

# **MS-4 STATUS REPORT**

**POCONO TOWNSHIP  
MONROE COUNTY, PA**

**DECEMBER 1, 2018 – JUNE 30, 2019**

Project No. 1630022

**Prepared For:**

Pocono Township  
112 Township Drive  
Tannersville, PA 18372

Prepared By:



**Boucher & James, Inc.**

CONSULTING ENGINEERS

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## ANNUAL MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) STATUS REPORT

FOR THE PERIOD DECEMBER 1, 2018 TO JUNE 30, 2019

GENERAL INFORMATION			
Permittee Name:	Pocono Township	NPDES Permit No.:	PAI132270
Mailing Address:	P.O. Box 197	Effective Date:	12/01/2018
City, State, Zip:	Tannersville, PA 18372	Expiration Date:	11/30/2023
MS4 Contact Person:	Donna Asure	Renewal Due Date:	12/1/2023
Title:	Township Manager	Municipality:	Pocono Township
Phone:	(570)629-1922	County:	Monroe
Email:	dasure@poconopa.gov		
Co-Permittees (if applicable):			

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? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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?
UNT to Broadhead Creek	HQ-CWF	Yes	Organic Enrichment/ Low D.O.; Suspended Solids	n/a	n/a
Brodhead Creek	HQ-CWF, TSF	Yes	Pathogens	n/a	n/a
McMichael Creek	HQ-CWF	Yes	Pathogens	n/a	n/a

**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	Pocono Township	Donna Asure	570-629-1922
#2 Public Involvement/Participation	Pocono Township	Donna Asure	570-629-1922
#3 Illicit Discharge Detection and Elimination (IDD&E)	Pocono Township	Donna Asure	570-629-1922
#4 Construction Site Storm Water Runoff Control	Pocono Township	Donna Asure	570-629-1922
#5 Post-Construction Storm Water Management in New Development and Redevelopment	Pocono Township	Donna Asure	570-629-1922
#6 Pollution Prevention / Good Housekeeping	Pocono Township	Donna Asure	570-629-1922

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

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

1. For new permittees only, has the written PEOP been developed and implemented within the first year of permit coverage?

Yes  No

2. Date of latest annual review of PEOP: N/A Were updates made?  Yes  No

3. What were the plans and goals for public education and outreach for the reporting period?

Develop PEOP Plan and implement as required.

4. Did the MS4 achieve its goal(s) for the PEOP during the reporting period?  Yes  No

5. Identify specific plans and goals for public education and outreach for the upcoming year:

- The Pocono Township website shall include a tab designated for Municipal Stormwater. The website will provide Municipal Stormwater related material for residents, homeowners, and business owners within the Township.
- Pocono Township shall provide copies of educational material related to Municipal Stormwater within their Municipal Building lobby. These documents may include brochures, pamphlets, fact sheets, and/or recreational guides related to golfing, hiking, climbing, fishing, camping, etc.
- Pocono Township will provide municipal stormwater related material through social media outlets.

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

1. For new permittees only, have the target audience lists been developed and implemented within the first year of permit coverage?

Yes  No Target audience list anticipated to be completed in Year 2 of the MS-4 Permitting.

2. Date of latest annual review of target audience lists: N/A Were updates made?  Yes  No

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

1. 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?

Yes  No

2. Date of latest annual review of educational materials: N/A                      Were updates made?     Yes  No

3. Do you have a municipal website?  Yes  No (URL:  
<https://www.poconopa.gov/>)



**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:

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 Township is interested in working with the Brodhead Watershed Association and will coordinate with them by June 2021.

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.

None during this reporting period.

**MCM #2 Comments:**

PIPP was developed to be implemented.

**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: N/A      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: N/A

2. Date of last update or revision to map(s): 9/5/17

3. Total No. of Outfalls in MS4: 0      Total No. of Outfalls Mapped: 0

4. Total No. of Observation Points: 66      Total No. of Observation Points Mapped: 66

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: N/A

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): 9/5/17

**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: 6/6/1982
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?

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:**

The IDD&E was developed for implementation.

**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 Refer to attached Section 365-15 Erosion and Sedimentation Control requirements.

If Yes, indicate the date of the ordinance or SOP: 11-21-2016

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: N/A

**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: N/A

**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: N/A

**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:

N/A

**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 N/A

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

**MCM #4 Comments:**

The current stormwater management ordinance will be reviewed and updated for consistency with the 2022 model ordinance by 2022.

**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 Sections 365-27 Performance Guarantee, 365-28 Maintenance Responsibilities, 365-29 Maintenance Agreement for privately owned facilities, 390-25.F.32(o) Preliminary plan requirements for major subdivisions ,390-27.B.33(n) Minor subdivisions, final plan requirements,390-28.B.23(i) Lot line adjustments and revisions to previously approved plans, 390.29.I.32(n) Plan requirements for land developments.

If Yes, indicate the date of the ordinance or SOP: 3/2/2009

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. No PCSM BMPs exist within the MS-4 area.

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.

*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): N/A

2. Has a tracking system been established and maintained to record qualifying projects and their associated BMPs?

Yes  No N/A

**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				0 1 "	0 1 "			
2				0 1 "	0 1 "			
3				0 1 "	0 1 "			
4				0 1 "	0 1 "			
5				0 1 "	0 1 "			
6				0 1 "	0 1 "			
7				0 1 "	0 1 "			
8				0 1 "	0 1 "			
9				0 1 "	0 1 "			
10				0 1 "	0 1 "			
11				0 1 "	0 1 "			
12				0 1 "	0 1 "			
13				0 1 "	0 1 "			
14				0 1 "	0 1 "			
15				0 1 "	0 1 "			
16				0 1 "	0 1 "			

**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:**

The current stormwater management ordinance will be reviewed and updated for consistency with the 2022 model ordinance by 2022.

**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 The township public works building has been identified. Additional facilities will be identified during the permit period.
2. When was the inventory last reviewed? N/A
3. When was it last updated? N/A

**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: N/A

**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: N/A Date of latest training: N/A

3. Training topics covered:

N/A

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

N/A

5. Names of training attendees:

N/A

**MCM #6 Comments:**

Employee training will commence during the Year 2 reporting period.

**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)	9/5/17	<input checked="" type="checkbox"/>	
Source Inventory		<input type="checkbox"/>	9/30/2021
Investigation of Suspected Sources		<input type="checkbox"/>	9/30/2022
Ordinance/SOP for Controlling Animal Wastes		<input type="checkbox"/>	9/30/2022

**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)			
<input checked="" type="checkbox"/> Impaired Waters PRP (Appendix E)	06/20/18	11/20/18	Brodhead Creek
<input type="checkbox"/> TMDL Plan (Appendix F)			
<input type="checkbox"/> Combined Chesapeake Bay / Impaired Waters PRP			
<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 checked="" type="checkbox"/> Impaired Waters PRP (Appendix E)	467		
<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: 11/30/2023

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.

Investigation of potential sites for best management practices required to reduce the sediment load will be completed.

**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)
						0 1 "	0 1 "		<input type="checkbox"/>	<input type="checkbox"/>	
						0 1 "	0 1 "		<input type="checkbox"/>	<input type="checkbox"/>	
						0 1 "	0 1 "		<input type="checkbox"/>	<input type="checkbox"/>	
						0 1 "	0 1 "		<input type="checkbox"/>	<input type="checkbox"/>	
						0 1 "	0 1 "		<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?
						0 1 "	0 1 "				<input type="checkbox"/>
						0 1 "	0 1 "				<input type="checkbox"/>
						0 1 "	0 1 "				<input type="checkbox"/>
						0 1 "	0 1 "				<input type="checkbox"/>
						0 1 "	0 1 "				<input type="checkbox"/>
						0 1 "	0 1 "				<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.

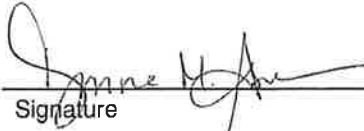
**For All Permittees:** I certify under penalty of law that this report was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage 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).

Donna Asure

Name of Responsible Official

(570)629-1922

Telephone No.



Signature

9-25-19

Date



**Minimum Control Measure #1**  
**Public Education and Outreach on Stormwater Impacts**

**Minimum Control Measure #1**  
**Public Education and Outreach on Stormwater Impacts**

Pocono Township  
1630022  
June 3, 2019

Communication Channels

1. The Pocono Township website shall include a tab designated for Municipal Stormwater. The website will provide Municipal Stormwater related material for residents, homeowners, and business owners within the Township.
2. Pocono Township shall provide copies of educational material related to Municipal Stormwater within their Municipal Building lobby. These documents may include brochures, pamphlets, fact sheets, and/or recreational guides related to golfing, hiking, climbing, fishing, camping, etc.
3. Pocono Township will provide municipal stormwater related material through social media outlets.

Proof of the Municipal Stormwater documents on the Township's website, within the Municipal Building's lobby, provided through social media will be provided with each annual MS-4 report. The above items shall be completed prior to June 30<sup>th</sup> of each year.

Target Audience

A list of residents, homeowners, and business owners will be developed and maintained. In addition, municipal employees shall also become familiar with Municipal Stormwater through the communication channels listed above.

Information Sources and Distribution

1. Pocono Township Website – [www.poconopa.gov](http://www.poconopa.gov)
2. Pocono Township Municipal Building lobby  
112 Township Drive, Tannersville, PA 18372
3. Pocono Township Facebook

# MCWA

The MCWA was formed in 2002 as a conduit for information sharing and collaboration of efforts amongst various volunteer and nonprofit watershed groups. We meet three times per year and have coordinated an annual watershed festival as well as other educational initiatives.

**For more information, visit:**  
[www.mcwa.web.officelive.com](http://www.mcwa.web.officelive.com).

Take a peek inside this brochure to learn your watershed address and determine which watershed organization works to maintain the quality of the water flowing in your local stream.

If you are having trouble locating your watershed, **we suggest visiting the interactive Google Map on our website**  
[www.mcwa.web.officelive.com](http://www.mcwa.web.officelive.com)

or contacting our coordinator, the Watershed Specialist at the Monroe County Conservation District, at 570-629-3060.

The printing of this brochure has been funded by:



## Welcome to Monroe

If you would like to value streams, rivers,

If you would like resources...

Or, if you have a concerned minded individuals in

...we suggest contact



The following is a list of

- ◆ Water quality monitoring
- ◆ Educational programs
- ◆ Newsletter production
- ◆ Website maintenance
- ◆ River, stream, and stream bank restoration
- ◆ Petitions to upgrade stream
- ◆ Native plant sales
- ◆ Fundraisers
- ◆ Educational materials
- ◆ Grant-funded projects

Protecting land for the future is a shared responsibility. Please donate or join today

Yes, I would like to help preserve land by becoming a contributing member of Pocono Heritage Land Trust:

- Individual Membership \$25
- Family Membership \$50
- Patron \$100
- Benefactor \$250
- Steward \$500 or more
- Corporate Sponsor

**Yes, I want to volunteer.**  
Please call me about how I can help.

Name \_\_\_\_\_

Address \_\_\_\_\_  
\_\_\_\_\_

Email \_\_\_\_\_

Phone \_\_\_\_\_



The official registration and financial information of Pocono Heritage Land Trust may be obtained from the Pennsylvania Department of State by calling toll free, within Pennsylvania, 800-732-0999. Registration does not imply endorsement.

PO Box 553 • Pocono Pines, PA 18350 • [www.phlt.org](http://www.phlt.org)



Photos by Don Miller, Dawn Gorham & Kim Williams

Hunting, fishing, birdwatching, photography, cross country skiing, are among the dozens of outdoor activities that draw tens of thousands of visitors to the Poconos every season. Pocono Heritage Land Trust's investments in open space support our economy.

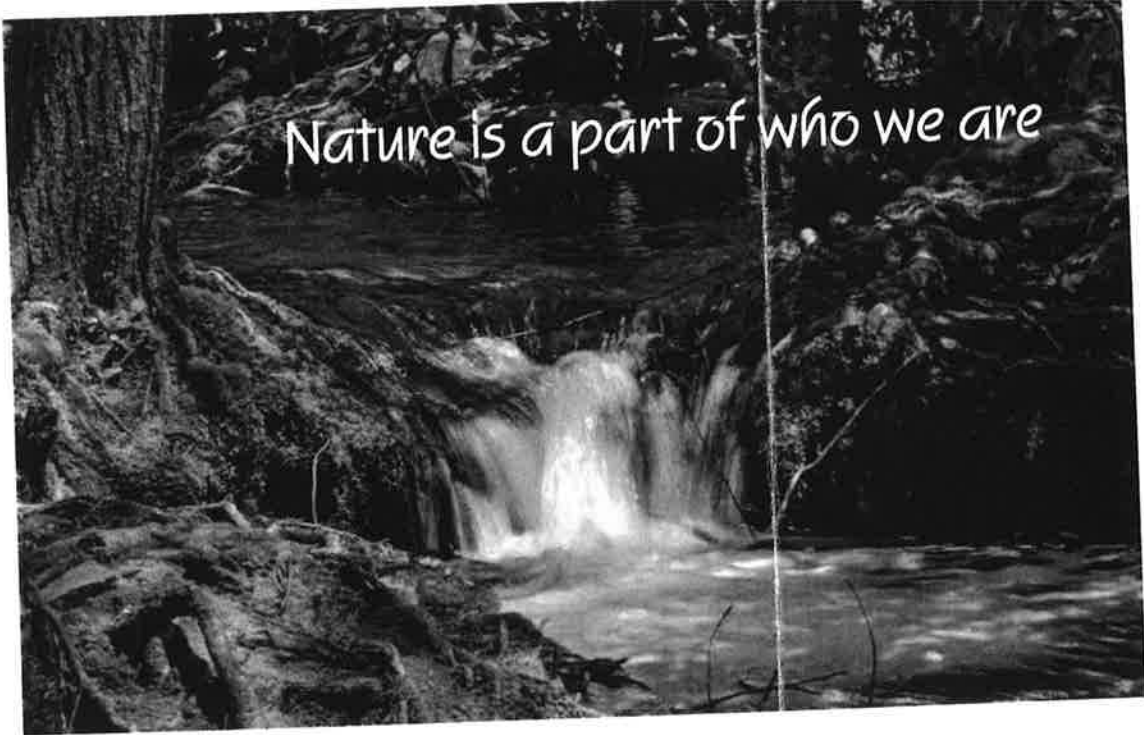


### How We Work

PHLT works cooperatively with landowners and local government to preserve land with environmental, scenic or recreational value. In some cases, PHLT acquires ownership of the land through donation or purchase. In others, it acquires the development rights through voluntary legal agreements called conservation easements. In all cases, the trust accepts responsibility for managing and protecting the land in perpetuity.



