approved SWM Site Plan. The record drawings and an explanation of any discrepancies with the construction plans shall be submitted to the Municipality.
- B. The record drawing submission shall include a certification of completion signed by a qualified professional verifying that all permanent SWM BMPs have been constructed according to the approved plans and specifications. The latitude and longitude coordinates for all permanent SWM BMPs must also be submitted, at the central location of the BMPs. If any licensed qualified professionals contributed to the construction plans, then a licensed qualified professional must sign the completion certificate.
- C. The Municipality may conduct inspections during construction as it deems appropriate. If inspections performed by the Municipality reveal deficiencies from the submitted and approved SWM Site Plan, the Municipality may request corrective actions. Any corrective action shall be at the cost of the stormwater facility owner.
- D. After receipt of the completion certification by the Municipality, the Municipality may conduct a final inspection.

ARTICLE V – OPERATION AND MAINTENANCE

Section 501. Responsibilities of Developers and Landowners

- A. The Municipality shall make the final determination on the continuing maintenance responsibilities prior to final approval of the SWM Site Plan. The Municipality may require a dedication of such facilities as part of the requirements for approval of the SWM Site Plan. Such a requirement is not an indication that the Municipality will accept the facilities. The Municipality reserves the right to reject or accept the ownership and operating responsibility for any portion of the stormwater management controls.
- B. Facilities, areas, or structures used as SWM BMPs shall be enumerated as permanent real estate appurtenances and recorded as deed restrictions or conservation easements that run with the land.
- C. The O&M Plan shall be recorded as a restrictive deed covenant that runs with the land.
- D. The Municipality may take enforcement actions against an owner for any failure to satisfy the provisions of this Article.

Section 502. Operation and Maintenance Agreements

- A. Prior to final approval of the SWM Site Plan, the property owner shall sign and record an Operation and Maintenance (O&M) Agreement (see Appendix B) covering all stormwater control facilities which are to be privately owned.
 - 1. The owner, successor and assigns shall maintain all facilities in accordance with the approved maintenance schedule in the O&M Agreement.
 - 2. The owner shall convey to the Municipality conservation easements to assure access for periodic inspections by the Municipality and maintenance, as necessary.
 - 3. The owner shall keep on file with the Municipality the name, address, and telephone number of the person or company responsible for maintenance activities; in the event of a change, new information shall be submitted by the owner to the Municipality within ten (10) working days of the change.
- B. The owner is responsible for operation and maintenance (O&M) of the SWM BMPs. If the owner fails to adhere to the O&M Agreement, the Municipality may perform the services required and charge the owner appropriate fees. Nonpayment of fees may result in a lien against the property.

Section 503. Performance Guarantee

For SWM Site Plans that involve subdivision and land development, the applicant shall provide a financial guarantee to the Municipality for the timely installation and proper construction of all stormwater management controls as required by the approved SWM Site Plan and this Ordinance in accordance with the provisions of Sections 509, 510, and 511 of the Pennsylvania Municipalities Planning Code.

ARTICLE VI – FEES AND EXPENSES

Section 601. General

The Municipality may include all costs incurred into the review fee charged to an applicant.

The review fee may include, but not be limited to, costs for the following:

- A. Administrative/clerical processing.
- B. Review of the SWM Site Plan.
- C. Review of a SWM Site Plan resubmission.
- D. Attendance at meetings.
- E. Inspections.

ARTICLE VII – PROHIBITIONS

Section 701. Prohibited Discharges and Connections

- A. Any drain or conveyance, whether on the surface or subsurface, that allows any non-stormwater discharge including sewage, process wastewater, and wash water to enter a regulated small MS4 or to enter the surface waters of this Commonwealth is prohibited.
- B. No person shall allow, or cause to allow, discharges into a regulated small MS4, or discharges into waters of this Commonwealth, which are not composed entirely of stormwater, except (1) as provided in paragraph C below and (2) discharges authorized under a state or federal permit.
- C. The following discharges are authorized unless they are determined to be significant contributors to pollution of a regulated small MS4 or to the waters of this Commonwealth:
 - 1. Discharges or flows from firefighting activities.
 - 2. 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).
 - 3. Non-contaminated irrigation water, water from lawn maintenance, landscape drainage and flows from riparian habitats and wetlands.
 - 4. Diverted stream flows and springs.
 - 5. Non-contaminated pumped ground water and water from foundation and footing drains and crawl space pumps.
 - 6. Non-contaminated HVAC condensation and water from geothermal systems.
 - 7. Residential (i.e., not commercial) vehicle wash water where cleaning agents are not utilized.
 - 8. Non-contaminated hydrostatic test water discharges, if such discharges do not contain detectable concentrations of TRC.
 - 9. Dechlorinated swimming pool and hot tub discharges, as long as the PADEP guidelines for swimming pool water discharge are followed.
- D. In the event that the Municipality or DEP determines that any of the discharges identified in Subsection C significantly contribute pollutants to a regulated small MS4 or to the waters of this Commonwealth, the Municipality or DEP will notify the responsible person(s) to cease the discharge.

Section 702. Roof Drains and Sump Pumps

Roof drains and sump pumps shall discharge to infiltration or vegetative BMPs wherever feasible.

Section 703. Alteration of SWM BMPs

No person shall modify, remove, fill, landscape, or alter any SWM BMPs, facilities, areas, drainage easements, or structures that were installed as a requirement of this Ordinance without the written approval of the Municipality.

ARTICLE VIII – ENFORCEMENT AND PENALTIES

Section 801. Right of Entry

Upon presentation of proper credentials, the Municipality or its designated agent may enter at reasonable times upon any property within the Municipality to inspect the condition of the stormwater structures and facilities in regard to any aspect regulated by this Ordinance.

Section 802. Inspection

The landowner or the owner's designee (including the Municipality for dedicated and owned facilities) shall inspect SWM BMPs, facilities and/or structures installed under this Ordinance according to the following frequencies, at a minimum, to ensure the BMPs, facilities and/or structures continue to function as intended:

1. Annually for the first 5 years.
2. Once every 3 years thereafter.
3. During or immediately after the cessation of a 10-year or greater storm.

Inspections should be conducted during or immediately following precipitation events. A written inspection report shall be created to document each inspection. The inspection report shall contain the date and time of the inspection, the individual(s) who completed the inspection, the location of the BMP, facility or structure inspected, observations on performance, and recommendations for improving performance, if applicable. Inspection reports shall be submitted to the Municipality within 30 days following completion of the inspection.

Section 803. Enforcement

- A. It shall be unlawful for a person to undertake any regulated activity except as provided in an approved SWM Site Plan, unless specifically exempted in Section 302.
- B. It shall be unlawful to violate Section 703 of this Ordinance.
- C. Inspections regarding compliance with the SWM Site Plan are a responsibility of the Municipality.

Section 804. Suspension and Revocation

- A. Any approval or permit issued by the Municipality pursuant to this Ordinance may be suspended or revoked for:
 1. Non-compliance with or failure to implement any provision of the approved SWM Site Plan or O&M Agreement.
 2. A violation of any provision of this Ordinance or any other applicable law, ordinance, rule, or regulation relating to the Regulated Activity.
 3. The creation of any condition or the commission of any act during the Regulated Activity which constitutes or creates a hazard, nuisance, pollution, or endangers the life or property of others.
- B. A suspended approval may be reinstated by the Municipality when:
 1. The Municipality has inspected and approved the corrections to the violations that caused the suspension.
 2. The Municipality is satisfied that the violation has been corrected.
- C. An approval that has been revoked by the Municipality cannot be reinstated. The applicant may apply for a new approval under the provisions of this Ordinance.

- D. If a violation causes no immediate danger to life, public health, or property, at its sole discretion, the Municipality may provide a limited time period for the owner to correct the violation. In these cases, the Municipality will provide the owner, or the owner's designee, with a written notice of the violation and the time period allowed for the owner to correct the violation. If the owner does not correct the violation within the allowed time period, the Municipality may revoke or suspend any, or all, applicable approvals and permits pertaining to any provision of this Ordinance.

Section 805. Penalties

- A. Anyone violating the provisions of this Ordinance shall be guilty of a summary offense, and upon conviction, shall be subject to a fine of not more than \$ 600 for each violation, recoverable with costs. Each day that the violation continues shall be a separate offense and penalties shall be cumulative.
- B. In addition, the Municipality may institute injunctive, mandamus, or any other appropriate action or proceeding at law or in equity for the enforcement of this Ordinance. Any court of competent jurisdiction shall have the right to issue restraining orders, temporary or permanent injunctions, mandamus, or other appropriate forms of remedy or relief.

