pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Clean Water

ALTERNATIVE E&S BMPs and PCSM SCMs

Revised, May 13, 2025

Introduction

The Pennsylvania Department of Environmental Protection (DEP) and delegated county conservation districts (CCDs) periodically receive requests for alternative erosion and sediment control (E&S) best management practices (BMPs) as part of applications or Notices of Intent (NOIs) for Chapter 102 permits. E&S BMPs and design standards are identified in DEP's *Erosion and Sediment Pollution Control Program Manual* ("E&S Manual") (386-2134-001). DEP's regulations at 25 Pa. Code §§ 102.4(b)(7) and 102.11(b) provide that DEP may approve alternative E&S BMPs (not identified in the E&S Manual). Post-construction stormwater management (PCSM) stormwater control measures (SCMs) and design standards are identified in DEP's *Stormwater Best Management Practices Manual* ("Stormwater BMP Manual") (363-0300-002). DEP's regulations (25 Pa. Code § 102.11(b)) also recognize that DEP may approve alternative PCSM SCMs (not identified in the Stormwater BMP Manual).

The purpose of this document is to identify the alternative BMPs and SCMs that have been reviewed by DEP and provide the results of that review. Applicants may utilize this information during the design and BMP/SCM selection phase of project development. If an alternative BMP/SCM in this document has been approved by DEP and is selected for an earth disturbance project, the reviewer of the permit application may accept the BMP/SCM as approved under Chapter 102 and no further review by DEP is necessary unless the reviewer believes the proposed BMP/SCM differs from the BMP/SCM described in this document.

This document will be updated periodically as new alternative BMPs/SCMs are reviewed. Note that all alternative BMPs/SCMs reviewed by DEP are listed – both those that are approved and those that have been disapproved. There are three tables of BMPs in this document: 1) Approved Alternative E&S BMPs; 2) Disapproved Alternative E&S BMPs; and 3) Approved Alternative PCSM SCMs. The following describes the columns in each table:

- **Alternative BMP** – The general name of the alternative BMP or SCM.
- **Comments** – DEP's review comments on the alternative BMP or SCM.
- **ABACT (HQ/EV)** ***(used in E&S tables only)*** – antidegradation best available combination of technologies. For stormwater discharges in watersheds classified as High Quality (HQ) or Exceptional Value (EV) under Chapter 93, ABACT must be used if non-discharge alternatives are not available. The table identifies whether the listed alternative BMP qualifies as ABACT in HQ and EV watersheds ("Yes" or "No").
- **Function** ***(used in PCSM table only)*** – The function of the SCM in relation to stormwater: Water Quality (WQ), Rate Control (RC), and/or Volume Management (VM).
- **DEP Review Date** – The date on which DEP finalized its review of the alternative BMP or SCM.
- **Example** – If applicable, DEP will list the name of a product or technology that illustrates an example of the listed alternative BMP/SCM and, if available, provide a link to the product or technology.

  NOTE – The identification of an example product or technology is not an endorsement by DEP of the product or technology, and is provided solely to assist the reviewer in understanding the BMP/SCM reviewed by DEP.

New Alternative BMP Proposals

To request that DEP's Bureau of Clean Water review a new alternative E&S BMP or PCSM SCM, the applicant of a project seeking to use the alternative BMP/SCM or the manufacturer of the BMP/SCM must complete and submit the **Alternative BMP Submission Form** (**Word**) (**PDF**) to DEP. DEP will not review an alternative BMP/SCM without receipt of a complete Alternative BMP Submission Form and all applicable attachments as specified on the checklist to that form.

Completed forms should be sent via email to **RA-EPALTERNATIVEBMP@pa.gov**. DEP highly recommends that the alternative BMP/SCM review be completed prior to an applicant proposing the BMP/SCM in a permit application for a specific project. DEP attempts to complete all reviews of alternative BMPs/SCMs within 90 days of receipt of a complete form and attachments.