*A deep desire to protect their land for future generations led George & Olive Learn to place a conservation easement on their property along the Pocono Creek*



*Protecting land protects water quality and prevents stream bank erosion, providing some of the best fishing found anywhere in the United States, right here in the Poconos.*



## POCONO HERITAGE LAND TRUST

Here in Monroe County and throughout the Pocono Mountains, you can enjoy crossing bridges over sparkling trout streams. World-class hiking trails and other special natural places enrich our days and lives. Outdoor recreation means more than just jobs and income; it's a part of life and why many of us choose to live here.

And that is true for everyone from fourth-generation residents to newcomers. Preserving our natural heritage ensures that we can all enjoy the outdoors -- bike, fish, hunt, see wildlife -- or just sit quietly and enjoy the view.

### *At PHLT, protecting land and water is our mission.*

Pocono Heritage Land Trust exists to conserve land for local land conservation, our Land Trust now protects over 10,000 acres, and the county to conserve many thousands more.

### *Everyone who lives in the Poconos benefits from PHLT.*

During the more than three decades of PHLT's existence, far more land has been developed than conserved. As people need places to live, work, and shop, after a while, we have a responsibility to respect and protect our natural world.

Developing land may mean economic rewards for some people. But conserving land means everybody reaps the benefits of nature -- pure drinking water, clean air, healthy fish and wildlife, thriving forests, room to grow, and a higher-quality more "livable" community -- now and for generations to come.

Minimum Control Measure #2  
Public Involvement/Participation

**Minimum Control Measure #2**  
**Public Involvement and Participation**

Pocono Township  
1630022  
June 3, 2019

1. Pocono Township shall discuss Municipal Stormwater during one (1) advertised meeting per year. One (1) public meeting during the 5-year permit period is required.
2. The Township Planning Commission meets on the 2<sup>nd</sup> and 4<sup>th</sup> Monday of the month and the Board of Commissioners meets on the 1<sup>st</sup> and 3<sup>rd</sup> Mondays of the month. All meetings provide an opportunity for the public to comment on Township business, including Municipal Stormwater.

Proof of the Municipal Stormwater discussions during an advertised meeting will be provided during the permit period.

S:\2016\1630022\Documents\Reports\MCM.#2\_Public Involvement.Participation\2019\Public.Involvement\_Participation\_2019.docx

Minimum Control Measure #3  
Illicit Discharge Detention and Elimination



**Minimum Control Measure #3**  
**Illicit Discharge Detection and Elimination**

Pocono Township  
1630022  
March 15, 2019

1. The MS-4 Mapping will be updated as needed to include any newly constructed or newly found storm sewer collection and conveyance systems, or newly constructed or newly found stormwater management facilities.
2. All identified outfalls must be screened during dry weather conditions twice during the 5-year permit period. Documentation of all screenings, findings, and action taken, if any shall be kept.
3. Any reports from the public or other agencies for suspected or confirmed illicit discharges shall be responded to and any required action shall be taken. All reports of illicit discharges must be documented with response and action taken, if any.
4. All illicit discharges that may endanger users downstream, or may create pollution or danger of pollution or property damage shall be reported to the Pennsylvania Department of Environmental Protection.
5. Review Stormwater Management Ordinance and update as required to include the prohibition of non-stormwater discharges within the regulated MS-4.
6. Prepare and distribute materials educating residents, property owners, business owners, and employees of illicit discharges.
7. All reports and occurrences of illicit discharges must be documented with response and action taken, if any.

Minimum Control Measure #4  
Construction Site Stormwater Runoff Control

Outlet structures for stormwater management facilities shall be designed to meet the performance standards of this chapter using any generally accepted hydraulic analysis technique or method.

- J. The design of any stormwater detention facilities intended to meet the performance standards of this chapter shall be verified by routing the design storm hydrograph through these facilities using the Storage-Indication Method. For drainage areas greater than 200 acres in size, the design storm hydrograph shall be computed using a calculation method that produces a full hydrograph. The municipality may approve the use of any generally accepted full hydrograph approximation technique that shall use a total runoff volume that is consistent with the volume from a method that produces a full hydrograph.

### **§ 365-14 Additional requirements.**

- A. Any stormwater management facility (i.e., BMP, detention basin) designed to store runoff and requiring a berm or earthen embankment required or regulated by this chapter shall be designed to provide an emergency spillway to handle flow up to and including the one-hundred-year proposed conditions. The height of embankment must provide a minimum 1.0 foot of freeboard above the maximum pool elevation computed when the facility functions for the one-hundred-year proposed conditions inflow. Should any stormwater management facility require a dam safety permit under PA DEP Chapter 105, the facility shall be designed in accordance with Chapter 105 and meet the regulations of Chapter 105 concerning dam safety which may be required to pass storms larger than the one-hundred-year event.
- B. Any facilities that constitute water obstructions (e.g., culverts, bridges, outfalls, or stream enclosures), and any work involving wetlands governed by PA DEP Chapter 105 regulations (as amended or replaced from time to time by PA DEP), shall be designed in accordance with Chapter 105 and will require a permit from PA DEP.
- C. Any other stormwater conveyance facility and/or channel that does not fall under Chapter 105 regulations must be able to convey, without damage to the stormwater structure or roadway, runoff from the fifty-year design storm with a minimum 1.0 foot of freeboard measured below the lowest point along the top of the roadway. Any facility that constitutes a dam as defined in PA DEP Chapter 105 regulations may require a permit under dam safety regulations. Conveyance facilities to or exiting from stormwater management facilities (i.e., detention basins) shall be designed to convey the design flow to or from that structure. Roadway crossings located within designated floodplain areas must be able to convey runoff from a one-hundred-year design storm. Any facility located within a PennDOT right-of-way must meet PennDOT minimum design standards and permit submission requirements.
- D. Storm sewers must be able to convey proposed conditions runoff from a fifty-year design storm without surcharging inlets, where appropriate and as supplemented by Subsection C above.
- E. Adequate erosion protection shall be provided along all open channels, and at all points of discharge.
- F. The design of all stormwater management facilities shall incorporate sound engineering principles and practices. The municipality reserves the right to disapprove any design that would result in the construction of or continuation of a stormwater problem area.

### **§ 365-15 Erosion and sediment control requirements.**

- A. Any earth disturbance must be conducted in conformance with Pennsylvania Title 25, Chapter 102, Erosion and Sediment Control.
- B. Additional erosion and sediment control design standards and criteria that must be or are recommended to be applied where infiltration BMPs are proposed shall include the following:
  - (1) Areas proposed for infiltration BMPs shall be protected from sedimentation and compaction during the construction phase to maintain maximum infiltration capacity.

- (2) Infiltration BMPs shall not be constructed nor receive runoff until the entire contributory drainage area to the infiltration BMP has achieved final stabilization.

### **§ 365-16 Consumptive use tracking report.**

- A. Submissions. All regulated activities shall submit a "Consumptive Use Tracking Report" (CUTR), which shall be developed in accordance with the forms available at the Township and submitted as follows:
  - (1) Residential development and/or redevelopment. The CUTR shall be submitted to the municipality during the preliminary plan approval process or building permit approval process, whichever occurs first, and the Monroe County Conservation District along with the erosion and sedimentation control plan.
  - (2) Commercial/industrial development and/or redevelopment. The CUTR shall be submitted to the municipality during the preliminary plan approval process or building permit approval process, whichever occurs first. The CUTR shall also be submitted to the Monroe County Conservation District along with the erosion and sedimentation control plan.

**Minimum Control Measure #5**  
**Post Construction Stormwater Management in New**  
**Development and Redevelopment**

### § 365-27 Performance guarantee.

- A. For subdivisions and land developments, the applicant shall provide a performance guarantee to the municipality for the timely installation and proper construction of all stormwater management controls as required by the approved stormwater management site plan in the amount and method of payment provided for in Chapter 390, Subdivision and Land Development.
- B. For other regulated activities, the municipality will require a performance guarantee from the applicant in an amount equal to 110% of the full construction cost of the stormwater management controls as required by the approved stormwater management site plan estimated as of 90 days following the date scheduled for the completion of the construction of the same.
- C. At the completion of the project, and as a prerequisite for the release of the performance guarantee, the applicant or his representatives shall:
- (1) Provide a certification of completion from a Pennsylvania-licensed professional engineer, verifying that all required stormwater management facilities have been constructed according to the plans and specifications and approved revisions thereto as follows:  
  
"I (Design Engineer), on this date (date of signature) hereby certify that the stormwater management facilities have all been installed in accordance with the approved Stormwater Management Site Plan for (name of project) and in compliance with the design standards and requirements of the Ordinance."
  - (2) Provide a set of record drawings with a certification from the contractor on the record drawings that states:  
  
"I, (insert signer's name), state that I am the (insert position) of (insert name of contractor) on this date (date of signature), hereby certify (1) that I am duly authorized to make this certification of behalf of (insert name of contractor), and (2) that all stormwater management facilities have been constructed according to the approved plans and specifications and approved revisions thereto."  
  
The signer shall either be the owner, partner, officer of the corporation, managing member of the limited liability company, or person in control of any other legal entity, duly authorized by the contractor to sign the certification.
- D. After the municipality receives the certifications and record drawings, a final observation shall be conducted by the Municipal Engineer or his municipal designee to verify compliance with the approved stormwater management site plan and approved revisions thereto.

### § 365-28 Maintenance responsibilities.

- A. The stormwater management site plan for the development site shall contain an operation and maintenance plan prepared by the applicant and approved by the Municipal Engineer. The operation and maintenance plan shall outline required routine maintenance actions and schedules necessary to insure proper operation of the stormwater management facilities.
- B. The stormwater management site plan for the development site shall establish responsibilities for the continuing operation and maintenance of all proposed stormwater management facilities, consistent with the following principles:
- (1) Both the owner and developer of the development site shall be responsible for maintenance of the stormwater management facilities, unless the Board of Commissioners shall otherwise agree.
  - (2) If a development site consists of structures or lots which are to be separately owned and in which streets, sewers or other public improvements are to be offered for dedication to the municipality, stormwater

control facilities may also be offered for dedication to the municipality, however the municipality is not obligated to accept ownership.

- (3) If a development site is to be maintained in a single ownership or if streets, sewers or other public improvements are to be privately owned and maintained, then the ownership and maintenance of stormwater control facilities shall be the responsibility of the applicant, owner or private management entity, as approved by the municipality.
- (4) If, with the permission of the Board of Commissioners, the ownership of and/or maintenance responsibility for the stormwater management facilities is assigned/delegated to a homeowners' association, condominium unit owners' association, or similar entity (a "transferee"), such transferee shall enter into an agreement with the municipality, which shall be in form and substance acceptable to the municipality, acknowledging its duties and the municipality's rights, and agreeing to perform all maintenance responsibilities, contained in the stormwater maintenance agreement referenced in § 365-29 of this chapter entered into with respect to the property or project. If such transferee fails to properly maintain the stormwater management facilities, the municipality shall have the same rights granted to municipalities under Section 705 of the Pennsylvania Municipalities Planning Code, Act of July 31, 1968, P.L. 805, No. 247,<sup>[1]</sup> as amended, with reference to maintenance of common open space, to maintain the stormwater management facilities.

[1] *Editor's Note: See 53 P.S. § 10705.*

- C. The Board of Commissioners, upon recommendation of the Municipal Engineer, shall make the final determination on the continuing maintenance responsibilities prior to approval of the stormwater management site plan. The Board of Commissioners reserves the right, but not the obligation or requirement, to accept the ownership and operating responsibility for any or all of the stormwater management controls.

### **§ 365-29 Maintenance agreement for privately owned facilities.**

- A. Prior to approval of the site's stormwater management site plan, the applicant shall sign and record a maintenance agreement in form and substance satisfactory to the Board of Commissioners, covering all stormwater control facilities that are to be privately owned.
- B. Other items may be included in the maintenance agreement where determined necessary to guarantee the satisfactory maintenance of all facilities. The maintenance agreement shall be subject to the review and approval of the municipal solicitor and Board of Commissioners.

### § 390-24 Sketch plans overlay sheet.

- A. As provided in § 390-15D(5)(b) and (c), the applicant has the option for an informal review or a detailed review and is STRONGLY ENCOURAGED to include sufficient detail on the sketch plan to make the review meaningful.
- B. In the case of a detailed review, in order to provide a full understanding of the site's potential and to facilitate the most effective exchange with the Township, the Sketch Plan should include the information listed below. Many of these items can be taken from the existing resources and site analysis (See § 390-25D.), a document that should be prepared and submitted as part of the sketch plan. In fact, the diagrammatic sketch plan may be prepared as a simple overlay sheet placed on top of the existing resources and site analysis.
- (1) Name and address of the legal owner, the equitable owner, and/or the applicant;
  - (2) Name and address of the professional engineer, surveyor, planner, architect, landscape architect, or site designer responsible for preparing the plan;
  - (3) Graphic scale (not greater than one inch equals 200 feet; however, dimensions on the plan need not be exact at this stage) and North arrow;
  - (4) Approximate tract boundaries, sufficient to locate the tract on a map of the municipality;
  - (5) Location map;
  - (6) Zoning district (if a zoning ordinance is in effect);
  - (7) Roads on and adjacent to the tract (both existing and proposed);
  - (8) One-hundred-year floodplain limits;
  - (9) Approximate location of wetlands;
  - (10) Topographic, physical, and cultural features including fields, pastures, meadows, wooded areas, hedgerows and other significant vegetation, steep slopes (over 25%), rock outcrops, soil types, ponds, ditches, drains, dumps, storage tanks, streams within 200 feet of the tract, and existing rights-of-way and easements, and cultural features such as all structures, foundations, walls, wells, trails, and abandoned roads;
  - (11) Schematic layout indicating a general concept for land conservation and development;
  - (12) Proposed general road and lot layout;
  - (13) General description of proposed method of water supply, sewage disposal, and stormwater management; and
  - (14) In the case of land development plans, proposed location of buildings and major structures, parking areas and other improvements.