Section 806. Appeals

- A. Any person aggrieved by any action of the Municipality or its designee, relevant to the provisions of this Ordinance, may appeal to the Municipality within 30 days of that action.
- B. Any person aggrieved by any decision of the Municipality, relevant to the provisions of this Ordinance, may appeal to the County Court of Common Pleas in the county where the activity has taken place within 30 days of the Municipality's decision.

ARTICLE IX – REFERENCES

1. U.S. Department of Agriculture, National Resources Conservation Service (NRCS). *National Engineering Handbook*. Part 630: Hydrology, 1969-2001. Originally published as the *National Engineering Handbook*, Section 4: Hydrology. Available from the NRCS online at: <http://www.nrcs.usda.gov/>.
2. U.S. Department of Agriculture, Natural Resources Conservation Service. 1986. *Technical Release 55: Urban Hydrology for Small Watersheds*, 2nd Edition. Washington, D.C.
3. Pennsylvania Department of Environmental Protection. No. 363-0300-002 (December 2006), as amended and updated. *Pennsylvania Stormwater Best Management Practices Manual*. Harrisburg, PA.
4. Pennsylvania Department of Environmental Protection. No. 363-2134-008 (March 31, 2012), as amended and updated. *Erosion and Sediment Pollution Control Program Manual*. Harrisburg, PA.
5. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Weather Service, Hydrometeorological Design Studies Center. 2004-2006. *Precipitation-Frequency Atlas of the United States, Atlas 14*, Volume 2, Version 3.0, Silver Spring, Maryland. Internet address: <http://hdsc.nws.noaa.gov/hdsc/pfds/>.

STORMWATER MANAGEMENT ORDINANCE

ORDINANCE NO: 1263

ENACTED and ORDAINED at a regular meeting of the

Springdale Borough Council

on this 18th day of September, 2018.

This Ordinance shall take effect immediately.

James Zwisko-Council
(Name) President

[Signature]
(Title)

Craig Alexander, Solicitor
(Name)

[Signature]
(Title)

Joseph Bortolme, Mayor
(Name)

[Signature]
(Title)

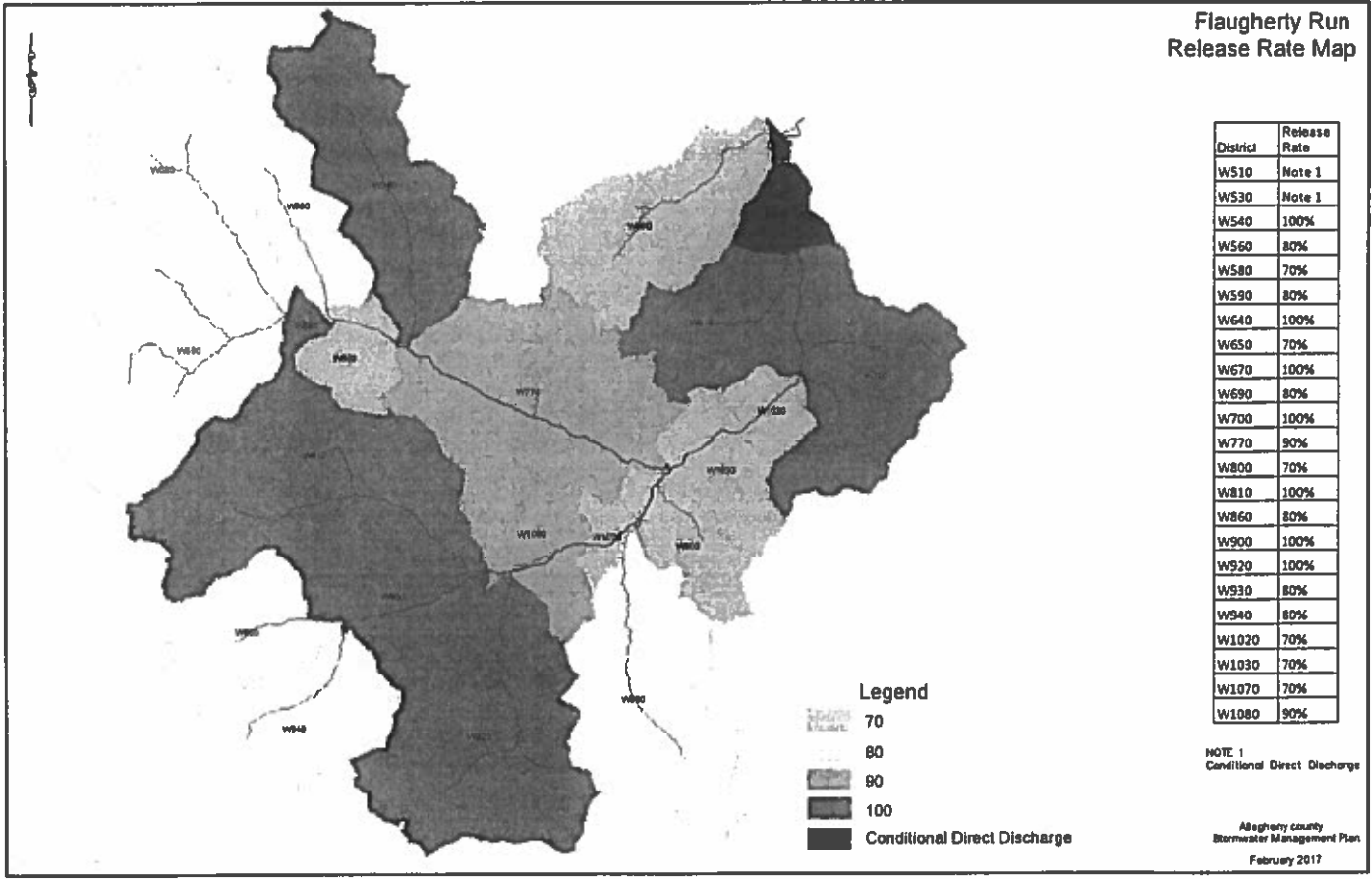
ATTEST:

[Signature]
Secretary Borough manager

APPENDIX A

NEW AND EXISTING RELEASE RATE MANAGEMENT DISTRICTS (MAPS)

Flaugherty Run Release Rate Map

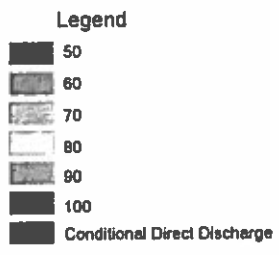
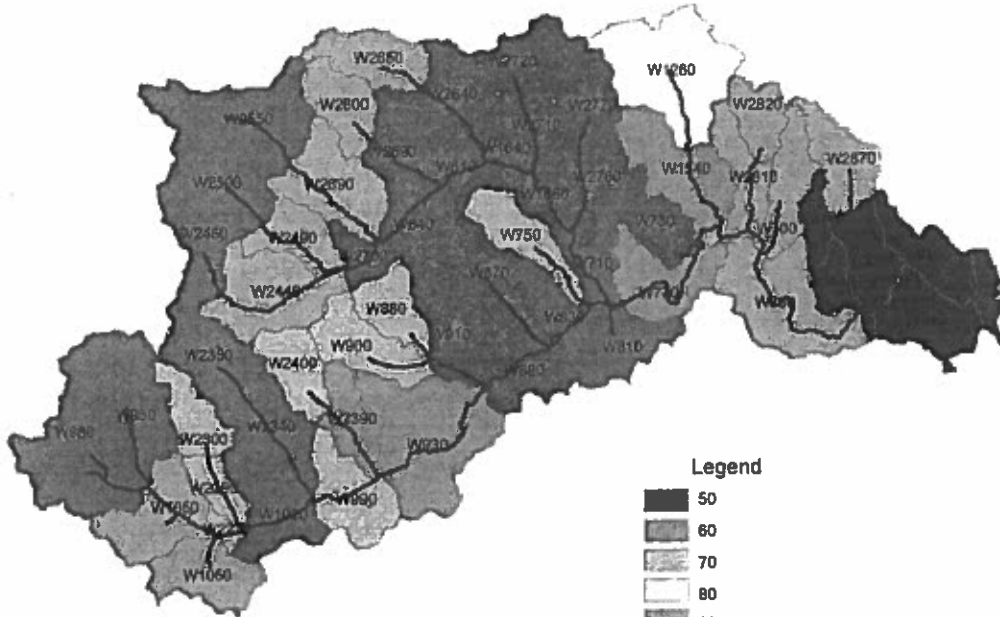


District	Release Rate
W510	Note 1
W530	Note 1
W540	100%
W560	80%
W580	70%
W590	80%
W640	100%
W650	70%
W670	100%
W690	80%
W700	100%
W770	90%
W800	70%
W810	100%
W860	80%
W900	100%
W920	100%
W930	80%
W940	80%
W1020	70%
W1030	70%
W1070	70%
W1080	90%