### § 390-25 Preliminary plan requirements for major subdivisions.

(See § 390-29 for land developments.)

- A. Preliminary plans shall be prepared by a qualified professional (See definition in Article II.) as applicable and required by state law. The submission requirements for a preliminary plan shall consist of the following



elements, and shall be prepared in accordance with the drafting standards and plan requirements described herein:

- (1) Site context map;
- (2) Existing resources and site analysis;
- (3) Preliminary resource impact and conservation analysis;
- (4) Preliminary improvements plan; and
- (5) Preliminary studies and reports as set forth in other parts of this chapter.

**B. Drafting standards.**

- (1) The plan shall be clearly and legibly drawn at a scale of 10 feet, 20 feet, 30 feet, 40 feet, 50 feet, 60 feet, 80 feet, 100 feet or 200 feet to the inch.
- (2) Dimensions shall be in feet and hundredths of feet; bearings shall be in degrees, minutes and seconds for the boundary of the entire tract, and dimensions in feet for lot lines.
- (3) The survey shall not have an error of closure greater than one in 10,000 feet and shall include a boundary closure report.
- (4) The sheet size shall be no larger than 24 inches by 36 inches, unless permitted by the Planning Commission. If the plan is prepared in two or more sections, a key map showing the location of the sections shall be placed on each sheet. If more than one sheet is necessary, each sheet shall be the same size and numbered to show the relationship to the total number of sheets in the plan (e.g., Sheet 1 of 5), and a key diagram showing the relative location of the several sections shall be drawn on each sheet.
- (5) Plans shall be legible in every detail.

**C. Site context map.** A map compiled from existing information showing the location of the proposed major subdivision within its neighborhood context shall be submitted. For sites under 100 acres in area, such maps shall show the relationship of the subject property to natural and man-made features existing within 1,000 feet of the site. For sites of 100 acres or more, the map shall show the above relationships within 2,000 feet of the site. The features that shall be shown on site context maps include topography (from USGS maps), stream valleys, wetland complexes (from maps published by the United States Fish and Wildlife Service or the USDA Natural Resources Conservation Service), woodlands over 1/2 acre in area (from aerial photographs), ridgelines, public roads and trails, utility easements and rights-of-way, public land, and land protected under conservation easements.

**D. Existing resources and site analysis.** For all major subdivisions (except those in which all proposed lots are to be 10 or more acres in area), an existing resources and site analysis shall be prepared to provide the developer and the municipality with a comprehensive analysis of existing conditions, both on the proposed development site and within 500 feet of the site. Conditions beyond the parcel boundaries may be described on the basis of existing published data available from governmental agencies, and from aerial photographs. The Planning Commission shall review the plan to assess its accuracy, conformance with municipal ordinances, and likely impact upon the natural and cultural resources on the property. The following information shall be included:

- (1) A vertical aerial photograph enlarged to a scale not less detailed than one inch equals 400 feet, with the site boundaries clearly marked.
- (2)

Topography, the contour lines of which shall generally be at two-foot intervals although ten-foot intervals are permissible beyond the parcel boundaries, interpolated from USGS published maps. The determination of appropriate contour intervals shall be made by the Planning Commission, which may specify greater or lesser intervals on exceptionally steep or flat sites. Slopes between 15% and 25% and exceeding 25% shall be clearly indicated. Topography for major subdivisions shall be prepared by a professional land surveyor or professional engineer from an actual field survey of the site or from stereoscopic aerial photography and shall be coordinated with official USGS bench marks the location and datum of which shall be shown on the plan.

- (3) The location and delineation of ponds, vernal pools, streams, ditches, drains, and natural drainage swales, as well as the one-hundred-year floodplains and wetlands. Additional areas of wetlands on the proposed development parcel shall also be indicated, as evident from testing, visual inspection, or from the presence of wetland vegetation.
- (4) Vegetative cover conditions on the property according to general cover type including cultivated land, permanent grass land, meadow, pasture, old field, hedgerow, woodland and wetland, the actual canopy line of existing trees and woodlands. Vegetative types shall be described by plant community, relative age and condition.
- (5) Soil series, types and phases, as mapped by the United States Department of Agriculture, Natural Resources Conservation Service in the published soil survey for the county, and accompanying data published for each soil relating to its suitability for construction (and, in unsewered areas, for septic suitability).
- (6) Watershed boundaries shall be identified.
- (7) A viewshed analysis using GIS or other suitable methodology showing the location and extent of views into the property and along ridgelines from critical points along adjoining public roads and how the views will be affected by the proposed development and what design elements will be used to minimize the visual effects.
- (8) Geologic formations on the proposed development parcel, including rock outcroppings, cliffs, sinkholes, and fault lines, based on available published information or more detailed data obtained by the applicant.
- (9) All existing man-made features, including but not limited to roads, driveways, farm roads, woods roads, buildings, foundations, walls, wells, drainage fields, dumps, utilities, fire hydrants, and storm and sanitary sewers.
- (10) Locations of all historically significant sites or structures on the tract, including but not limited to cellar holes, stone walls, earthworks, and graves.
- (11) Locations of trails that have been in public use (pedestrian, equestrian, bicycle, etc.).
- (12) All easements and other encumbrances of property which are or have been filed of record with the Recorder of Deeds of Monroe County, or which are visible on the ground even if not filed of record, shall be shown on the plan.
- (13) For conservation design subdivisions. Total acreage of the tract, the adjusted tract area and the constrained land area with detailed supporting calculations.

**E. Resource impact and conservation analysis.**

- (1) A preliminary resource impact and conservation analysis shall be prepared for all major subdivision applications to categorize the impacts of the proposed activities and physical alterations on those

resources shown on the existing resources and site analysis (as required under § 390-25D). All proposed improvements, including but not necessarily limited to grading, fill, roads, buildings, utilities and stormwater detention facilities, as proposed in the other proposed preliminary plan documents, shall be taken into account in preparing the preliminary resource impact and conservation analysis, which shall clearly demonstrate that the applicant has minimized site disturbance to the greatest extent practicable.

- (2) Using the existing resources and site analysis as a base map, impact areas shall be mapped according to the following categories: 1) primary impact areas, i.e., areas directly impacted by the proposed major subdivision, 2) secondary impact areas, i.e., areas in proximity to primary areas which may be impacted, and 3) designated protected areas, either to be included in a proposed greenway or an equivalent designation such as dedication of a neighborhood park site.
- (3) In addition, the applicant shall submit an accompanying resource assessment report divided into the following sections:
  - (a) Description of existing resources as documented in § 390-25D.
  - (b) Impacts of the proposed development on existing resources, correlated to the areas depicted in the resource impact and conservation analysis.
  - (c) Measures taken to minimize and control such impacts both during and following the period of site disturbance and construction.
  - (d) The qualifications and experience of the preparer of the report.
- (4) This requirement for a resource impact and conservation analysis may be waived by the Township if, in its judgment, the proposed development areas, as laid out in the sketch plan or in the preliminary plan would be likely to cause no more than an insignificant impact upon the site's resources.

F. Preliminary improvements plan. This plan shall include the following items:

- (1) Historic resources, trails and significant natural features, including topography, areas of steep slope, wetlands, one-hundred-year floodplains, swales, rock outcroppings, vegetation, existing utilities, and other site features, as indicated on the existing resources and site analysis.
- (2) Existing and proposed lot lines, lot areas, full lot grading, driveway locations and elevations, and any existing easements and rights-of-way.
- (3) Location, alignment, width, profile and proposed names of all proposed roads and road rights-of-way, including all road extensions or spurs that are reasonably necessary to provide adequate road connections and facilities to adjoining development or undeveloped areas; preliminarily engineered profiles for proposed roads. Turning movement diagrams shall be provided to demonstrate that the largest truck or emergency vehicle servicing the development can safely and conveniently navigate the proposed roads, drives and parking and loading areas.
- (4) Information indicating available and safe sight stopping distances for all driveways, access drives, roads, etc., which must be in compliance with the most current PennDOT specifications.
- (5) Location of proposed swales, drainage easements, stormwater and other management facilities. Also, see Chapter 365, Stormwater Management, of the Code of the Township of Pocono.
- (6) Where community sewage service is proposed, the proposed layout of proposed sewage systems, including but not limited to the proposed locations of sewer mains and sewage treatment plants, showing the type and degree of treatment intended and the size and capacity of treatment facilities.

- (7) Where central water service is proposed, the proposed layout of proposed water distribution facilities including water mains, fire hydrants, storage tanks and, where appropriate, wells or other water sources.
- (8) Location of all percolation tests as may be required under this chapter, including all failed test sites or pits as well as those approved. All approved sites shall be clearly distinguished from unapproved sites.
- (9) Limit of disturbance line (must be exact in relation to the retention of existing trees proposed to be saved).
- (10) Location and dimensions of proposed playgrounds, public buildings, public areas and parcels of land proposed to be dedicated or reserved for public use.
- (11) If land to be subdivided lies partly in or abuts another municipality, the applicant shall submit information concerning the location and proposed design of roads, layout and size of lots and provisions of public improvements on land subject to his control within the adjoining municipalities. The design of public improvements shall provide for a smooth, practical transition where specifications vary between municipalities. Evidence of approval of this information by appropriate officials of the adjoining municipalities also shall be submitted.
- (12) Where the applicant proposes to install the improvements in phases, he shall submit with the preliminary plan a delineation of the proposed sections and a schedule of deadlines within which applications for final approval of each section are intended to be filed.
- (13) Utilities and easements:
  - (a) Locations of existing and proposed utility easements.
  - (b) Layout of all proposed sanitary and storm sewers and location of all inlets and culverts, and any proposed connections with existing facilities. (This data may be on a separate plan.)
    - [1] Stationing and offsets to be provided.
    - [2] Elevation and top of structures to be provided.
  - (c) The proposed location of on-site sewage and water facilities.
- (14) Location of proposed shade trees, plus locations of existing vegetation to be retained.
- (15) A signature block in the lower right hand eighth of the plan immediately above the title block for recommendation by the Planning Commission and for the approval of the Board of Commissioners shall be provided including a space for the date of recommendation/approval. Include provision for plan revisions including space for a brief description of the revision directly to the left of the title block.
- (16) Signature blocks for the Township Engineer and Monroe County Planning Commission.
- (17) Zoning data (if a zoning ordinance is in effect), including all of the following, when applicable:
  - (a) Zoning district designations.
  - (b) Zoning district boundary lines traversing the proposed major subdivision and/or development.
  - (c) Zoning district boundary lines within 1,000 feet of the proposed major subdivision and/or development, shown on location map.
- (18) A title block shall be included on the lower right corner.

- (19) Name and address of project.
- (20) Name and address of the owner of record (if a corporation, give name of each officer) and current deed book and page where the deed of record is recorded.
- (21) Name and address of developer if different from landowner (if a corporation, give name of each officer).
- (22) Name, address, license number, original seal and original signature of the qualified professional (See definition in Article II.) responsible for the preparation of the plan.
- (23) Date, including the month, day and year that the preliminary plan was initially prepared and the month, day and year for each plan revision along with a description of the revision.
- (24) A key map for the purpose of locating the property being subdivided and showing the relation of the property, differentiated by tone or pattern, to adjoining property and to all roads, roads, municipal boundaries, zoning districts (if zoning is in effect), watercourses and any area subject to flooding.
- (25) North arrow (true or magnetic).
- (26) Graphic scale and written scale.
- (27) Names of present adjoining property owners and the names of all adjoining subdivisions, if any, including property owners and/or subdivisions across adjacent roads, along with the current Tax Map number for each property shown.
- (28) The road name and number (if applicable) where the property is located.
- (29) Certificate of ownership and acknowledgment of the plan, in the form provided by the Township, which shall be accurately completed, signed by the owner of the property, dated and notarized.
- (30) Certificate of accuracy and compliance, in the form provided by the Township, dated and signed by the registered professional land surveyor responsible for the plan and embossed with his or her seal.
- (31) Excepted parcels or sections shall be marked "not included in this plat" with the boundary completely indicated by bearings and distances.
- (32) The following items shall be on all preliminary plans in the form of protective covenants and/or notes:
  - (a) Building setbacks, easements, buffers, etc., that would limit building.
  - (b) Corner lot sight easements.
  - (c) Utility, drainage and slope easements.
  - (d) "Well and sewage disposal systems shall be constructed in accordance with recommended standards of the Pennsylvania Department of Environmental Protection."
  - (e) "Individual owners of lots must apply to the Township for, and obtain, a sewage permit prior to undertaking the construction of an on-lot sewage disposal system."
  - (f) "The Planning Commission and the Board of Commissioners have not passed upon the feasibility of any individual lot or location within a lot being able to sustain any type of well or sewage disposal system."