- Legend**
- 70
 - 80
 - 90
 - 100
 - Conditional Direct Discharge

NOTE 1
Conditional Direct Discharge

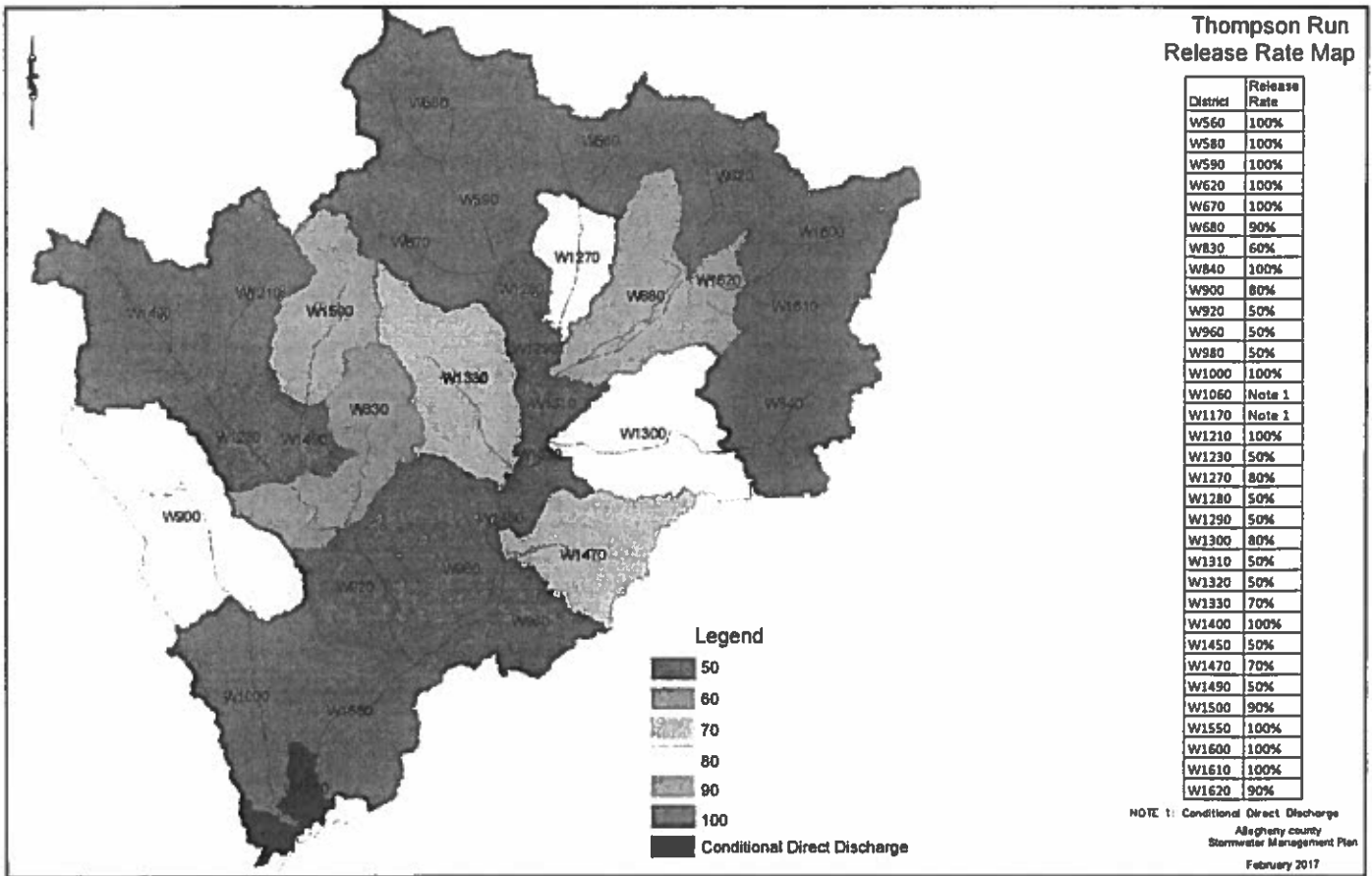
Robinson Run Release Rate Map



District	Release Rate	District	Release Rate
W610	50%	W1660	50%
W640	50%	W2270	70%
W700	90%	W2290	70%
W710	100%	W2300	70%
W730	50%	W2340	100%
W750	70%	W2350	100%
W760	Note 1	W2390	60%
W770	60%	W2400	70%
W780	Note 1	W2440	90%
W810	100%	W2450	100%
W830	100%	W2490	90%
W840	Note 1	W2500	100%
W860	90%	W2550	100%
W870	50%	W2590	50%
W880	70%	W2600	90%
W890	50%	W2640	50%
W900	70%	W2650	90%
W910	50%	W2690	90%
W930	60%	W2700	50%
W950	100%	W2710	50%
W980	100%	W2720	50%
W990	70%	W2760	50%
W1020	100%	W2770	50%
W1050	90%	W2810	90%
W1060	90%	W2820	90%
W1280	80%	W2860	Note 1
W1540	60%	W2870	90%
W1640	50%	W3140	Note 1
		W3160	Note 1

NOTE 1: Conditional Direct Discharge






Thompson Run Release Rate Map



**Deer Creek
Girtys Run
Pine Creek
Squaw Run
Release Rate Map**

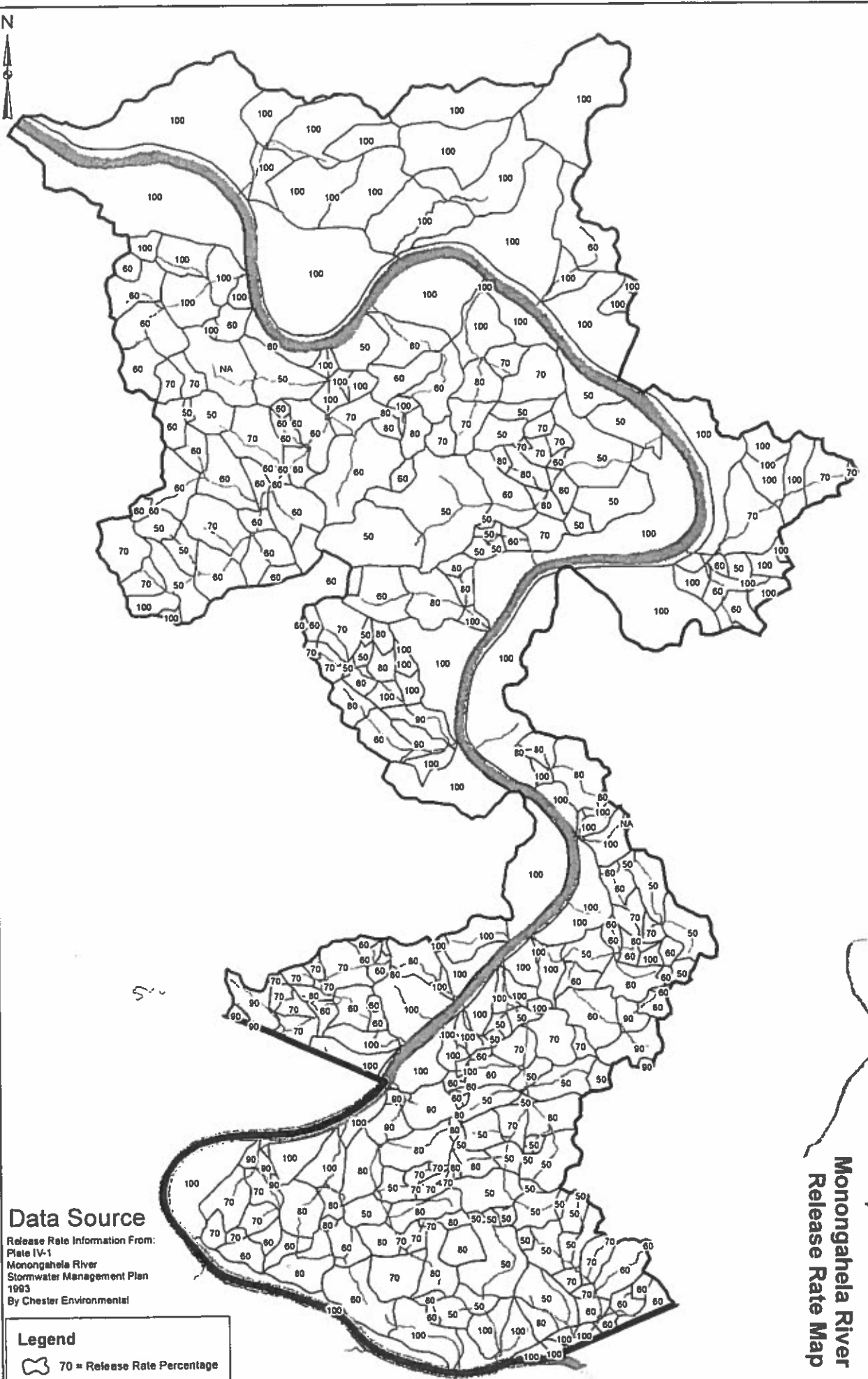


Legend

-  Pine Creek
-  Deer Creek
-  Squaw Run
-  Girtys Run
-  80 = Release Rate Percentage

Data Source

Release Rate Information From
Regional Release Rate Percentage Map
Act 167 Storm water management plan updates for
Squaw Run Watershed
Girtys Run Watershed
Pine Creek Watershed
Deer Creek Watershed
April 28, 2008
For North Hills Council of Governments



Data Source

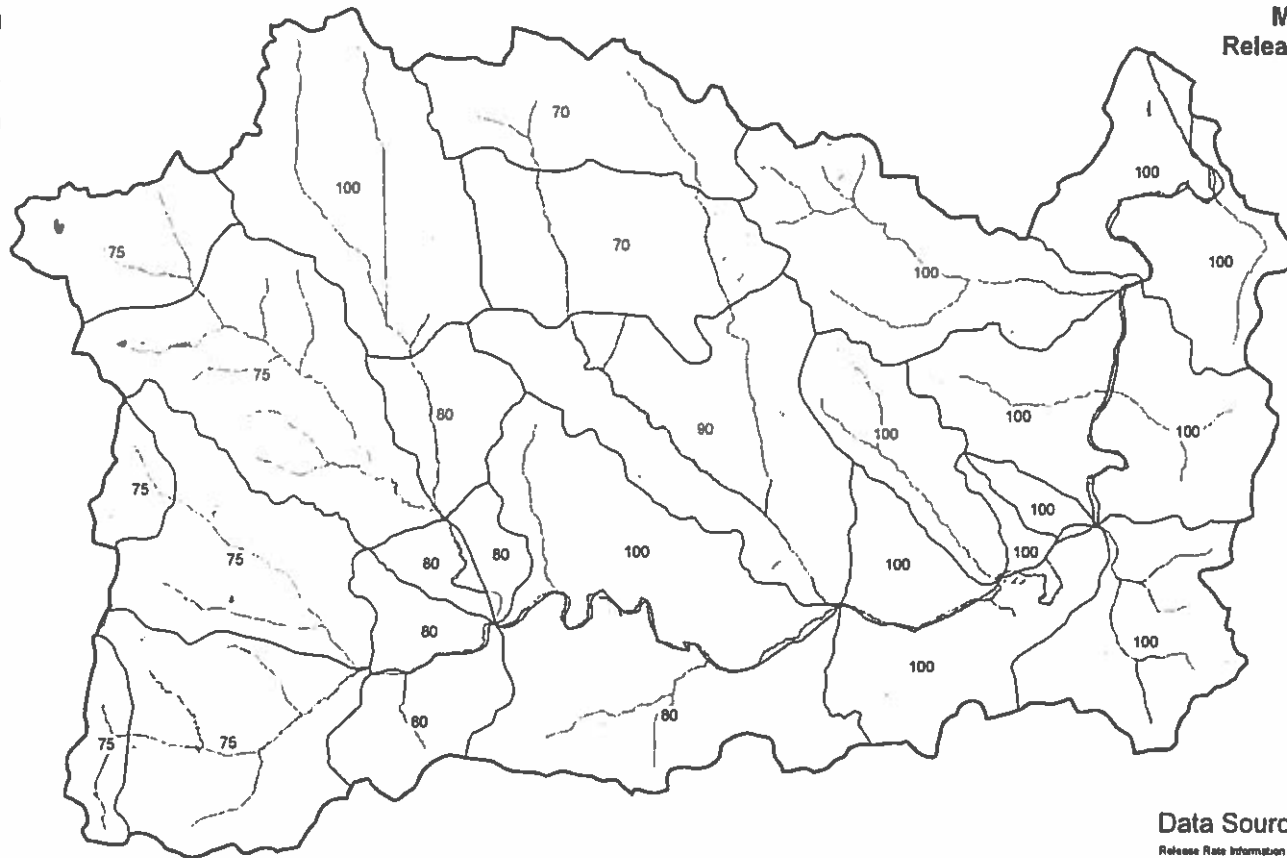
Release Rate Information From:
Plate IV-1
Monongahela River
Stormwater Management Plan
1993
By Chester Environmental

Legend

 70 = Release Rate Percentage

Monongahela River
Release Rate Map

Montour Run Release Rate Map



Legend

 70 = Release Rate Percentage

Data Source

Release Rate Information From:
Figure 7-4
Release Rate Percentage Map
Montour Run Watershed Stormwater Management Plan
February 1999
By GAI Consultants

Turtle Creek Release Rate Map



THOMPSON RUN
(SEE THOMPSON RUN MAP)



Legend

 70 = Release Rate Percentage

Data Source

Release Rate Information From:
Plot V-1
Assigned Release Rate Percentage Map
Turtle Creek Stormwater Management Plan
By The Chester Engineers

APPENDIX B

OPERATION AND MAINTENANCE (O&M) AGREEMENT STORMWATER MANAGEMENT BEST MANAGEMENT PRACTICES (SWM BMPs)

THIS AGREEMENT, made and entered into this day of _____, 20_____, by and between _____ (hereinafter the "Landowner"), and _____, _____ County, Pennsylvania (hereinafter "Municipality");

WITNESSETH

WHEREAS, the Landowner is the owner of certain real property as recorded by deed in the land records of _____ County, Pennsylvania, Deed Book _____ at page _____, (hereinafter "Property").

WHEREAS, the Landowner is proceeding to build and develop the Property; and

WHEREAS, the SWM BMP Operation and Maintenance (O&M) Plan approved by the Municipality (hereinafter referred to as the "O&M Plan") for the property identified herein, which is attached hereto as Appendix A and made part hereof, as approved by the Municipality, provides for management of stormwater within the confines of the Property through the use of BMPs; and

WHEREAS, the Municipality, and the Landowner, his successors and assigns, agree that the health, safety, and welfare of the residents of the Municipality and the protection and maintenance of water quality require that on-site SWM BMPs be constructed and maintained on the Property; and

WHEREAS, the Municipality requires, through the implementation of the SWM Site Plan, that SWM BMPs as required by said SWM Site Plan and the Municipal Stormwater Management Ordinance be constructed and adequately operated and maintained by the Landowner, successors, and assigns.

NOW, THEREFORE, in consideration of the foregoing promises, the mutual covenants contained herein, and the following terms and conditions, the parties hereto agree as follows:

1. The Landowner shall construct the BMPs in accordance with the plans and specifications identified in the SWM Site Plan.
2. The Landowner shall operate and maintain the BMPs as shown on the SWM Site Plan in good working order in accordance with the specific operation and maintenance requirements noted on the approved O&M Plan.
3. The Landowner hereby grants permission to the Municipality, its authorized agents and employees, to enter upon the property, at reasonable times and upon presentation of proper credentials, to inspect the BMPs whenever necessary. Whenever possible, the Municipality shall notify the Landowner prior to entering the property.
4. In the event the Landowner fails to operate and maintain the BMPs per paragraph 2, the Municipality or its representatives may enter upon the Property and take whatever action is deemed necessary to maintain said BMP(s). It is expressly understood and agreed that the Municipality is under no obligation to maintain or repair said facilities, and in no event shall this Agreement be construed to impose any such obligation on the Municipality.
5. In the event the Municipality, pursuant to this Agreement, performs work of any nature, or expends any funds in performance of said work for labor, use of equipment, supplies, materials, and the like, the Landowner shall reimburse the Municipality for all expenses (direct and indirect) incurred within 10 days of receipt of invoice from the Municipality.

6. The intent and purpose of this Agreement is to ensure the proper maintenance of the on-site BMPs by the Landowner; provided, however, that this Agreement shall not be deemed to create any additional liability of any party for damage alleged to result from or be caused by stormwater runoff.
7. The Landowner, its executors, administrators, assigns, and other successors in interests, shall release the Municipality from all damages, accidents, casualties, occurrences, or claims which might arise or be asserted against said employees and representatives from the construction, presence, existence, or maintenance of the BMP(s) by the Landowner or Municipality.
8. The Municipality intends to inspect the BMPs at a minimum of once every three years to ensure their continued functioning.

This Agreement shall be recorded at the Office of the Recorder of Deeds of _____ County, Pennsylvania, and shall constitute a covenant running with the Property and/or equitable servitude, and shall be binding on the Landowner, his administrators, executors, assigns, heirs, and any other successors in interests, in perpetuity.