- (g) "The applicant hereby certifies that every contract for the sale of a lot shown on this plan, and for which there is no currently existing community sewage system available, will contain a statement in the contract of sale advising the purchaser of his rights and obligations under Act Number 280 of 1976, amending the Pennsylvania Sewage Facilities Act."<sup>[1]</sup>
- [1] *Editor's Note: See 35 P.S. 750.1 et seq.*
- (h) "By approval of this plan the Township has neither confirmed nor denied the existence and/or extent of any wetland areas whether or not delineated on the plan, and any encroachment thereon for any reason whatsoever shall be the sole responsibility of the subdivider and/or developer, his heirs, successors and assigns and shall be subject to the jurisdiction of the Army Corps of Engineers and/or the Pennsylvania Department of Environmental Protection and said encroachment shall conform to the rules and regulations of the jurisdictional agencies."
- (i) "This plan is under and subject to all of the rules, regulations, requirements and restrictions as set forth in the Pocono Township Subdivision and Land Development Ordinance and the Pocono Township Zoning Ordinance, as both are amended."
- (j) The applicable highway occupancy note(s) shall appear on the plan: "A highway occupancy permit is required pursuant to Section 420 of the Act of June 1, 1945 (P.L. 1242, No. 428), known as the 'State Highway Law,' before driveway access to a state highway is permitted"; and/or "A highway occupancy permit is required pursuant to the Pocono Township Road Encroachment Ordinance before driveway access to a Township road is permitted." The applicable note(s) shall also state: "Access to the public road shall be only as authorized by a highway occupancy permit."
- (k) In the event the subdivision incorporates a private access road as defined in this chapter, the following shall appear on the plan: "The maintenance of the private access road and turnaround shall be the responsibility of the owner(s) of the lots served by the road. The private access road shall remain private and shall not be offered for dedication to the Township as a public road."
- (l) In the event the subdivision includes the joining or annexing of lots, parcels or tracts of land, the following shall appear on the plan: "Lot Number \_\_\_\_ shall be joined to and become an inseparable part of Lot Number \_\_\_\_ and cannot be subdivided or sold separately or apart therefrom without prior Township approval."
- (m) "The applicant, his heirs, successors or assigns will implement all requirements and obtain all permits and approvals as required by any and all local, state or federal agencies and authorities, and does hereby acknowledge and agree that if said permits and approvals are not obtained as required, then any and all approvals given by Pocono Township will become null and void with no further action on the part of the Township."
- (n) A listing of any subdivision/land development waivers or modifications, zoning variances, special exceptions and/or conditional uses that have been granted, including the date of the order of the Pocono Township Zoning Hearing Board or Board of Commissioners granting the same.
- (o) If the Plans include any stormwater management planning, controls or devices, the following covenant shall appear on the plan: "The owners, their heirs, executors, administrators, successors and assigns, shall make provision and be responsible for the installation, maintenance, operation and repair of any and all stormwater management facilities and controls depicted on this plan and other plans and documents supporting the same, including, but not limited to, all infiltration devices, buffers, detention basins, inlets, swales, pipes, berms and spreaders. Pocono Township is hereby granted the right to inspect all permanent stormwater management facilities and controls at any reasonable time. If Pocono Township determines at any time that any of said stormwater management facilities or controls have been eliminated, altered or improperly maintained, the then

owner shall be advised of the corrective measures required and be afforded a reasonable period of time to take the necessary corrective action. Pocono Township shall have the right, but not the obligation, of ingress, egress and regress to any and all of the stormwater management facilities and controls, as well as upon and within the utility and drainage easements as shown on this plan, for the purpose of installation, maintenance and/or repair due to the failure or neglect of the owner to perform the same within the time required, or for emergency remedies to the stormwater management facilities and controls if necessary, if Pocono Township elects to perform such installation, maintenance and/or repair. All costs and expenses incurred by Pocono Township in relation to any work performed by Pocono Township pursuant to the provisions of this covenant and/or the enforcement of the same, shall be the joint and several responsibility of the owner and any occupier of the property who violated the provisions of this covenant, payable by the owners and/or occupiers of the property, their heirs, administrators, executors, successors and assigns upon demand by Pocono Township, and shall constitute a lien against the property until paid in full. The remedies of Pocono Township pursuant to this covenant are in addition to all other rights and remedies available to Pocono Township, its successors and assigns, pursuant to any statute, ordinance, at law or in equity. All of the foregoing is more particularly and at large provided in that certain Stormwater Management Agreement and Declaration of Easement between the owner and the Township dated \_\_\_\_\_, 20\_\_\_\_, the terms and provisions of which are incorporated herein by reference. This covenant shall run with the land.”

(33) Design plans and calculations, signed and sealed by a professional engineer, for any remaining retaining walls over four feet in height.

G. Supporting documents and information. The following supporting documents, plans and information shall be submitted with preliminary plans for all major subdivisions:

(1) Road information as follows:

(a) Typical road cross-section drawings for all proposed roads showing the following:

[1] Typical cut sections.

[2] Typical fill sections.

[3] Superelevated sections.

[4] Typical parallel drainage.

[5] Underdrains, if applicable.

(b) Profiles along the top of the cartway center line showing existing and proposed grade lines and printed elevations of the proposed grade lines at fifty-foot intervals, with stationing.

(c) WB-50 turning movement diagrams for the largest anticipated vehicle.

(2) Exterior elevations of any proposed buildings if the property is to be developed for a use other than a single-family detached dwelling.

(3) Any existing or proposed deed restrictions, protective and restrictive covenants that apply to the major subdivision and/or development plan.

(4) All proposed offers of dedication and/or reservation of rights-of-way and land areas with conditions attached.

- (5) Existing documents of dedication and/or reservation of rights-of-way and land areas with conditions attached.
- (6) Proof of legal interest in the property, a copy of the latest deed of record and current title search report.
- (7) Water supply information. In the case of individual on-lot wells, information documenting water table depth and potential for affecting the groundwater supply. In the case of community systems:
  - (a) A statement from a professional engineer of the type and adequacy of any community water supply system proposed to serve the project.
  - (b) Preliminary design of any central water supply system.
  - (c) Publicly owned central system. A letter from the water company or authority stating that said company or authority will supply the development including a verification of the adequacy of service.
  - (d) Privately owned central system. A statement setting forth the proposed ownership of the system and responsibility for operation and maintenance.
  - (e) A copy of any application for any permit, license or certificate required by DEP or the Pennsylvania Public Utility Commission for the construction and operation of any proposed central water supply system. Preliminary plan approval shall be conditioned on the issuance of said permits by PA DEP and/or PA PUC.
- (8) Sewage disposal information.
  - (a) Completed sewage facilities planning module(s) for land development and other required sewage planning documents as required by the Pennsylvania Sewage Facilities Act<sup>[2]</sup> and PA DEP.  
[2] *Editor's Note: See 35 P.S. § 750.1 et seq.*
  - (b) Private sewage treatment plants and community on-lot systems. A preliminary design of the system and a statement setting forth the proposed ownership of the system and responsibility for operation and maintenance. A business plan and agreement shall be provided to ensure that the plant or system is self-sufficient, including security for capital components and maintenance.
  - (c) If service by the Township, a sewer authority or a public utility is proposed, a letter or other written certification from the Township, the authority or the public utility stating that it will provide the necessary sewer service and verifying that its system has adequate capacity to do so.
- (9) A list of any public utility, environmental or other permits required and if none are required, a statement to that effect. The Township may require a professional engineer's certification of such list.
- (10) Confirmation that the soil erosion and sedimentation control plan has been accepted for review by the Monroe County Conservation District. (See also § 390-51.)
- (11) A drainage/stormwater management plan meeting the requirements of this chapter and any Stormwater Management Ordinance<sup>[3]</sup> adopted by the Township.  
[3] *Editor's Note: See Ch. 365, Stormwater Management.*
- (12) Preliminary bridge designs and a statement by the applicant's engineer regarding any approvals required by the state or federal government.
- (13) A landscaping plan documenting compliance with § 390-55.



- (14) Where the land included in the subject application has an electric transmission line, a gas pipeline, or a petroleum or petroleum products transmission line located within the tract, the preliminary plan shall be accompanied by a letter from the owner or lessee of such line stating any conditions on the use of the land and the minimum building setback and/or right-of-way-lines. This requirement may also be satisfied by submitting a copy of the recorded agreement.
  - (15) Confirmation that the highway occupancy permit application has been accepted for review by the Township or PennDOT as applicable.
  - (16) A written plan for the ownership of and maintenance of all improvements, common areas and open space as required by §§ 390-38 and 390-39 of this chapter.
  - (17) The required wetland studies.
  - (18) The required steep slope information.
  - (19) Truck turning movement diagrams for at least a WB-50 truck.
  - (20) Exterior elevations (including at least front and side elevations) of any proposed buildings if the property is to be developed for a use other than single-family detached dwellings.
  - (21) Copies of all other required permits or the applications made therefor.
  - (22) Proposed grading plan.
- H. Community/financial impact analysis. A community impact analysis including the following information shall be required for residential subdivisions or land developments containing 15 or more dwelling units or residential lots in the aggregate; all nonresidential developments (with the exception of agricultural development) with buildings containing in excess of 20,000 square feet of floor space in the aggregate; development of any kind impacting 30 acres of land or more in the aggregate; or for any subdivision or land development application expected to generate more than 250 new trips per day.
- (1) Community impact. The impact analysis shall indicate the existing facilities that meet the increased needs that the development will bring to the Township and the improvements, if any, which will have to be made to accommodate the increased needs, addressing, at a minimum, the following:
    - (a) The number of residents and public school children generated by the proposed development.
    - (b) Increases in vehicular traffic and the ability of the existing road system to accommodate traffic and increases.
    - (c) The anticipated load on public utilities, police and fire protection.
    - (d) Disturbance to the natural ecology, such as alluvial soil areas, loss of tree cover and land erosion.
    - (e) Harmony with the character of surrounding development.
    - (f) Feasibility of providing public transportation to the site.
    - (g) Anticipated time period to sell/rent the proposed development.
  - (2) Financial analysis. The following information shall be provided:
    - (a) Anticipated annual revenues to the Township and the school district for each of the first five years of the development and at project build-out.

(b) Anticipated Township and school district expenses associated with the development for each of the first five years of the development and at project build-out.

(3) Phase I environmental site assessment (PESA).

(a) The purpose of the PESA shall be to identify current and historical items associated with the property that may constitute a threat to the environment. The assessment, prepared in accord with ASTM E1527-05, as amended, may be required by the Township Planning Commission and/or Commissioners for all developments, regardless of the number of lots, size of the building or acreage disturbed, if the land proposed for development is known to contain or suspected of containing items which may constitute a threat to the environment.

(b) By including the PESA requirement, Pocono Township makes no representation, expressed or implied, that the PESA, as defined above, will in any way, directly or indirectly, absolve or limit the developer/landowner from liability pursuant to the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA, or Superfund Act),<sup>[4]</sup> the Superfund Amendment and the Reauthorization Act of 1986 (SARA), or any other applicable federal, state, county, and local statute, rule or regulation heretofore or hereafter promulgated.

[4] *Editor's Note: see 42 U.S.C. § 9601 et seq.*

(c) The assessment must include, but shall not be limited to:

[1] A detailed site visit conducted by personnel with proper OSHA Health and Safety Training, including site reconnaissance, interview with knowledgeable sources, and an investigation of surrounding properties, in order to identify the following:

[a] Storage, utilization of agricultural herbicides/pesticides or waste at the site or surrounding properties;

[b] Presence of underground or aboveground storage tanks, or other containers, for fuel or agricultural chemical storage;

[c] The possible location and orientation of any underground petroleum pipelines which may come into contact with the site; and

[d] The possible location of on-site fill areas which, because of the deposited material, may pose limitations for structural and/or nonstructural development.

[2] A deeds of record search and review of Pocono Township records in order to identify previous landowners and site operations that could adversely affect the property. Historical aerial photographs should be considered in order to identify past on-site or off-site indicators of environmental impacts (e.g., lagoons, trash site, etc.). The review of tax records and maps in order to identify owners and respective land uses of surrounding properties.

[3] A review of the Pennsylvania Department of Environmental Protection (PA DEP) files in order to ascertain whether or not any notices of violation have been issued to the site or nearby properties. In addition, the United States Environmental Protection Agency (EPA) Comprehensive Environmental Response, Compensation, and Liability System (CERCLA) list of potential hazardous waste sites in Pennsylvania and the National Priorities List must be reviewed in order to identify nearby existing or potential national Superfund sites.

I. Additional information. The Township shall require any other necessary information based on the specific characteristics of the proposed project.

- (d) Typical parallel drainage.
  - (2) Final profiles along the top of the cartway (pavement) center line showing existing and final grade lines and printed elevations of the final grade line at fifty-foot intervals.
  - (3) Any existing and finally proposed deed restrictions, protective and restrictive covenants that apply to the subdivision and/or development plan.
  - (4) All existing and offers of dedication and/or reservation of rights-of-way and land areas with conditions attached.
  - (5) Proof of legal interest in the property, a copy of the latest deed of record and a current title search report.
  - (6) Water supply and sewage disposal information.
    - (a) Final plan of any central water supply and/or sewage disposal system showing all pertinent details.
    - (b) All other documentation required to demonstrate compliance with § 390-48 of this chapter.
  - (7) All required state or federal environmental and other permits.
  - (8) Highway occupancy permits.
  - (9) Soil erosion and sedimentation control plan approved by the Monroe County Conservation District.
  - (10) Final drainage/stormwater management plan.
  - (11) Final grading and finish contours.
  - (12) Final bridge designs and required state or federal approvals.
  - (13) Proof of execution of the plan for the ownership of and maintenance of all improvements, common areas and open space as required by §§ 390-38 and 390-39 of this chapter.
  - (14) Final utility plans (i.e., sewer, water, cable, electric, gas, storm sewer).
- E. Additional information. The Township shall request any other necessary information based on the specific characteristics of the proposed project.
- F. Application forms and certifications. The applicant shall complete and submit such application forms and certifications as prescribed by the Township for submission with final plan applications.
- G. Maintenance of development improvements. The developer shall provide a proposed plan for the succession of ownership and continued operation and maintenance of all development improvements, amenities and common use or open space areas in accord with Article V. The Township shall determine the adequacy of the plan and shall require any additional assurance to provide for proper operation and maintenance.

### **§ 390-27 Minor subdivisions, final plan requirements.**

Plans for minor subdivisions shall be prepared by a qualified professional (See definition in Article II.) as applicable and required by state law; and shall be submitted pursuant to the following:

- A. Drafting standards.

- (1) The plan shall be clearly and legibly drawn at a scale of 10 feet, 20 feet, 30 feet, 40 feet, 50 feet, 60 feet, 80 feet, 100 feet or 200 feet to the inch.
- (2) Dimensions shall be in feet and hundredths of feet and bearings shall be in degrees, minutes and seconds for the boundary of the entire tract and lot lines.
- (3) The survey shall not have an error of closure greater than one in 10,000 feet and shall include a boundary closure report.
- (4) The sheet size shall be no larger than 24 inches by 36 inches, unless permitted by the Planning Commission. If the plan is prepared in two or more sections, a key map showing the location of the sections shall be placed on each sheet. If more than one sheet is necessary, each sheet shall be the same size and numbered to show the relationship to the total number of sheets in the plan (e.g., Sheet 1 of 5), and a key diagram showing the relative location of the several sections shall be drawn on each sheet.
- (5) Plans shall be legible in every detail.

**B. Minor plan information.**

- (1) Name of minor subdivision.
- (2) Name and address of owner of record (if a corporation, give name of each officer).
- (3) Name and address of developer if different from landowner (if a corporation, give name of each officer).
- (4) Name, address, license number, original seal and original signature of the qualified professional (See definition in Article II.) responsible for the preparation of the minor subdivision plan.
- (5) Date, including the month, day and year that the final plan for the minor subdivision was completed and the month, day and year of each plan revision along with a description of the revision.
- (6) The deed book volume and page number reference of the latest source(s) of title to the land being subdivided.
- (7) North arrow (true or magnetic).
- (8) Graphic scale and written scale.
- (9) Lots numbered in consecutive order, along with lots previously subdivided from the parcel.
- (10) A plat of the area proposed to be subdivided, including the tract boundaries, if appropriate, road lines and names, lot lines, rights-of-way or easements (existing and/or proposed, if any).
- (11) Sufficient data, acceptable to the Township, to determine readily the location, bearing and length of every boundary, road or lot line. All dimensions shall be shown in feet and hundredths of a foot. All bearings shall be shown to the nearest one second of an arc.
- (12) The area of each lot or parcel shall be shown within each lot or parcel, the area of each shown in the nearest 1/100th of an acre or square feet.
- (13) Reference monuments and/or lot markers shall be shown on the plan and shall be placed as required by § 390-49 of this chapter.
- (14)

Any existing buildings located on the tract being subdivided shall be platted to demonstrate compliance with setback requirements.

- (15) The proposed building reserve (setback) lines for each lot, or the proposed placement of each building.
- (16) The name and number and pavement width and right-of-way lines of all existing public roads and the name, location and pavement width and right-of-way lines of all other roads within or abutting the property.
- (17) Names of adjoining property owners including those across adjacent roads, and the names of all adjoining subdivisions including those across adjacent roads with the book and page where each property and/or subdivision is recorded; along with the Tax Map number for each property shown.
- (18) Watercourses, lakes, streams, ponds with names, and other significant features, constructed or natural including utilities, wells and sewage systems.
- (19) Wetlands in accord with § 390-57, if required.
- (20) A clear sight triangle shall be clearly shown for all road intersections.
- (21) Site data including, total acreage, number of lots, existing zoning district (if zoning is in effect) and Tax Map number.
- (22) Existing or proposed contour lines at an interval of not greater than 20 feet as superimposed from the latest USGS. quadrangle or from a field survey. A minimum of two contour lines are required to show direction and amount of slope.
- (23) Location of all flood hazard areas as shown on the most recent FIA/FEMA mapping.
- (24) The location and extent of various soil types by NRCS classification for each type.
- (25) The location of any soil test pits and/or percolation tests. The logs of the test pit evaluations and the results of the percolation tests shall accompany the plan.
- (26) Any existing or proposed areas of wells and subsurface sewage disposal fields when on-site disposal is proposed.
- (27) A location map at a scale of one inch equals 800 feet for the purpose of locating the property being subdivided.
- (28) A signature block in the lower right hand eighth of the plan immediately above the title block for recommendation by the Planning Commission and for the approval of the Board of Commissioners shall be provided including a space for the date of recommendation/approval. Include provision for plan revisions including space for a brief description of the revision directly to the left of the title block.
- (29) Signature blocks for the Township Engineer and Monroe County Planning Commission.
- (30) A title block on the lower right corner.
- (31) Certificate of ownership and acknowledgment of the plan, in the form provided by the Township, which shall be accurately completed, signed by the owner of the property, dated and notarized.
- (32) Certificate of accuracy and compliance, in the form provided by the Township, dated and signed by the registered professional land surveyor responsible for the plan and embossed with his or her seal.

- (33) The following items and notes shall be on all final plans when applicable, in the form of protective and/or restrictive covenants:
- (a) Building setbacks, easements, buffers, etc., that would limit building.
  - (b) Corner lot sight easements.
  - (c) Utility, drainage and slope easements.
  - (d) "Well and sewage disposal systems shall be constructed in accordance with recommended standards of the Pennsylvania Department of Environmental Protection."
  - (e) "Individual owners of lots must apply to the Township for, and obtain, a sewage permit prior to undertaking the construction of an on-lot sewage disposal system."
  - (f) "The Planning Commission and the Commissioners have not passed upon the feasibility of any individual lot or location within a lot being able to sustain any type of well or sewage disposal system."
  - (g) "The applicant hereby certifies that every contract for the sale of a lot shown on this plan, and for which there is no currently existing community sewage system available, will contain a statement in the contract of sale advising the purchaser of his rights and obligations under Act Number 280 of 1976, amending the Pennsylvania Sewage Facilities Act."<sup>[1]</sup>  
[1] *Editor's Note: See 35 P.S. § 750.1 et seq.*
  - (h) "By approval of this plan the Township has neither confirmed nor denied the existence and/or extent of any wetland areas whether or not delineated on the plan and any encroachment thereon for any reason whatsoever shall be the sole responsibility of the subdivider and/or developer, his heirs, successors and assigns and shall be subject to the jurisdiction of the Army Corps of Engineers and/or the Pennsylvania Department of Environmental Protection and said encroachment shall conform to the rules and regulations of the jurisdictional agencies."
  - (i) "This plan is under and subject to all of the rules, regulations, requirements and restrictions as set forth in the Pocono Township Subdivision and Land Development Ordinance and the Pocono Township Zoning Ordinance, as both are amended."
  - (j) The applicable highway occupancy note(s) shall appear on the plan: "A highway occupancy permit is required pursuant to Section 420 of the Act of June 1, 1945 (P.L. 1242, No. 428), known as the 'State Highway Law,' before driveway access to a state highway is permitted"; and/or "A highway occupancy permit is required pursuant to the Pocono Township Road Encroachment Ordinance before driveway access to a Township road is permitted." The applicable note(s) shall also state: "Access to the public road shall be only as authorized by a highway occupancy permit."
  - (k) In the event the Subdivision includes the joining or annexing of lots, parcels or tracts of land, the following shall appear on the plan: "Lot Number \_\_\_\_ shall be joined to and become an inseparable part of Lot Number \_\_\_\_ and cannot be subdivided or sold separately or apart therefrom without prior Township approval."
  - (l) "The applicant, his heirs, successors or assigns will implement all requirements and obtain all permits and approvals as required by any and all local, state or federal agencies and authorities, and does hereby acknowledge and agree that if said permits and approvals are not obtained as required, then any and all approvals given by Pocono Township will become null and void with no further action on the part of the Township."

(m) A listing of any subdivision/land development waivers or modifications, zoning variances, special exceptions and/or conditional uses that have been granted, including the date of the order of the Pocono Township Zoning Hearing Board or Board of Commissioners granting the same.

(n) If the plans include any stormwater management planning, controls or devices, the following covenant shall appear on the plan: "The owners, their heirs, executors, administrators, successors and assigns, shall make provision and be responsible for the installation, maintenance, operation and repair of any and all stormwater management facilities and controls depicted on this plan and other plans and documents supporting the same, including, but not limited to, all infiltration devices, buffers, detention basins, inlets, swales, pipes, berms and spreaders. Pocono Township is hereby granted the right to inspect all permanent stormwater management facilities and controls at any reasonable time. If Pocono Township determines at any time that any of said stormwater management facilities or controls have been eliminated, altered or improperly maintained, the then owner shall be advised of the corrective measures required and be afforded a reasonable period of time to take the necessary corrective action. Pocono Township shall have the right, but not the obligation, of ingress, egress and regress to any and all of the stormwater management facilities and controls, as well as upon and within the utility and drainage easements as shown on this plan, for the purpose of installation, maintenance and/or repair due to the failure or neglect of the owner to perform the same within the time required, or for emergency remedies to the stormwater management facilities and controls if necessary, if Pocono Township elects to perform such installation, maintenance and/or repair. All costs and expenses incurred by Pocono Township in relation to any work performed by Pocono Township pursuant to the provisions of this covenant and/or the enforcement of the same, shall be the joint and several responsibility of the owner and any occupier of the property who violated the provisions of this covenant, payable by the owners and/or occupiers of the property, their heirs, administrators, executors, successors and assigns upon demand by Pocono Township, and shall constitute a lien against the property until paid in full. The remedies of Pocono Township pursuant to this covenant are in addition to all other rights and remedies available to Pocono Township, its successors and assigns, pursuant to any statute, ordinance, at law or in equity. All of the foregoing is more particularly and at large provided in that certain Stormwater Management Agreement and Declaration of Easement between the owner and the Township dated \_\_\_\_\_, 20\_\_\_\_, the terms and provisions of which are incorporated herein by reference. This covenant shall run with the land."

C. Supporting documents and information.

(1) The required sewage facilities planning modules along with the site investigation reports.

(2) Typical cross sections for any private access roads of a design adequate for anticipated traffic along with center-line profiles and vertical curve data.

D. Additional information. The Township shall request any other necessary information based on the specific characteristics of the project.

E. Application forms and certifications. The applicant shall complete and submit such application forms and certifications as prescribed by the Township for submission with minor subdivision applications.

### **§ 390-28 Lot line adjustments and revisions to previously approved plans.**

Plans for lot line adjustments and revisions to previously approved plans shall be prepared by a qualified professional (See definition in Article II.) as applicable and required by state law; and shall be submitted pursuant to the following:

A. Drafting standards.

- (1) The plan shall be clearly and legibly drawn at a scale of 10 feet, 20 feet, 30 feet, 40 feet, 50 feet, 60 feet, 80 feet, 100 feet or 200 feet to the inch.
- (2) Dimensions shall be in feet and hundredths of feet and bearings shall be in degrees, minutes and seconds for the boundary of the entire tract and lot lines.
- (3) The survey shall not have an error of closure greater than one in 10,000 feet and shall include a boundary closure report.
- (4) The sheet size shall be no larger than 24 inches by 36 inches, unless permitted by the Planning Commission. If the plan is prepared in two or more sections, a key map showing the location of the sections shall be placed on each sheet. If more than one sheet is necessary, each sheet shall be the same size and numbered to show the relationship to the total number of sheets in the plan (e.g., Sheet 1 of 5), and a key diagram showing the relative location of the several sections shall be drawn on each sheet.
- (5) Plans shall be legible in every detail.

**B. Plan information for lot line adjustments and revisions to previously approved plans.**

- (1) Name and address of owner of record (if a corporation, give name of each officer).
- (2) Name, address, license number, original seal and original signature of the qualified professional (See definition in Article II.) responsible for the preparation of the minor subdivision plan.
- (3) Date, including the month, day and year that the final plan for the minor subdivision was completed and the month, day and year of each plan revision along with a description of the revision.
- (4) The deed book volume and page number reference of the latest source(s) of title to the land being subdivided.
- (5) North arrow (true or magnetic).
- (6) Graphic scale and written scale.
- (7) Sufficient data, acceptable to the Township, to determine readily the location, bearing and length of every boundary, road or lot line. All dimensions shall be shown in feet and hundredths of a foot. All bearings shall be shown to the nearest one second of an arc.
- (8) The original and proposed lot numbers shown on the appropriate lots.
- (9) Building setback lines.
- (10) Any existing buildings located on the tract being subdivided shall be platted to demonstrate compliance with setback requirements.
- (11) Reference monuments and/or lot markers shall be shown on the plan and shall be placed as required by § 390-49 of this chapter.
- (12) The area of each lot or parcel shall be shown within each lot or parcel, the area of each shown in the nearest 1/100th of an acre or square feet.
- (13) Lot lines to be eliminated shown with a broken line and labeled "Lot line to be eliminated."
- (14)



The name and number and pavement width and right-of-way lines of all existing public roads and the name, location and pavement width and right-of-way lines of all other roads within or abutting the property.

- (15) Names of adjoining property owners including those across adjacent roads, and the names of all adjoining subdivisions including those across adjacent roads with the book and page where each property and/or subdivision is recorded; along with the Tax Map number for each property shown.
- (16) The area of each lot, existing and proposed.
- (17) A reference to the recorded subdivision plan where the lots were originally subdivided including recording information.
- (18) A location map at a scale of one inch equals 800 feet for the purpose of locating the property being subdivided.
- (19) Zoning district.
- (20) A signature block in the lower right hand eighth of the plan immediately above the title block for the approval of the Board of Commissioners including a space for the date approval.
- (21) Certificate of ownership and acknowledgment of the plan, in the form provided by the Township, which shall be accurately completed, signed by the owner of the property, dated and notarized.
- (22) Certificate of accuracy and compliance, in the form provided by the Township, dated and signed by the registered professional land surveyor responsible for the plan and embossed with his or her seal.
- (23) The following items and notes shall be on all lot line adjustment/revision plans when applicable, in the form of protective and/or restrictive covenants:
  - (a) "Well and sewage disposal systems shall be constructed in accordance with recommended standards of the Pennsylvania Department of Environmental Protection."
  - (b) "Individual owners of lots must apply to the Township for, and obtain, a sewage permit prior to undertaking the construction of an on-lot sewage disposal system."
  - (c) "The Planning Commission and the Commissioners have not passed upon the feasibility of any individual lot or location within a lot being able to sustain any type of well or sewage disposal system."
  - (d) "By approval of this plan the Township has neither confirmed nor denied the existence and/or extent of any wetland areas whether or not delineated on the plan and any encroachment thereon for any reason whatsoever shall be the sole responsibility of the subdivider and/or developer, his heirs, successors and assigns and shall be subject to the jurisdiction of the Army Corps of Engineers and/or the Pennsylvania Department of Environmental Protection and said encroachment shall conform to the rules and regulations of the jurisdictional agencies."
  - (e) "This plan is under and subject to all of the rules, regulations, requirements and restrictions as set forth in the Pocono Township Subdivision and Land Development Ordinance and the Pocono Township Zoning Ordinance, as both are amended."
  - (f) The applicable highway occupancy note(s) shall appear on the plan: "A highway occupancy permit is required pursuant to Section 420 of the Act of June 1, 1945 (P.L. 1242, No. 428), known as the 'State Highway Law,' before driveway access to a state highway is permitted"; and/or "A highway occupancy

permit is required pursuant to the Pocono Township Road Encroachment Ordinance, before driveway access to a Township road is permitted." The applicable note(s) shall also state: "Access to the public road shall be only as authorized by a highway occupancy permit."