ATTEST:

WITNESS the following signatures and seals:

(SEAL)

For the Municipality:

For the Landowner:

ATTEST:

_____ (City, Borough, Township)

County of _____, Pennsylvania

I, _____, a Notary Public in and for the county and state aforesaid, whose commission expires on the ____ day of _____, 20____, do hereby certify that _____ whose name(s) is/are signed to the foregoing Agreement bearing date of the ____ day _____, 20____, has acknowledged the same before me in my said county and state.

GIVEN UNDER MY HAND THIS _____ day of _____, 20____.

NOTARY PUBLIC

(SEAL)

APPENDIX C

SMALL PROJECT STORMWATER MANAGEMENT SITE PLAN

This small project stormwater site plan has been developed to assist those proposing residential projects to meet the requirements of the *Allegheny County Stormwater Management Plan Model Ordinance* without having to hire professional services to draft a formal stormwater management plan. This small project site plan is only permitted for projects with earth disturbances between one-quarter (0.25) acre and one (1) acre of earth disturbance (Section 302.B) and using *The Simplified Method* (CG-2 in the BMP Manual³) for Volume Control as described in Section 303.B. Additional information can be found in Chapter 6 of the Pennsylvania Stormwater Best Management Practices Manual

A. What is an applicant required to submit?

All requirements of Section 302.B including a brief description of the proposed stormwater facilities, including types of materials to be used, total square footage of proposed impervious areas, volume calculations, and a simple sketch plan showing the following information:

- Location of proposed structures, driveways, or other paved areas with approximate surface area in square feet.
- Location of any existing or proposed onsite septic system and/or potable water wells showing proximity to infiltration facilities.
- County Conservation District erosion and sediment control "Adequacy" letter as may be required by Municipal, County or State regulations.

B. Determination of Required Volume Control and Sizing Stormwater Facilities

By following the simple steps outlined below in the provided example, an applicant can determine the runoff volume that is required to be controlled and how to choose the appropriate stormwater facility to permanently remove the runoff volume from the site. Impervious area calculations must include all areas on the lot proposed to be covered by roof area or pavement which would prevent rain from naturally percolating into the ground, including impervious surfaces such as sidewalks, driveways, parking areas, patios or swimming pools. Sidewalks, driveways or patios that are designed and constructed to allow for infiltration are not included in this calculation.

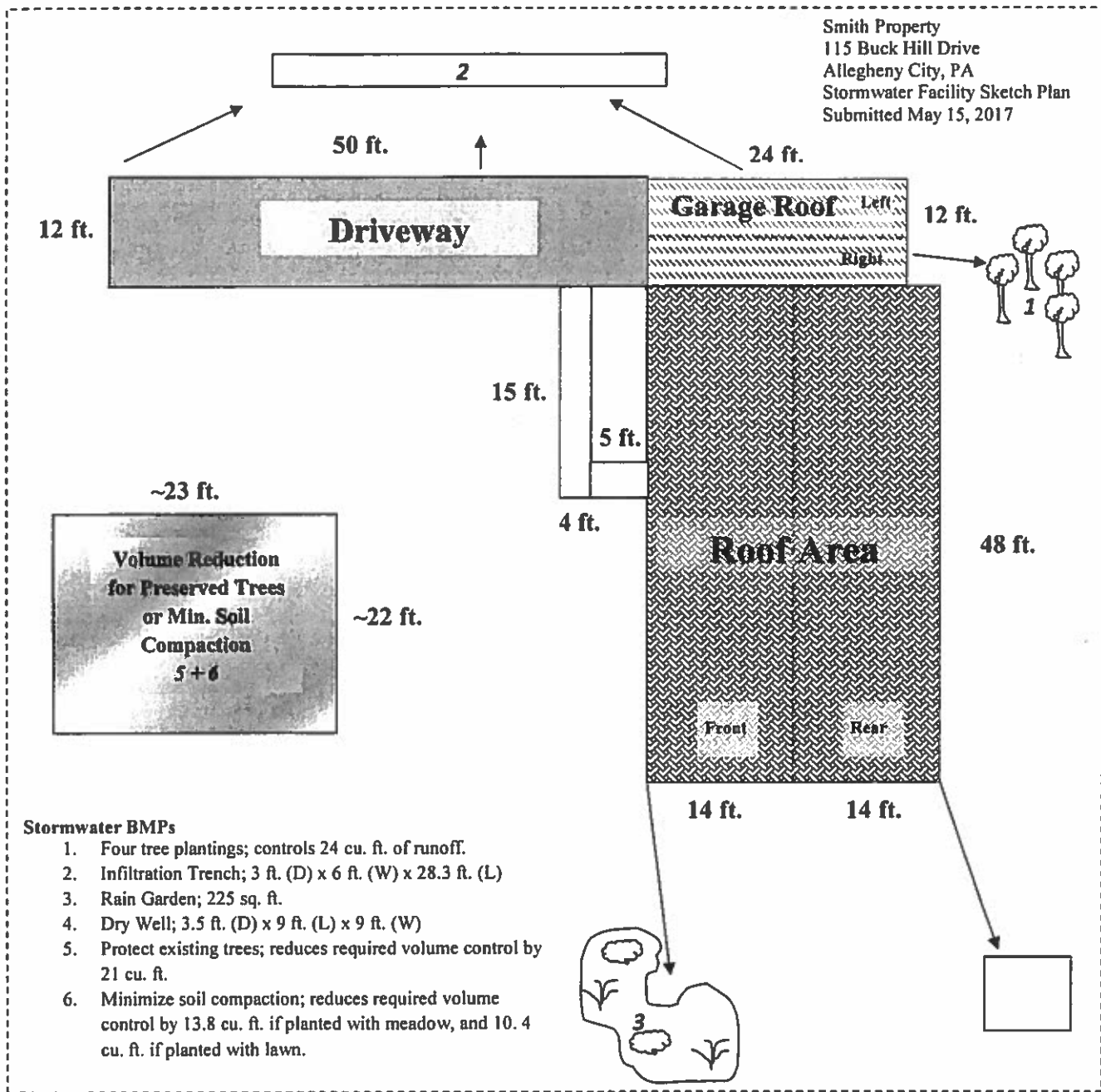
Site Plan Example: Controlling runoff volume from a proposed home site

Step 1: Determine Total Impervious Surfaces

Impervious Surface			Area (sq. ft.)
House Roof (Front)	14 ft. x 48 ft.	=	672 sq. ft.
House Roof (Rear)	14 ft. x 48 ft.	=	672 sq. ft.
Garage Roof (Left)	6ft. x 24 ft.	=	144 sq. ft.
Garage Roof (Right)	6 ft. x 24 ft.	=	144 sq. ft.
Driveway	12 ft. x 50 ft.	=	1000 sq. ft.
Walkway	4 ft. x 20 ft.	=	80 sq. ft.

	Total Impervious		3000 sq. ft.

Figure 1: Sample Site Sketch Plan



Step 2: Determine Required Volume Control (cubic feet) using the following equation:

$$\text{Volume (cu. ft.)} = (\text{Total impervious area in square feet} \times 2 \text{ inches of runoff}) / 12 \text{ inches}$$

$$(3,000 \text{ sq. ft.} \times 2 \text{ inches of runoff}) / 12 \text{ inches} = 500 \text{ cu. ft.}$$

Example continued:

Step 3: Sizing the Selected Volume Control BMP

Several Best Management Practices (BMPs), as described below, are suitable for small stormwater management projects. However, their application depends on the volume required to be controlled, how much land is available, and the site constraints. Proposed residential development activities can apply both nonstructural and structural BMPs to control the volume of runoff from the site. A number of different volume control BMPs are described below. Note that Figure 1 is an example of how these BMPs can be utilized in conjunction to control the total required volume on one site.

Structural BMPs

1. Infiltration Trench

An Infiltration Trench is a linear stormwater BMP consisting of a continuously perforated pipe at a minimum slope in a stone-filled trench. During small storm events, infiltration trenches can significantly reduce volume and serve in the removal of fine sediments and pollutants. Runoff is stored between the stones and infiltrates through the bottom of the facility and into the soil matrix. Runoff should be pretreated using vegetative buffer strips or swales to limit the amount of coarse sediment entering the trench which can clog and render the trench ineffective. In all cases, an infiltration trench should be designed with a positive overflow.

Design Considerations:

- Although the width and depth can vary, it is recommended that Infiltration Trenches be limited in depth to not more than six (6) feet of stone.
- Trench is wrapped in nonwoven geotextile (top, sides, and bottom).
- Trench needs to be placed on uncompacted soils.
- Slope of the Trench bottom should be level or with a slope no greater than 1%.
- A minimum of 6" of topsoil is placed over trench and vegetated.
- The discharge or overflow from the Infiltration Trench should be properly designed for anticipated flows.
- Cleanouts or inlets should be installed at both ends of the Infiltration Trench and at appropriate intervals to allow access to the perforated pipe.
- Volume of facility = Depth x Width x Length x Void Space of the gravel bed (assume 40%).

Maintenance:

- Catch basins and inlets should be inspected and cleaned at least two times a year.
- The vegetation along the surface of the infiltration trench should be maintained in good condition and any bare spots should be re-vegetated as soon as possible.
- Vehicles should not be parked or driven on the trench and care should be taken to avoid soil compaction by lawn mowers.

Determine trench length: $L = 170 \text{ sq. ft.} / 6 \text{ ft.} = 28.3 \text{ ft.}$

Final infiltration trench dimensions: 3 ft. (D) x 6 ft. (W) x 28.3 ft. (L)

2. Rain Garden

A Rain Garden is a planted shallow depression designed to catch and filter rainfall runoff. The garden captures rain from a downspout or a paved surface. The water sinks into the ground, aided by deep rooted plants that like both wet and dry conditions. The ideal location for a rain garden is between the source of runoff (roofs and driveways) and the runoff destination (drains, stream, low spots, etc.).

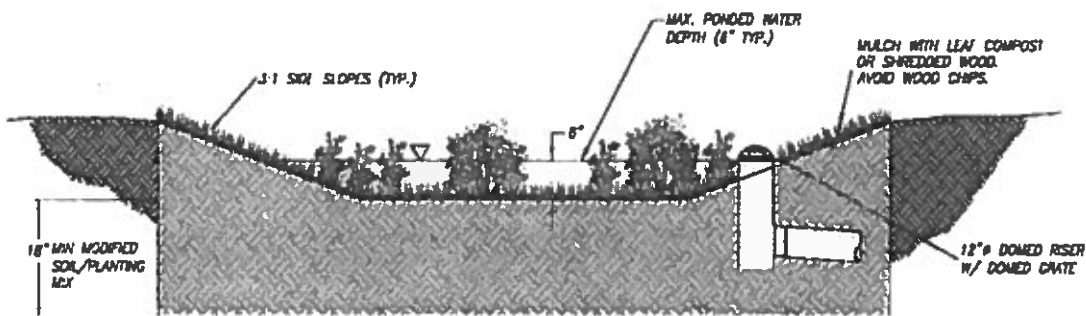
Design Considerations:

- A maximum of 3:1 side slope is recommended.
- The depth of a rain garden can range from 6 - 8 inches. Ponded water should not exceed 6 inches.
- The rain garden should drain within 72 hours.
- The garden should be at least 10-20 feet from a building's foundation and 25 feet from septic system drainfields and wellheads.
- If the site has clay soils, soil should be amended with compost or organic material.
- Choose native plants. See http://pa.audubon.org/habitat/PDFs/RGBrochure_complete.pdf for a native plant list. To find native plant sources go to www.pawildflower.org.
- At the rain garden location, the water table should be at least 2' below the soil level. If water stands in an area for more than one day after a heavy rain you can assume it has a higher water table and is not a good choice for a rain garden.

Maintenance:

- Water plants regularly until they become established.
- Inspect twice a year for sediment buildup, erosion and vegetative conditions.
- Mulch with hardwood when erosion is evident and replenish annually.
- Prune and remove dead vegetation in the spring season.
- Weed as you would any garden.
- Move plants around if some plants would grow better in the drier or wetter parts of the garden.

Figure 4: Rain Garden Diagram



Source: PA BMP Guidance Manual, Chapter 6 Page 50

Sizing Example for Rain Garden

1. Pick a site for the rain garden between the source of runoff and a low lying area, a.k.a., a drainage area.

2. Perform an infiltration test to determine the depth of the rain garden:

- Dig a hole 8" x 8"
- Fill with water and put a popsicle stick at the top of the water level.
- Measure how far it drains down after a few hours (ideally 4 hours).
- Calculate the depth of water that will drain out over 24 hours.

3. Determine total impervious surface area to drain to rain garden:

House Roof (Front)	14 ft. x 48 ft.	=	672 sq. ft.
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4. Sizing the rain garden:

For this example, let's say the infiltration test determined 6" of water drained out of a hole in 24 hours. The depth of the rain garden should be set to the results of the infiltration test so 6" is the depth of the rain garden. The sizing calculation below is based on controlling 1" of runoff. First divide the impervious surface by the depth of the rain garden.

$$672 \text{ sq. ft.} / 6 \text{ (depth of rain garden in inches)} = 112 \text{ sq. ft.}$$

In order to control 2" of runoff volume, the rain garden area is multiplied by 2.

$$112 \text{ sq. ft.} * 2 = 224 \text{ sq. ft.}$$

The rain garden should be about 225 sq. ft. in size and 6" deep.

3. Dry Well (a.k.a., Seepage Pit)

A Dry Well, sometimes called a Seepage Pit, is a subsurface storage facility that temporarily stores and infiltrates stormwater runoff from the roofs of structures. By capturing runoff at the source, Dry Wells can dramatically reduce the increased volume of stormwater generated by the roofs of structures. Roof leaders connect directly into the Dry Well, which may be either an excavated pit filled with uniformly graded aggregate wrapped in geotextile, or a prefabricated storage chamber or pipe segment. Dry Wells discharge the stored runoff via infiltration into the surrounding soils. In the event that the Dry Well is overwhelmed in an intense storm event, an overflow mechanism (surcharge pipe, connection to a larger infiltration area, etc.) will ensure that additional runoff is safely conveyed downstream.

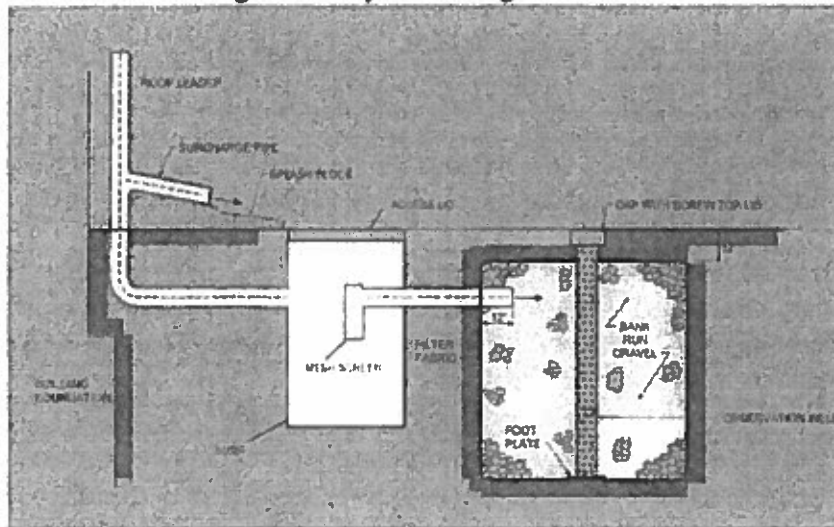
Design Considerations:

- Dry Wells typically consist of 18 to 48 inches of clean washed, uniformly graded aggregate with 40% void capacity (AASHTO No. 3, or similar). "Clean" gravel fill should average one and one-half to three (1.5 – 3.0) inches in diameter.
- Dry Wells are not recommended when their installation would create a significant risk for basement seepage or flooding. In general, 10 - 20 feet of separation is recommended between Dry Wells and building foundations.
- The facility may be either a structural prefabricated chamber or an excavated pit filled with aggregate.
- Depth of dry wells in excess of three-and-a-half (3.5) feet should be avoided unless warranted by soil conditions.
- Stormwater dry wells must never be combined with existing, rehabilitated, or new septic system seepage pits. Discharge of sewage to stormwater dry wells is strictly prohibited.
- As shown in Figure 5, the installation should include a surcharge or overflow pipe.

Maintenance:

- Dry wells should be inspected at least four (4) times annually as well as after large storm events.
- Remove sediment, debris/trash, and any other waste material from a dry well.
- Regularly clean out gutters and ensure proper connections to the dry well.
- Replace the filter screen that intercepts the roof runoff as necessary.

Figure 5: Dry Well Diagram



Source: PA BMP Guidance Manual, Chapter 6, Page 65.