- (g) In the event the subdivision incorporates a private access road as defined in this chapter, the following shall appear on the plan: "The maintenance of the private access road and turnaround shall be the responsibility of the owner(s) of the lots served by the road. The private access road shall remain private and shall not be offered for dedication to the Township as a public road."
- (h) In the event the subdivision includes the joining or annexing of lots, parcels or tracts of land, the following shall appear on the plan: "Lot Number \_\_\_\_ shall be joined to and become an inseparable part of Lot Number \_\_\_\_ and cannot be subdivided or sold separately or apart therefrom without prior Township approval."
- (i) "The applicant, his heirs, successors or assigns will implement all requirements and obtain all permits and approvals as required by any and all local, state or federal agencies and authorities, and does hereby acknowledge and agree that if said permits and approvals are not obtained as required, then any and all approvals given by Pocono Township will become null and void with no further action on the part of the Township."
- (j) When easements are not delineated specifically, "the approval of this plan by the Board of Commissioners does not have the effect of altering, redefining or extinguishing any easements of record, existing on or over the subject property."
- (k) "This plan supersedes the plot plan filed in the Monroe County Recorder of Deeds Office in Plot Book Volume \_\_\_\_, Page \_\_\_\_, but only to the extent depicted on this plan. In all other respects, said recorded plan shall remain in full force and effect."
- (l) If the plans include any stormwater management planning, controls or devices, the following covenant shall appear on the plan: "The owners, their heirs, executors, administrators, successors and assigns, shall make provision and be responsible for the installation, maintenance, operation and repair of any and all stormwater management facilities and controls depicted on this plan and other plans and documents supporting the same, including, but not limited to, all infiltration devices, buffers, detention basins, inlets, swales, pipes, berms and spreaders. Pocono Township is hereby granted the right to inspect all permanent stormwater management facilities and controls at any reasonable time. If Pocono Township determines at any time that any of said stormwater management facilities or controls have been eliminated, altered or improperly maintained, the then owner shall be advised of the corrective measures required and be afforded a reasonable period of time to take the necessary corrective action. Pocono Township shall have the right, but not the obligation, of ingress, egress and regress to any and all of the stormwater management facilities and controls, as well as upon and within the utility and drainage easements as shown on this plan, for the purpose of installation, maintenance and/or repair due to the failure or neglect of the owner to perform the same within the time required, or for emergency remedies to the stormwater management facilities and controls if necessary, if Pocono Township elects to perform such installation, maintenance and/or repair. All costs and expenses incurred by Pocono Township in relation to any work performed by Pocono Township pursuant to the provisions of this covenant and/or the enforcement of the same, shall be the joint and several responsibility of the owner and any occupier of the property who violated the provisions of this covenant, payable by the owners and/or occupiers of the property, their heirs, administrators, executors, successors and assigns upon demand by Pocono Township, and shall constitute a lien against the property until paid in full. The remedies of Pocono Township pursuant to this covenant are in addition to all other rights and remedies available to Pocono Township, its successors and assigns, pursuant to any statute, ordinance, at law or in equity. All of the foregoing is more particularly and at large provided in that certain Stormwater Management Agreement and Declaration of Easement between the owner and

the Township dated \_\_\_\_\_, 20\_\_\_\_, the terms and provisions of which are incorporated herein by reference. This covenant shall run with the land.”

(m) Specific additional restrictions or covenants that the Board of Commissioners deems appropriate.

- C. Additional information. The Township shall request any other necessary information based on the specific characteristics of the project.
- D. Application forms and certifications. The applicant shall complete and submit such application forms and certifications as prescribed by the Township for submission with minor subdivision applications.

### **§ 390-29 Plan requirements for land developments.**

- A. Applicability. All plans for land developments, except as noted in Subsection B below, shall be submitted in accord with this § 390-29.
- B. Nonqualifying land developments - preliminary plans and final plans required. Land developments which involve the transfer of any interest in real estate other than rental or short-term lease shall comply with § 390-16, Preliminary plans, and § 390-17, Final plans, of this chapter.
- C. Plan preparation. Land development plans shall be prepared by a qualified professional (See definition in Article II.) as applicable and required by state law.
- D. Elements. The submission requirements for a land development plan shall consist of the following elements, and shall be prepared in accordance with the drafting standards and plan requirements described herein:
  - (1) Site context map;
  - (2) Existing resources and site analysis;
  - (3) Resource impact and conservation analysis; and
  - (4) Improvements plan;
  - (5) Studies and reports as set forth in other parts of this chapter.
- E. Drafting standards.
  - (1) The plan shall be clearly and legibly drawn at a scale of 10 feet, 20 feet, 30 feet, 40 feet, 50 feet, 60 feet, 80 feet, 100 feet or 200 feet to the inch.
  - (2) Dimensions shall be in feet and hundredths of feet; bearings shall be in degrees, minutes and seconds for the boundary of the entire tract, and dimensions in feet for lot lines.
  - (3) The survey shall not have an error of closure greater than one in 10,000 feet and shall include a boundary closure report.
  - (4) The sheet size shall be no smaller than 11 inches by 17 inches and no larger than 24 inches by 36 inches. If the plan is prepared in two or more sections, a key map showing the location of the sections shall be placed on each sheet. If more than one sheet is necessary, each sheet shall be the same size and numbered to show the relationship to the total number of sheets in the plan (e.g., Sheet 1 of 5), and a key diagram showing the relative location of the several sections shall be drawn on each sheet.<sup>[1]</sup>

[1] Editor's Note: Amended at time of adoption of Code (see Ch. 1, General Provisions, Art. I).

(5) Plans shall be legible in every detail.

F. Site context map. A map compiled from existing information showing the location of the proposed land development within its neighborhood context shall be submitted. For sites under 100 acres in area, such maps shall show the relationship of the subject property to natural and man-made features existing within 1,000 feet of the site. For sites of 100 acres or more, the map shall show the above relationships within 2,000 feet of the site. The features that shall be shown on site context maps include topography (from USGS. maps), stream valleys, wetland complexes (from maps published by the United States Fish and Wildlife Service or the USDA Natural Resources Conservation Service), woodlands over 1/2 acre in area (from aerial photographs), ridgelines, public roads and trails, utility easements and rights-of-way, public land, and land protected under conservation easements.

G. Existing resources and site analysis. For all land developments, an existing resources and site analysis shall be prepared to provide the developer and the municipality with a comprehensive analysis of existing conditions, both on the proposed development site and within 500 feet of the site. Conditions beyond the parcel boundaries may be described on the basis of existing published data available from governmental agencies, and from aerial photographs. The Planning Commission shall review the plan to assess its accuracy, conformance with municipal ordinances, and likely impact upon the natural and cultural resources on the property. The following information shall be included:

(1) A vertical aerial photograph enlarged to a scale not less detailed than one inch equals 400 feet, with the site boundaries clearly marked.

(2) Topography, the contour lines of which shall generally be at two-foot intervals although ten-foot intervals are permissible beyond the parcel boundaries, interpolated from USGS published maps. The determination of appropriate contour intervals shall be made by the Planning Commission, which may specify greater or lesser intervals on exceptionally steep or flat sites. Slopes between 15% and 25% and exceeding 25% shall be clearly indicated. Topography for land developments shall be prepared by a professional land surveyor or professional engineer from an actual field survey of the site or from stereoscopic aerial photography and shall be coordinated with official USGS bench marks the location and datum of which shall be shown on the plan.

(3) The location and delineation of ponds, vernal pools, streams, ditches, drains, and natural drainage swales, as well as the one-hundred-year floodplains and wetlands. Additional areas of wetlands on the proposed development parcel shall also be indicated, as evident from testing, visual inspection, or from the presence of wetland vegetation.

(4) Vegetative cover conditions on the property according to general cover type including cultivated land, permanent grass land, meadow, pasture, old field, hedgerow, woodland and wetland, the actual canopy line of existing trees and woodlands. Vegetative types shall be described by plant community, relative age and condition.

(5) Soil series, types and phases, as mapped by the United States Department of Agriculture, Natural Resources Conservation Service, in the published soil survey for the county, and accompanying data published for each soil relating to its suitability for construction (and, in unsewered areas, for septic suitability).

(6) Watershed boundaries shall be identified.

(7) A viewshed analysis using GIS or other suitable methodology showing the location and extent of views into the property and along ridgelines from critical points along adjoining public roads and how the views will be affected by the proposed development and what design elements will be used to minimize the visual effects.

- (8) Geologic formations on the proposed development parcel, including rock outcroppings, cliffs, sinkholes, and fault lines, based on available published information or more detailed data obtained by the applicant.
- (9) All existing man-made features including but not limited to roads, driveways, farm roads, woods roads, buildings, foundations, walls, wells, drainage fields, dumps, utilities, fire hydrants, and storm and sanitary sewers.
- (10) Locations of all historically significant sites or structures on the tract, including but not limited to cellar holes, stone walls, earthworks, and graves.
- (11) Locations of trails that have been in public use (pedestrian, equestrian, bicycle, etc.).
- (12) All easements and other encumbrances of property which are or have been filed of record with the Recorder of Deeds of Monroe County shall be shown on the plan.

H. Resource impact and conservation analysis.

- (1) A resource impact and conservation analysis shall be prepared for all land development applications to categorize the impacts of the proposed activities and physical alterations on those resources shown on the existing resources and site analysis (as required under § 390-29G). All proposed improvements, including but not necessarily limited to grading, fill, roads, buildings, utilities and stormwater detention facilities, as proposed in the other proposed land development plan documents, shall be taken into account in preparing the preliminary resource impact and conservation analysis, which shall clearly demonstrate that the applicant has minimized site disturbance to the greatest extent practicable.
- (2) Using the existing resources and site analysis as a base map, impact areas shall be mapped according to the following categories: 1) primary impact areas, i.e., areas directly impacted by the proposed land development, 2) secondary impact areas, i.e., areas in proximity to primary areas which may be impacted, and 3) designated protected areas, either to be included in a proposed greenway or an equivalent designation such as dedication of a neighborhood park site.
- (3) In addition, the applicant shall submit an accompanying resource assessment report divided into the following sections:
  - (a) Description of existing resources as documented in § 390-29G.
  - (b) Impacts of the proposed development on existing resources, correlated to the areas depicted in the resource impact and conservation analysis.
  - (c) Measures taken to minimize and control such impacts both during and following the period of site disturbance and construction.
  - (d) The qualifications and experience of the preparer of the report.
- (4) This requirement for a resource impact and conservation analysis may be waived by the Township if, in its judgment, the proposed development areas, as laid out in the sketch plan or in the land development plan would be likely to cause no more than an insignificant impact upon the site's resources.

I. Improvements plan. This plan shall include the following items:

- (1) Historic resources, trails and significant natural features, including topography, areas of steep slope, wetlands, one-hundred-year floodplains, swales, rock outcroppings, vegetation, existing utilities, and other site features, as indicated on the existing resources and site analysis.

- (2) Existing and proposed lot lines, lot areas, full lot grading, driveway locations and elevations, and any existing easements and rights-of-way.
- (3) Location, alignment, width, profile and proposed names of all proposed roads and road rights-of-way, including all road extensions or spurs that are reasonably necessary to provide adequate road connections and facilities to adjoining development or undeveloped areas; preliminarily engineered profiles for proposed roads.
- (4) Information indicating available and safe sight stopping distances for all driveways, access drives, roads, etc., which must be in compliance with the most current version Pennsylvania Department of Transportation specifications.
- (5) Location of proposed swales, drainage easements, stormwater and other management facilities.
- (6) Where community sewage service is proposed, the proposed layout of proposed sewage systems, including but not limited to the proposed locations of sewer mains and sewage treatment plants, showing the type and degree of treatment intended and the size and capacity of treatment facilities.
- (7) Where central water service is proposed, the proposed layout of proposed water distribution facilities including water mains, fire hydrants, storage tanks and, where appropriate, wells or other water sources.
- (8) Location of all percolation tests as may be required under this chapter, including all failed test sites or pits as well as those approved. All approved sites shall be clearly distinguished from unapproved sites.
- (9) Limit-of-disturbance line (must be exact in relation to the retention of existing trees proposed to be saved).
- (10) Location and dimensions of proposed playgrounds, public buildings, public areas and parcels of land proposed to be dedicated or reserved for public use.
- (11) If land to be subdivided lies partly in or abuts another municipality, the applicant shall submit information concerning the location and proposed design of roads, layout and size of lots and provisions of public improvements on land subject to his control within the adjoining municipalities. The design of public improvements shall provide for a smooth, practical transition where specifications vary between municipalities. Evidence of approval of this information by appropriate officials of the adjoining municipalities also shall be submitted.
- (12) Where the applicant proposes to install the improvements in phases, he shall submit with the land development plan a delineation of the proposed sections and a schedule of deadlines within which applications for final approval of each section are intended to be filed.
- (13) Utilities and easements.
  - (a) Locations of existing and proposed utility easements.
  - (b) Layout of all proposed sanitary and storm sewers and location of all inlets and culverts, and any proposed connections with existing facilities. (This data may be on a separate plan.)
  - (c) The proposed location of on-site sewage and water facilities.
- (14) Location of proposed shade trees, plus locations of existing vegetation to be retained.
- (15) A signature block in the lower right hand eighth of the plan immediately above the title block for recommendation by the Planning Commission and for the approval of the Board of Commissioners shall

be provided including a space for the date of recommendation/approval. Include provision for plan revisions including space for a brief description of the revision directly to the left of the title block.

- (16) Signature blocks for the Township Engineer and Monroe County Planning Commission.
- (17) Zoning data (if a zoning ordinance is in effect), including all of the following, when applicable:
  - (a) Zoning district designations.
  - (b) Zoning district boundary lines traversing the proposed land development.
  - (c) Zoning district boundary lines within 1,000 feet of the proposed land development, shown on location map.
- (18) A title block shall be included on the lower right corner.
- (19) Name and address of project.
- (20) Name and address of the owner of record (if a corporation, give name of each officer) and current deed book and page where the deed of record is recorded.
- (21) Name and address of developer if different from landowner (if a corporation, give name of each officer).
- (22) Name, address, license number, original seal and original signature of the qualified professional (See definition in Article II.) responsible for the preparation of the plan.
- (23) Date, including the month, day and year that the land development plan was initially prepared and the month, day and year for each plan revision along with a description of the revision.
- (24) A key map for the purpose of locating the property being subdivided and showing the relation of the property, differentiated by tone or pattern, to adjoining property and to all roads, roads, municipal boundaries, zoning districts (if zoning is in effect), watercourses and any area subject to flooding.
- (25) North arrow (true or magnetic).
- (26) Graphic scale and written scale.
- (27) Names of present adjoining property owners and the names of all adjoining subdivisions, if any, including property owners and/or subdivisions across adjacent roads, along with the current Tax Map number for each property shown.
- (28) The road name and number (if applicable) where the property is located.
- (29) Certificate of ownership and acknowledgment of the plan, in the form provided by the Township, which shall be accurately completed, signed by the owner of the property, dated and notarized.
- (30) Certificate of accuracy and compliance, in the form provided by the Township, dated and signed by the registered professional land surveyor responsible for the plan and embossed with his or her seal.
- (31) Excepted parcels or sections shall be marked "not included in this plat" with the boundary completely indicated by bearings and distances.
- (32) The following items shall be on all land development plans in the form of protective covenants and/or notes:

- (a) Building setbacks.
- (b) Corner lot sight easements.
- (c) Utility, drainage and slope easements.
- (d) "Well and sewage disposal systems shall be constructed in accordance with recommended standards of the Pennsylvania Department of Environmental Protection."
- (e) "Individual owners of lots must apply to the Township for, and obtain, a sewage permit prior to undertaking the construction of an on-lot sewage disposal system."
- (f) "The Planning Commission and the Commissioners have not passed upon the feasibility of any individual lot or location within a lot being able to sustain any type of well or sewage disposal system."
- (g) "The applicant hereby certifies that every contract for the sale of a lot shown on this plan, and for which there is no currently existing community sewage system available, will contain a statement in the contract of sale advising the purchaser of his rights and obligations under Act Number 280 of 1976, amending the Pennsylvania Sewage Facilities Act."<sup>[2]</sup>  
[2] *Editor's Note: See 35 P.S. § 750.1 et seq.*
- (h) "By approval of this plan the Township has neither confirmed nor denied the existence and/or extent of any wetland areas whether or not delineated on the plan and any encroachment thereon for any reason whatsoever shall be the sole responsibility of the subdivider and/or developer, his heirs, successors and assigns and shall be subject to the jurisdiction of the Army Corps of Engineers and/or the Pennsylvania Department of Environmental Protection and said encroachment shall conform to the rules and regulations of the jurisdictional agencies."
- (i) "This plan is under and subject to all of the rules, regulations, requirements and restrictions as set forth in the Pocono Township Subdivision and Land Development Ordinance and the Pocono Township Zoning Ordinance, as both are amended."
- (j) The applicable highway occupancy note(s) shall appear on the plan: "A highway occupancy permit is required pursuant to Section 420 of the Act of June 1, 1945 (P.L. 1242, No. 428), known as the 'State Highway Law,' before driveway access to a state highway is permitted; and/or "A highway occupancy permit is required pursuant to the Pocono Township Road Encroachment Ordinance before driveway access to a Township road is permitted." The applicable note(s) shall also state: "Access to the public road shall be only as authorized by a highway occupancy permit."
- (k) In the event the subdivision includes the joining or annexing of lots, parcels or tracts of land, the following shall appear on the plan: "Lot Number \_\_\_\_ shall be joined to and become an inseparable part of Lot Number \_\_\_\_ and cannot be subdivided or sold separately or apart therefrom without prior Township approval."
- (l) "The applicant, his heirs, successors or assigns will implement all requirements and obtain all permits and approvals as required by any and all local, state or federal agencies and authorities, and does hereby acknowledge and agree that if said permits and approvals are not obtained as required, then any and all approvals given by Pocono Township will become null and void with no further action on the part of the Township."
- (m) A listing of any subdivision/land development waivers or modifications, zoning variances, special exceptions and/or conditional uses that have been granted, including the date of the order of the Pocono Township Zoning Hearing Board or Board of Commissioners granting the same.



(n) If the plans include any stormwater management planning, controls or devices, the following covenant shall appear on the plan: "The owners, their heirs, executors, administrators, successors and assigns, shall make provision and be responsible for the installation, maintenance, operation and repair of any and all stormwater management facilities and controls depicted on this plan and other plans and documents supporting the same, including, but not limited to, all infiltration devices, buffers, detention basins, inlets, swales, pipes, berms and spreaders. Pocono Township is hereby granted the right to inspect all permanent stormwater management facilities and controls at any reasonable time. If Pocono Township determines at any time that any of said stormwater management facilities or controls have been eliminated, altered or improperly maintained, the then owner shall be advised of the corrective measures required and be afforded a reasonable period of time to take the necessary corrective action. Pocono Township shall have the right, but not the obligation, of ingress, egress and regress to any and all of the stormwater management facilities and controls, as well as upon and within the utility and drainage easements as shown on this plan, for the purpose of installation, maintenance and/or repair due to the failure or neglect of the owner to perform the same within the time required, or for emergency remedies to the stormwater management facilities and controls if necessary, if Pocono Township elects to perform such installation, maintenance and/or repair. All costs and expenses incurred by Pocono Township in relation to any work performed by Pocono Township pursuant to the provisions of this covenant and/or the enforcement of the same, shall be the joint and several responsibility of the owner and any occupier of the property who violated the provisions of this covenant, payable by the owners and/or occupiers of the property, their heirs, administrators, executors, successors and assigns upon demand by Pocono Township, and shall constitute a lien against the property until paid in full. The remedies of Pocono Township pursuant to this covenant are in addition to all other rights and remedies available to Pocono Township, its successors and assigns, pursuant to any statute, ordinance, at law or in equity. All of the foregoing is more particularly and at large provided in that certain Stormwater Management Agreement and Declaration of Easement between the owner and the Township dated \_\_\_\_\_, 20\_\_\_\_, the terms and provisions of which are incorporated herein by reference. This covenant shall run with the land."

J. Supporting documents and information. The following supporting documents, plans and information shall be submitted with land development plans for all land developments:

(1) Road, accessway and parking area information as follows:

(a) Typical cross-section drawings for all proposed roads showing the following:

[1] Typical cut sections.

[2] Typical fill sections.

[3] Superelevated sections.

[4] Typical parallel drainage.

(b) Profiles along the top of the cartway center line showing existing and proposed grade lines and printed elevations of the proposed grade lines at fifty-foot intervals.

(c) Truck turning movement diagrams for at least a WB-50 truck.

(d) Road, accessway and lighting and parking area lighting.

(2) Exterior elevations of any proposed buildings including at least the front and side elevations.

(3)

Any existing or proposed deed restrictions, protective and restrictive covenants that apply to the land development plan.

- (4) All proposed offers of dedication and/or reservation of rights-of-way and land areas with conditions attached.
- (5) Existing documents of dedication and/or reservation of rights-of-way and land areas with conditions attached.
- (6) Proof of legal interest in the property, a copy of the latest deed of record and a current title search report.
- (7) Water supply information. In the case of individual on-lot wells, information documenting water table depth and potential for affecting the groundwater supply. In the case of community systems:
  - (a) A statement from a professional engineer of the type and adequacy of any community water supply system proposed to serve the project.
  - (b) Preliminary design of any central water supply system.
  - (c) Publicly owned central system. A letter from the water company or authority stating that said company or authority will supply the development including a verification of the adequacy of service.
  - (d) Privately owned central system. A statement setting forth the proposed ownership of the system and responsibility for operation and maintenance.
  - (e) A copy of any application for any permit, license or certificate required by DEP or the Pennsylvania Public Utility Commission for the construction and operation of any proposed central water supply system. Land development plan approval shall be conditioned on the issuance of said permits by PA DEP and/or PA PUC.
- (8) Sewage disposal information.
  - (a) Completed sewage facilities planning module(s) for land development and other required sewage planning documents as required by the Pennsylvania Sewage Facilities Act<sup>[3]</sup> and PA DEP.  
[3] Editor's Note: See 35 P.S. § 750.1 et seq.
  - (b) Private sewage treatment plants and community on-lot systems. A preliminary design of the system and a statement setting forth the proposed ownership of the system and responsibility for operation and maintenance.
  - (c) If service by the Township, a sewer authority or a public utility is proposed, a letter or other written certification from the Township, the authority or the public utility stating that it will provide the necessary sewer service and verifying that its system has adequate capacity to do so.
- (9) A list of any public utility, environmental or other permits required and if none are required a statement to that effect. The Township may require a professional engineer's certification of such list.
- (10) Confirmation that the soil erosion and sedimentation control plan has been accepted for review by the Monroe County Conservation District. (See also § 390-51.)
- (11) Drainage/stormwater management plan meeting the requirements of this chapter and any Stormwater Management Ordinance adopted by the Township.

- (12) Preliminary bridge designs and a statement by the applicant's engineer regarding any approvals required by the state or federal government.
- (13) A landscaping plan documenting compliance with § 390-55.
- (14) Where the land included in the subject application has an electric transmission line, a gas pipeline, or a petroleum or petroleum products transmission line located within the tract, the land development plan shall be accompanied by a letter from the owner or lessee of such right-of-way stating any conditions on the use of the land and the minimum building setback and/or right-of-way-lines. This requirement may also be satisfied by submitting a copy of the recorded agreement.
- (15) Confirmation that the highway occupancy permit application has been accepted for review by the Township or PennDOT as applicable.
- (16) A plan for the ownership of and maintenance of all improvements, common areas and open space as required by §§ 390-38 and 390-39 of this chapter.
- (17) Wetland studies as required by § 390-57 of this chapter.
- (18) Steep slope information as required to document compliance with this chapter.
- (19) Copies of all other required permits or the applications made therefor.
- (20) Design plans and calculations, signed and sealed by a professional engineer for any retaining walls over four feet in height.

K. Community/financial impact analysis. A community impact analysis including the following information shall be required for land developments containing 15 or more dwelling units or residential lots in the aggregate; all nonresidential developments (with the exception of agricultural development) with buildings containing in excess of 20,000 square feet of floor space in the aggregate; or development of any kind impacting 30 acres of land or more in the aggregate.

- (1) Community impact. The impact analysis shall indicate the existing facilities that meet the increased needs that the development will bring to the Township and the improvements, if any, which will have to be made to accommodate the increased needs, addressing, at a minimum, the following:
  - (a) The number of residents and public school children generated by the proposed development.
  - (b) Increases in vehicular traffic and the ability of the existing road system to accommodate traffic and increases.
  - (c) The anticipated load on public utilities, police and fire protection.
  - (d) Disturbance to the natural ecology, such as alluvial soil areas, loss of tree cover and land erosion.
  - (e) Harmony with the character of surrounding development.
  - (f) Feasibility of providing public transportation to the site.
  - (g) Anticipated time period to sell/rent the proposed development.
- (2) Financial analysis. The following information shall be provided:
  - (a) Anticipated annual revenues to the Township and the school district for each of the first five years of the development and at project build-out.

(b) Anticipated Township and school district expenses associated with the development for each of the first five years of the development and at project build-out.

(3) Phase I environmental site assessment (PESA).

(a) The purpose of the PESA shall be to identify current and historical items associated with the property that may constitute a threat to the environment. The assessment, prepared in accord with ASTM E1527-05, as amended, may be required by the Township Planning Commission and/or Board of Commissioners for all developments, regardless of the number of lots, size of the building or acreage disturbed, if the land proposed for development is known to contain or suspected of containing items which may constitute a threat to the environment.

(b) By including the PESA requirement, Pocono Township makes no representation, expressed or implied, that the PESA, as defined above, will in any way, directly or indirectly, absolve or limit the developer/landowner from liability pursuant to the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA, or Superfund Act),<sup>[4]</sup> the Superfund Amendment and the Reauthorization Act of 1986 (SARA), or any other applicable federal, state, county, and local statute, rule or regulation heretofore or hereafter promulgated.

[4] *Editor's Note: see 42 U.S.C. § 9601 et seq.*

(c) The assessment must include, but shall not be limited to:

[1] A detailed site visit conducted by personnel with proper OSHA Health and Safety Training, including site reconnaissance, interview with knowledgeable sources, and an investigation of surrounding properties, in order to identify the following:

[a] Storage, utilization of agricultural herbicides/pesticides or waste at the site or surrounding properties;

[b] Presence of underground or above ground storage tanks, or other containers, for fuel or agricultural chemical storage;

[c] The possible location and orientation of any underground petroleum pipelines which may come into contact with the site; and

[d] The possible location of on-site fill areas which, because of the deposited material, may pose limitations for structural and/or nonstructural development.

[2] A deeds of record search and review of Pocono Township records in order to identify previous landowners and site operations that could adversely affect the property. Historical aerial photographs must be procured and reviewed in order to identify past on-site or off-site indicators of environmental impacts (e.g., lagoons, trash site, etc.). The review of tax records and maps in order to identify owners and respective land uses of surrounding properties.

[3] A review of the Pennsylvania Department of Environmental Protection (PA DEP) files in order to ascertain whether or not any notices of violation have been issued to the site or nearby properties. In addition, the United States Environmental Protection Agency (EPA) Comprehensive Environmental Response, Compensation, and Liability System (CERCLA) list of potential hazardous waste sites in Pennsylvania and the National Priorities List must be reviewed in order to identify nearby existing or potential national Superfund sites.

L. Additional information. The Township shall require any other necessary information based on the specific characteristics of the proposed project.

- M. Application forms and certifications. The applicant shall complete and submit such application forms and certifications as prescribed by the Township for submission with land development plan applications.
- N. Land development plan engineering certification. Prior to approval of the land development plan, the applicant shall submit to the Township a land development plan engineering certification stating that the proposed layout of proposed roads, lots, and open lands complies with the Township's ordinances, particularly those sections governing the design of subdivision roads and stormwater management facilities, and that all improvements will be installed in accord with the specific requirements of this chapter or any waivers or modifications granted by the Township. This certification requirement is meant to provide the Township with assurance that the proposed plan is able to be accomplished within the Township's current regulations.