Sizing Example for Dry Wells:

1. Determine contributing impervious surface area:

House Roof (Rear)	14 ft. x 48 ft.	=	672 sq. ft.
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2. Determine required volume control:

$$(672 \text{ sq. ft.} \times (2 \text{ inches of runoff} / 12 \text{ inches/ft.})) = 112 \text{ cu. ft.}$$

$$112 \text{ cu. ft.} / 0.4 = 280 \text{ cu. ft. (assuming the 40\% void ratio in the gravel bed)}$$

3. Sizing the dry well:

Set the depth to 3.5 ft.; Set the width equal to the length for a square chamber.

$$3.5 \text{ ft.} \times L \times L = 280 \text{ cu. ft.}; \quad L \times L = 280 \text{ cu. ft.} / 3.5 \text{ ft.}; \text{ thus } L \times L = 80 \text{ sq. ft.}; \quad L=9 \text{ (approx)}$$

$$\text{Dimensions} = 3.5 \text{ ft. (D)} \times 9 \text{ ft. (L)} \times 9 \text{ ft. (W)}$$

NonStructural BMPs

1. Tree Plantings and Preservation

Trees and forests reduce stormwater runoff by capturing and storing rainfall in the canopy and releasing water into the atmosphere through evapotranspiration. Tree roots and leaf litter also create soil conditions that promote the infiltration of rainwater into the soil. In addition, trees and forests reduce pollutants by taking up nutrients and other pollutants from soils and water through their root systems. A development site can reduce runoff volume by planting new trees or by preserving trees which existed on the site prior to development. The volume reduction calculations either determine the cubic feet to be directed to the area under the tree canopy for infiltration or determine a volume reduction credit which can be used to reduce the size of any one of the planned structural BMPs on the site.

Tree Considerations:

- Existing trees must have at least a 4" trunk caliper or larger.
- Existing tree canopy must be within 100 ft. of impervious surfaces.
- A tree canopy is classified as the continuous cover of branches and foliage formed by a single tree or collectively by the crowns of adjacent trees.
- New tree plantings must be at least 6 ft. in height and have a 2" trunk caliper.
- All existing and newly planted trees must be native to Pennsylvania. See <http://www.dcnr.state.pa.us/forestry/commontr/commontrees.pdf> for a guide book titled *Common Trees of Pennsylvania* for a native tree list.
- When using trees as volume control BMPs, runoff from impervious areas should be directed to drain under the tree canopy.

Determining the required number of planted trees to reduce the runoff volume:

1. Determine contributing impervious surface area:

Garage Roof (Right)	6 ft. x 24 ft.	=	144 ft.
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2. Calculate the required control volume:
 $(144 \text{ sq. ft.} \times 2 \text{ inches of runoff}) / 12 \text{ inches} = 24 \text{ cu. ft.}$
3. Determine the number of tree plantings:

- A newly planted deciduous tree can reduce runoff volume by 6 cu. ft.
- A newly planted evergreen tree can reduce runoff volume by 10 cu. ft.

$$24 \text{ cu. ft.} / 6 \text{ cu. ft.} = 4 \text{ Deciduous Trees}$$

Determining the volume reduction for preserving existing trees:

1. Calculate approximate area of the existing tree canopy:
 $\sim 22 \text{ sq. ft.} \times \sim 23 \text{ sq. ft.} = 500 \text{ sq. ft.}$
2. Measure distance from impervious surface to tree canopy: 35 ft.

3. Calculate the volume reduction credit by preserving existing trees:

- For Trees within 20 feet of impervious cover:
Volume Reduction cu. ft. = (Existing Tree Canopy sq. ft. x 1 inch) / 12
- For Trees beyond 20 feet but not farther than 100 feet from impervious cover:
Volume Reduction cu. ft. = (Existing Tree Canopy sq. ft. x 0.5 inch) / 12

$$(500 \text{ sq. ft.} \times 0.5 \text{ inches}) / 12 = 21 \text{ cu. ft.}$$

This volume credit can be utilized in reducing the size of any one of the structural BMPs planned on the site. For example, the 21 cu. ft. could be subtracted from the required infiltration volume when sizing the infiltration trench;

$$510 \text{ cu. ft.} - 21 \text{ cu. ft.} = 489 \text{ cu. ft.}$$

$$489 \text{ cu. ft.} / 3 \text{ ft. (Depth)} = 163 / 6 \text{ ft. (Width)} = 27.1 \text{ ft. (Length)}$$

Using the existing trees for a volume credit would decrease the length of the infiltration trench to 27.1 ft. instead of 28.3 ft.

2. **Minimize Soil Compaction and Replant with Lawn or Meadow**

When soil is overly compacted during construction it can cause a drastic reduction in the permeability of the soil and rarely is the soil profile completely restored. Runoff from vegetative areas with highly compacted soils similarly resembles runoff from an impervious surface. Minimizing soil compaction and re-planting with a vegetative cover like meadow or lawn, not only increases the infiltration on the site, but also creates a friendly habitat for a variety of wildlife species.

Design Considerations:

- Area shall not be stripped of topsoil.
- Vehicle movement, storage, or equipment/material lay down shall not be permitted in areas preserved for minimum soil compaction.
- The use of soil amendments and additional topsoil is permitted.
- Meadow should be planted with native grasses. Refer to *Meadows and Prairies: Wildlife-Friendly Alternatives to Lawn* at <http://pubs.cas.psu.edu/FreePubs/pdfs/UH128.pdf> for reference on how to properly plant the meadow and for a list of native species.

Determining the volume reduction by minimizing soil compaction and planting a meadow:

1. Calculate approximate area of preserved meadow:
~22 sq. ft. x ~23 sq. ft. = 500 sq. ft.

2. Calculate the volume reduction credit by minimizing the soil compaction and planting a lawn/meadow:

- For Meadow Areas: Volume Reduction (cu. ft.) = (Area of Min. Soil Compaction (sq. ft.) x 1/3 inch of runoff) / 12

$$(500 \text{ sq. ft.} \times 1/3 \text{ inch of runoff}) / 12 = 13.8 \text{ cu. ft.}$$

- For Lawn Areas: Volume Reduction (cu. ft.) = (Area of Min. Soil Compaction (sq. ft.) x 1/4 inch of runoff) / 12

$$(500 \text{ sq. ft.} \times 1/4 \text{ inch of runoff}) / 12 = 10.4 \text{ cu. ft.}$$

This volume credit can be used to reduce the size of any one of the structural BMPs on the site. See explanation under the volume credit for preserving existing trees for details.

Alternative BMP to Capture and Reuse Stormwater

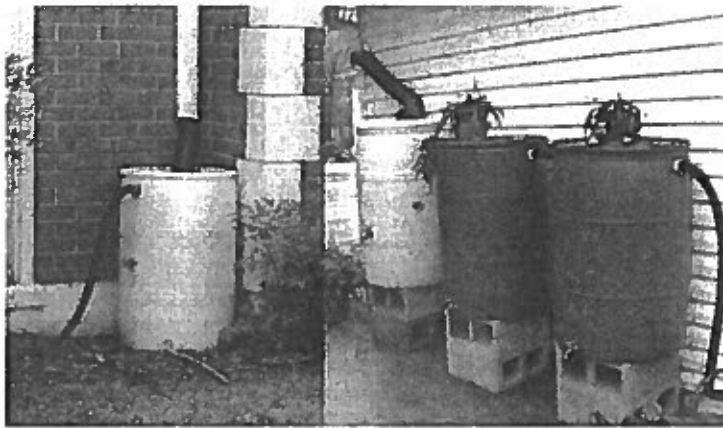
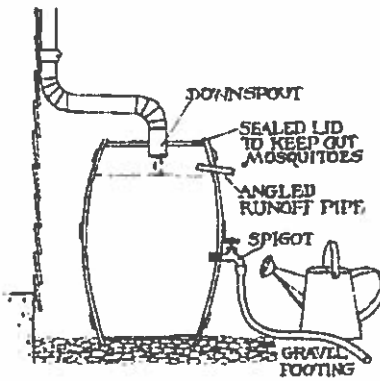
Rain Barrels

Rain barrels are large containers that collect drainage from roof leaders and temporarily store water to be released to lawns, gardens, and other landscaped areas after the rainfall has ended. Rain barrels are typically between 50 and 200 gallons in size. It is not recommended for rain barrels to be used as a volume control BMP because infiltration is not guaranteed after each storm event. For this reason, a rain barrel is not utilized in the site plan example. However, the information is included to provide an alternative for a homeowner to utilize when considering capture and reuse stormwater methods.

Design Considerations:

- Rain barrels should be directly connected to the roof gutter/spout.
- There must be a means to release the water stored between storm events to provide the necessary storage volume for the next storm.
- When calculating rain barrel size, rain barrels are typically assumed to be 25% full because they are not always emptied before the next storm.
- Use screens to filter debris and cover lids to prevent mosquitoes.
- An overflow outlet should be placed a few inches below the top with an overflow pipe to divert flow away from structures.
- It is possible to use a number of rain barrels jointly for an area.

Figure 6: Rain Barrel Diagram and Examples



Sources: (top picture) <http://www.citywindsor.ca/DisplayAttach.asp?AttachID=12348>
 (bottom picture on left) <http://repurposinglife.blogspot.com/2009/05/rainwater-harvesting.html>
 (bottom picture on right) <http://www.floridata.com/tracks/transplantedgardener/Rainbarrels.cfm>

Sizing Example for a Rain Barrel

1. Determine contributing impervious surface area:

Garage Roof (Right)	6 ft. x 24 ft.	=	144 sq. ft.
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2. Determine the amount of rainfall to be captured by the Rain Barrel. A smaller storm, no more than 2", is recommended to calculate the runoff to be captured. This example chose the 1" storm event.
3. Calculate the volume to be captured and reused:
 $(144 \text{ sq. ft.} \times 1 \text{ inch of runoff}) / 12 \text{ inches} = 12 \text{ cu. ft.}$
4. Size the rain barrel:

$$1 \text{ cu. ft.} = 7.48 \text{ gallons}$$

$$12 \text{ cu. ft.} \times 7.48 = 90 \text{ gallons}$$

$$90 \text{ gallons} \times (0.25^*) = 22.5 \text{ gallons} \text{ (*assuming that the rain barrel is always at least 25% full)}$$

$$90 \text{ gallons} + 22.5 \text{ gallons} = 112 \text{ gallons}$$

The rain barrel or barrels should be large enough to hold at least 112 gallons of water.

REFERENCES:

- Center for Watershed Protection and US Forest Service. (2008). *Watershed Forestry Resource Guide*. Retrieved on May 26, 2010 from <http://www.forestsforwatersheds.org/reduce-stormwater/>.
- DeBarry, Paul A., *Watersheds: Processes, Assessment and Management*. John Wiley & Sons. NY, NY, 2004
- Department of Environmental Protection. (2006). *Pennsylvania Stormwater Best Management Practices Manual*.
- Wissahickon Watershed Partnership. *Pennsylvania Rain Garden Guide*. Retrieved on May 4, 2010 from http://pa.audubon.org/habitat/PDFs/RGBrochure_complete.pdf.
- Building a Backyard Rain Garden. North Carolina Cooperative Extension. Retrieved on May 4, 2010 from <http://www.bae.ncsu.edu/topic/raingarden/Building.htm>
- Delaware County Planning Commission. (2010). *Draft Crum Creek Watershed Act 167 Stormwater Management Plan. Ordinance Appendix B. Simplified Approach to Stormwater Management for Small Projects*.
- Solebury Township. (2008). *Solebury Township Stormwater Management Ordinance. "Appendix J Simplified Stormwater Management Procedures for Existing Single Family Dwelling Lots"*

ALLEGHENY COUNTY STORMWATER MANAGEMENT ORDINANCE

Implementing the Requirements of the Allegheny County Stormwater Management Plan

The following is based on the PADEP 2022 MODEL STORMWATER MANAGEMENT ORDINANCE (5/2016).

The Pennsylvania Storm Water Management Act (Act 167) requires municipalities to “adopt or amend, and shall implement such ordinances and regulations, including zoning, subdivision and development, building code, and erosion and sedimentation ordinances, as are necessary to regulate development within the Municipality in a manner consistent with the applicable watershed stormwater plan and the provisions of this act.” Note that as required by the Allegheny County Act 167 Stormwater Management Plan (PLAN), Section 11, *Implementation of the Plan*, if a Municipality does not have a stormwater management ordinance, that Municipality must adopt a stormwater management ordinance in conformance with the PLAN including the Model Stormwater Management Ordinance; OR if the Municipality has a stormwater management ordinance, that Municipality must review and amend their existing ordinance to conform to the PLAN including the Model Ordinance. As further required by the PLAN, for those municipalities with watersheds included in a previously approved Act 167 Stormwater Management Plan, the Municipality must, for those watersheds, adopt or amend their stormwater management ordinance with provisions that are the stricter of either the PLAN or the previously approved Act 167 Stormwater Management Plan. As further required by the PLAN, those municipalities, with watersheds not included in an approved Act 167 Stormwater Management Plan and with a stormwater management ordinance with stricter provisions than those in the PLAN, are encouraged to incorporate those stricter provisions into any amended stormwater management ordinances.

Federal regulations at 40 CFR § 122.34 require the use of ordinances by small MS4s to address 1) the prohibition of unauthorized non-stormwater discharges (MCM #3), 2) erosion and sediment controls for construction activities involving earth disturbances of one acre or more (or disturbances less than one acre if the construction activity is part of a larger common plan of development or sale that would disturb one acre or more) (MCM #4), and 3) post-construction stormwater management for new development and redevelopment projects (MCM #5).

DEP is directed under Act 167 to develop a model stormwater ordinance. DEP's intention in publishing the Model Stormwater Management Ordinance is that its use will satisfy both Act 167 requirements and, for MS4s, regulatory requirements as implemented through NPDES permits.

Text highlighted in gray is an indicator where municipal-specific information should be entered. Note - use of the Riparian Buffers and GI/LID requirements may be used toward meeting pollutant load reduction obligations of the NPDES permit if the permittee can demonstrate reductions from the optional practices.

It is recommended that the municipal solicitor review the entire Ordinance, and especially Article VIII – Enforcement and Penalties, and make any revisions necessary to ensure enforcement is pursued commensurate with applicable municipal code. Appendix B to the Model Stormwater Management Ordinance is a recommended format for a landowner Operation and Maintenance agreement.

May 31, 2018

Model Stormwater Management Ordinance

ALLEGHENY COUNTY

ACT 167 PHASE 2

COUNTY -WIDE STORMWATER MANAGEMENT PLAN

Allegheny County Department of
Economic Development
One Chatham Center
112 Washington Place, Suite 900
Pittsburgh, PA 15219

Michael Baker International, Inc.
100 Airside Drive
Moon Township, PA 15108

Michael Baker
INTERNATIONAL



Springdale Borough

Ordinance # 1263

Ordinance Name/Subject Storm Water

Date Ordinance Written: *Allighey County*
Date Ordinance Advertised: *August 31, 2018*
Date Public Hearing Advertised: *August 31, 2018*
Date of Public Hearing: *Sept 18, 2018*
Date Ordinance Voted On: *Spt 18, 2018*

Notes: _____

Please attach a copy of the Proof Of Publication from the newspaper.

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TRIB TOTAL MEDIA LEGAL ADVERTISING

Proof of Publication of Notice in The Valley News Dispatch Under the Act of July 9, 1976, P.L. 877, No. 160

Commonwealth of Pennsylvania)
County of Allegheny) SS:

Patty Klingensmith,, Regional Multi-Media Advertising Manager of Trib Total Media, Inc., a corporation of the Commonwealth of Pennsylvania with place of business in Pittsburgh, Allegheny County, Pennsylvania, being duly sworn, deposes and says that the Tribune-Review is a daily newspaper in general circulation in Southwestern Pennsylvania. Said corporation was established in the year 1924. A copy of the printed notice of publication is attached hereto exactly as the same was printed and published in the regular editions of the said daily newspaper on the following dates, viz:
LEGAL# 6619401, RE: PROPOSED ORDINANCE #1263; 31ST DAY OF AUGUST, 2018.

Affiant further deposes that s/he is an officer duly Authorized by the Trib Total Media, Inc., publisher of the Tribune-Review, to verify the foregoing statement under oath and also declares that affiant is not interested in the subject matter of the aforesaid notice of publication, and that all allegations in the foregoing statement as to time, place and character of publication are true.

Patty Klingensmith
Regional Multi-Media Advertising Manager,
Trib Total Media, Inc.

Sworn to and subscribed before me this
31ST day of AUGUST, 2018

JoAnn M. Callahan
Notary Public

Statement of Advertising Costs

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fully paid.

Trib Total Media Inc., Publisher
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By _____

COMMONWEALTH OF PENNSYLVANIA
NOTARIAL SEAL
JoAnn M. Callahan, Notary Public
City of Greensburg, Westmoreland County
My Commission Expires July 1, 2020
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

BOROUGH OF SPRINGDALE
Notice and Hearing
September 27, 2018
The Borough of Springdale will meet and hold a public hearing on Monday, September 27, 2018, at 7:00 p.m. at the Borough Office, 325 School Street, Springdale, PA 15144. The purpose of the hearing is to receive comments on the proposed Ordinance #1263, AN ORDINANCE OF THE BOROUGH OF SPRINGDALE, PENNSYLVANIA, CONCERNING THE WAIVER OF THE PORT OF SPRINGDALE WITHIN THE RURAL RESIDENTIAL ZONING DISTRICT. Copies of the proposed ordinance are available for review at the Borough Office. The hearing will be held in the Borough Office, 325 School Street, Springdale, PA 15144. The hearing will be held from 7:00 p.m. to 9:00 p.m. on Monday, September 27, 2018. Notice is also given that if you are a person with a disability and wish to attend the meeting scheduled as stated above, and require an auxiliary aid service or other accommodation to participate in the proceedings, please contact the Borough at (724) 274-8800 to discuss how the Borough of Springdale may best accommodate your needs. Kimberly A. MoAcasa
Springdale Borough Manager
6619401(8-31-18)