### **§ 390-30 Requirements for as-built plans.**

- A. As-built plans shall include the information required by this § 390-30 and additional information may be required on a case-by-case basis.
- B. Submission. One legible paper print of the as-built plans and one compact disk with the plans in PDF format shall be submitted to the Township and one of each to the Township Engineer simultaneously.
- C. Format. The as-built plans shall consist of the approved plans (as revised through construction) with design information struck with as-built information placed next to design information.
- D. Water and sewer. Water and sewer as-built plans shall be coordinated with the respective authorities.
- E. Topography. If revised topography is needed due to a significant change in grade (+/- 0.5 feet), the revised topography shall be shown to distinguish it from design topography.
- F. Plan information. The following information shall be provided on the as-built plans:
  - (1) Storm sewer, including revised topography for basin/BMPs (if needed), basin/BMP berm height and width, outlet structure elevations, emergency spillway elevation and length, basin/BMP volume calculations, storm pipes and inlets (including pipe size, slope, invert, grate elevations), and location of all BMPs including snouts, bottomless inlets, depressed landscape islands, infiltration trenches, porous pavement, etc.
  - (2) Light pole locations.
  - (3) Sidewalk locations (if different from design).
  - (4) Field changes not otherwise required by this section.
  - (5) Road and traffic signs.
  - (6) Road elevations, layout, and striping; and if intersections have been revised significantly, sight distance.
  - (7) Parking spaces including handicapped spaces and access points.
  - (8) Retaining wall locations and elevations.
  - (9) Property corner monuments and markers with surveyor's certification.
  - (10) Building locations with tie distances to property lines.
  - (11) Utility location in association with easements (i.e., is the utility centered on the easement, etc.).

Minimum Control Measure #6  
Pollution Prevention/Good Housekeeping

## POCONO TOWNSHIP PUBLIC WORKS DEPARTMENT

### OPERATIONS & MAINTENANCE TRAINING SESSION

To be reviewed by all Public Works Employees

#### Introduction:

Pocono is considered a Municipal Separate Storm Sewer System or MS4 and must report to the Pennsylvania Department of Environmental Protection (PADEP) on a regular basis on specific criteria. One such requirement, under the program's Minimum Control Measure (MCM) #6: Pollution Prevention/Good Housekeeping, is that all employees of a Public Works Department receive associated periodic training. Employees are to be trained to perform their jobs while being mindful of preventing pollution from entering the Township's stormwater system.

Many of the points made in the Operations & Maintenance plans are common sense practices that should be followed for pollution prevention as well as for maintaining a safe working environment. The PADEP noted in a recent seminar that the EPA considers the efforts taken on Pollution Prevention/Good Housekeeping by the various Public Works Departments to be one of the most important parts of the prevention of stormwater pollution.

One of the main points to remember as part of the Public Works Department, and as a consumer of drinking water, is that any substance that is discharged, by whatever means, onto an impervious surface will almost always end up in the stormwater system and ultimately our drinking water supply source.

Although many of the pollutant sources that we will review may seem trivial, but when you multiply these various sources by the municipality's, or even the country's population, the effects are significantly greater.

Another point to be made is that, in general, the prevention of pollution is usually easier, and less costly, than cleaning it up later.

#### Plans to Be Reviewed and Updated as Necessary:

- Note that an updated Stormwater Management Ordinance, consistent with the DEP's 2022 Model Stormwater Management Ordinance is required to be adopted prior to June 2022.

#### Topics to Be Reviewed:

- Illicit Discharges and Possible Sources
  - Being aware to watch for illicit discharges as you perform your regular duties;
    - Construction Sites

- Excessive sediment on roads at construction entrance (or elsewhere that could easily enter the storm sewer system) Construction sediment may carry pollutants from the machinery into the storm sewer system.
  - Silt fence or sediment filter socks in need of repair; siltation is considered to be one of the greatest pollutants to our streams as it affects the aquatic life and can also contribute to flooding and/or flood patterns
  - Improper containment of trash-excessive litter
    - Industrial/Businesses
      - Illegal dumping into storm system
      - Improper storage of materials
      - Improper containment of trash – excessive litter
    - Private Swimming Pools (Chlorinated)
      - PADEP’s Swimming Pool Guidelines: Residents should follow the guidelines outlined on the PA DEP’s Fact Sheet under, “What if no public sewer is available?”
- Existing Stormwater Facilities
  - Being aware of the various stormwater management best management practices that you encounter, ESPECIALLY immediately after a storm event
  - Note and report if you observe any stormwater management best management practices that have structures that are clogged and/or require cleaning and/or repair
  - Be aware if you think any facility appears to have been altered without the proper authority
  - Items to note/report at any stormwater outfall as the following may be an indication of an illicit discharge:
    - Discoloration
    - Odor
    - Turbidity (cloudiness or haziness of a fluid)
    - Sheen or residue



- Floating or Submerged Solids
  - Soap bubbles
  - Adverse effects on plants/animals near outfall
  - Build Up of Sediment at end of outfall
- Although the following Sources of Stormwater Pollution may not specifically be issues that the Public Works Department needs to deal with on the job, these are issues that we all should be aware of in our daily lives. Please review and share with family and friends:
    - Pet Waste – An average size dog dropping contains 3 billion fecal coliform bacteria which can be harmful to your health. Pocono Township has approximately 3,734 households (2013-2017) and typically 40% of homes have a dog who could average two (2) poops/day. Doing the math, that works out to 8.9 billion fecal coliform bacteria per day that, if not picked up, could end up in the storm sewer system, especially if it is left in areas where it is easily washed into the system such as by the grassy areas near sidewalks where people tend to walk their dogs. Besides, it's just the right thing to do!
    - Over-use of Fertilizers – Always use the manufacturer's recommended amount of fertilizer as excess fertilizer is easily washed into the storm sewer system and can be detrimental to the aquatic life and our drinking water supplies. Make sure the fertilizers and herbicides are kept on grass surfaces and not spread onto driveways and sidewalks.
    - Grass clippings - While decomposing, grass clippings will use the available oxygen and produce carbon dioxide. If this process occurs in our streams and lakes, oxygen is being depleted from the waters and suffocating the aquatic life. Note that an average 1,000 square foot lawn can generate up to 500 pounds of grass clippings per year. Consider using your mulched grass clippings as a natural fertilizer or try time-released, water insoluble nitrogen fertilizers. Note that corn gluten can be used as a substitute for both weed control and herbicide.
    - Over-use of Deicing Agents – If possible, try to remove the snow before it turns to ice to eliminate using any chemicals at all. If deicing agents are necessary, apply deicing agents according to the manufacturer's recommendations or use alternatives to rock salt such a CMA deicer (Calcium Magnesium Acetate). If possible, clean up the deicing agents before they have a chance to be washed into the storm system.
    - Vehicle Maintenance – As with your work vehicles, personal vehicles should be maintained to prevent leaking motor oil or other fluids from entering the storm sewer system. Any leaks should be repaired as quickly as possible. If

changing your own oil, make sure to use a drip pan, clean up any spills, and always dispose of the used oil properly. Did you know that four (4) quarts of oil can form an eight (8) acre oil slick if dumped or spilled down a storm drain? It is recommended that cars are washed at commercial car washes where the wash water is filtered and recycled. If washing your car at home, do so on the lawn where the dirt and wash water can be naturally filtered. Make sure you use phosphate-free biodegradable detergents.

- Hazardous Materials – Dispose of hazardous materials properly – never into a storm drain. Government agencies typically have periodic hazardous material collection days. (Search “Hazardous Waste Collection Monroe County PA” to find a list of these dates.) Additionally, anything stored outdoors which could contain, or be covered in, any type of pollutant (such as oils, etc.) should be protected by a tarp so that in a rain event these pollutants are not washed into the storm system and ground water.
- No Dumping! – One of the initial catch phrases for the MS4 program is “Only Rain Down the Drain”. The main thing to remember is that only stormwater should be allowed to enter the storm sewer system, whether it is by storm inlets, or any other entry point of the system. Littering can be one of the main sources of pollution washed into the storm sewer system. Dispose of trash properly.



## **MANAGEMENT OF SWIMMING POOL, HOT TUB, AND SPA WATER DISCHARGES**

This fact sheet addresses the discharge of water from swimming pools, hot tubs, and spas that are disinfected using chlorine, bromine, or "salt water disinfection," and that also may contain residual amounts of other treatment chemicals including algaecides. Servicing of a pool, hot tub, or spa often involves discharging all or a portion of the water or backwash water from filters, both of which may contain residual chlorine at levels that could be damaging to the environment. As such, these waters may be considered "polluted" (i.e., "wastewater"), and must be managed to protect public health and to prevent pollution to waters of the commonwealth such as rivers, streams, lakes, and including storm sewers. The purpose of this fact sheet is to describe acceptable methods of managing discharges from swimming pools, hot tubs, and spas to avoid causing pollution. Pool, hot tub, and spa water should not be allowed to directly or indirectly discharge to waters of the commonwealth, including storm sewers.

### **What substances in pools, hot tubs, or spas could cause pollution?**

Chlorine and/or other disinfectants are typically added in sufficient amounts to kill potentially harmful bacteria. These disinfectants also react with other organic matter such as dirt, sweat, skin cells, leaves, and organisms creating potentially harmful disinfection byproducts. Other contaminants are added from the users, such as oil and grease from natural body oils and applied lotions and sunscreens. Chemicals commonly used in maintaining these systems, such as salt, borax, algaecides, phenols, caustic, and acid solutions, can be deadly to fish and other aquatic life. Backwashing of pool filters also contributes accumulated debris. All of these chemicals and materials have the potential to cause pollution and adversely affect public health and waters of the commonwealth.

### **What are acceptable methods for managing swimming pool, hot tub, and spa waters?**

The best approach for managing these wastewaters is disposal into a public sewer system or at a sewage treatment facility, with authorization of the sewer system owner. A permit is generally not necessary to reuse or recycle pool wastewaters, but approval from the owner of a sewer system or sewage treatment facility is typically required. Some municipalities have enacted additional requirements related to discharges from pools. Contact your municipality if you're unsure whether additional guidelines exist.

### **What if no public sewer is available?**

The wastewater can be drained and allowed to infiltrate into a vegetated area or used for on-site irrigation after these guidelines are met:

1. Shut off the chlorination/chemical feed system if there is one, or stop adding chlorine and chemicals.
2. Shut off the heating system, if there is one.
3. Hold the water in the pool or hot tub to reduce the chlorine level to 0.5 mg/L or less (if applicable), and the temperature to an acceptable level (generally within 10° F of the air temperature).
4. Test frequently – the water may need to be held for 10 days or more depending on the surrounding conditions. Recirculating the water may help to speed up this process.
5. Adjust the pH, if necessary, to between 6.0 and 9.0 standard units.
6. Never drain the pool on a rainy day or if the soil is saturated.

When discharging on-site for infiltration or using the water for irrigation, ensure that:

- The water will not flow into a storm sewer or other water of the commonwealth.
- The water does not run off the property.
- Nuisances such as prolonged ponding, odors, and mosquito breeding conditions are prevented.
- The flow rate is slow enough to allow infiltration and does not cause erosion.
- Solids are captured by attaching a filter bag to the end of the discharge hose, if needed.

**May water from swimming pools, hot tubs, or spas be discharged to onlot septic systems?**

No, pool water should not be discharged into or on the surface of onlot systems because the system is not designed for the additional flow and the contaminants could impact the operation.

**May chemicals (e.g., strong acids or caustics) be used to clean my pool, hot tub, or spa?**

Yes, as long as the wastewater is captured or collected, properly treated and disposed of, and prevented from entering waters of the commonwealth, including storm sewers.

**How should wastewater from cleaning my pool be handled, properly treated and disposed of?**

Cleaning wastewaters that contain acid, caustics, or chlorine rinses used to clean pool surfaces should be treated prior to discharge. All wastewaters, but especially cleaning wastewater, must be neutralized to a pH between 6.0 and 9.0 standard units. Chlorine rinses can be dechlorinated or should stand for a period of 10 days to allow chlorine degradation to a residual of 0.5 mg/L or less prior to discharge.

Any pool wastewaters that have unnatural cloudiness, color, oil film, solids, foam, debris, vegetation, algae, or are not or cannot be properly treated, should be collected and hauled to a treatment facility in accordance with the facility's guidelines.

**What should be done with standing water that has accumulated in a pool?**

Standing water, accumulated rainfall, or pool water from the previous season should be pumped from the top, but only if the chlorine residual and pH values are acceptable, to avoid disturbing solids on the pool bottom, which should not be discharged. After the water has been pumped, manually clean out the solids.

**Could someone who causes pollution by discharging water from swimming pools, hot tubs, or spas be penalized?**

If DEP determines that the management of swimming pool, hot tub, and spa wastewaters has caused pollution to waters of the commonwealth, the responsible party could be liable for civil penalties up to \$10,000 per day under the Clean Streams Law.

**For questions and additional information, contact the Clean Water Program in DEP's regional offices:**

**Northwest Regional Office**  
230 Chestnut St.  
Meadville, PA 16335-3481  
Main Telephone: 814-332-6945  
24-Hour Emergency: 800-373-3398  
**Counties:** Butler, Clarion, Crawford, Elk, Erie, Forest, Jefferson, Lawrence, McKean, Mercer, Venango, and Warren

**North-central Regional Office**  
208 W. Third St., Suite 101  
Williamsport, PA 17701-6448  
Main Telephone: 570-327-3636  
24-Hour Emergency: 570-327-3636  
**Counties:** Bradford, Cameron, Clearfield, Centre, Clinton, Columbia, Lycoming, Montour, Northumberland, Potter, Snyder, Sullivan, Tioga, and Union

**Northeast Regional Office**  
2 Public Square  
Wilkes-Barre, PA 18701-1915  
Main Telephone: 570-826-2511  
24-Hour Emergency: 570-826-2511  
**Counties:** Carbon, Lackawanna, Lehigh, Luzerne, Monroe, Northampton, Pike, Schuylkill, Susquehanna, Wayne, and Wyoming

**Southwest Regional Office**  
400 Waterfront Drive  
Pittsburgh, PA 15222-4745  
Main Telephone: 412-442-4000  
24-Hour Emergency: 412-442-4000  
**Counties:** Allegheny, Armstrong, Beaver, Cambria, Fayette, Greene, Indiana, Somerset, Washington, and Westmoreland

**South-central Regional Office**  
909 Elmerton Ave.  
Harrisburg, PA 17110-8200  
Main Telephone: 717-705-4700  
24-Hour Emergency: 866-825-0208  
**Counties:** Adams, Bedford, Berks, Blair, Cumberland, Dauphin, Franklin, Fulton, Huntingdon, Juniata, Lancaster, Lebanon, Mifflin, Perry, and York

**Southeast Regional Office**  
2 East Main St.  
Norristown, PA 19401-4915  
Main Telephone: 484-250-5900  
24-Hour Emergency: 484-250-5900  
**Counties:** Bucks, Chester, Delaware, Montgomery, and Philadelphia

For more information, visit [www.dep.pa.gov](http://www.dep.pa.gov).