Approved Alternative E&S BMPs

Alternative E&S BMP	Description / Comments	ABACT – HQ	ABACT – EV	DEP Review Date	Example
Use of Wood Chips in Compost Socks	Tests show wood chips are as effective as compost for filtering sediment.	Yes	No	4/1/2012	Refer to Page 65 of the E&S Manual for compost sock installation.
Use of Kiln Dried Wood Chips in Compost Socks	Tests show kiln dried wood chips are as effective as compost for filtering sediment. This should follow the same standards as a compost sock.	Yes	Yes	12/14/2020	Siltworm
Use of Switchgrass in Compost Socks	Tests show switchgrass is as effective as compost for filtering sediment. This is a direct replacement for compost sock and should follow the same standards. Additionally, a sock can be filled with a combination of switchgrass and compost. There is no restriction on the ratio of switchgrass to compost.	Yes	Yes	3/1/2017, 5/8/2019	Big Switch Sock SwitchSock
Use of Switchgrass/Corn Stover mix in Compost Filter Socks	Testing shows that the addition of Corn Stover in amounts up to 25%, by volume, does not change the filtering characteristics of the filter sock compared to compost filter sock. This filter sock should follow the slope lengths shown in Figure 4.2 and sock fabric specifications in Table 4.1 of the E&S Manual.	Yes	Yes	9/14/2021	
Use of Rice Hulls in Compost Filter Socks	Testing shows that rice hulls when used as a filler material for filter sock provides a high level of TSS removal and provides the secondary benefit of hydrocarbon removal. This filter sock is a direct replacement for compost filter socks and should follow the slope lengths shown in Figure 4.2 and sock fabric specifications in Table 4.1 of the E&S Manual.	Yes	Yes	9/14/2021	

Alternative E&S BMP	Description / Comments	ABACT – HQ	ABACT – EV	DEP Review Date	Example
Trenchless Curved Silt Fence	Trenchless Curved Silt Fence as a perimeter E&S BMP utilizes a trenchless installation and a curved design for stability. This technology is considered equivalent to Reinforced Silt Fence when a 25-inch design height is used with a stake embedment depth of 12 inches and with 8-foot spacing; and equivalent to Super Silt Fence when a 28-inch design height is used with a stake embedment depth of 18 inches and with 4-foot spacing. The slope length charts for Reinforced Silt Fence (25-inch height) and Super Silt Fence (28-inch height) in the E&S Manual should be used.	N/A	N/A	10/22/21	New Pig Trenchless Curved Silt Fence Installation & Maintenance
Composite Filter Fence	Testing shows that this filter fence product results in water quality treatment equivalent to a compost filter sock. This composite filter fence (CFF) is 28-in. above the surface of the ground, with the material trenched into the existing soil (similar to silt fence) or the optional trenchless installation method may be used. This filter fence is supported by spaded stakes at 5-ft. spacing. The 28-in. filter fence will use slope lengths equivalent to a 32-in. compost filter sock from Figure 4.2 of the E&S Manual. Additional sizes available are 16-in CFF using 18-in filter sock slope lengths, 21-inch CFF using 24-inch filter sock slope lengths, and 48” using the super silt fence slope lengths (Figure 4.3 of the E&S Manual).	Yes	Yes	10/29/2024	Siltron Fence - MKB Enterprises

Alternative E&S BMP	Description / Comments	ABACT – HQ	ABACT – EV	DEP Review Date	Example
Multi-Layer Geotextile Filter Fence	Testing provided shows that this filter fence product results in water quality equivalent to a compost filter sock. This filter fence is 16-in., 21-in. or 28-in. above the surface of the ground, with the material trenched into the existing soil (similar to silt fence). This filter fence is supported by spaded stakes at 5-ft. spacing. The 16-in. filter fence will use slope lengths equivalent to an 18-in. compost filter sock; the 21-in. filter fence will use slope lengths equivalent to a 24-in. compost filter sock; the 28-in. filter fence will use slope lengths equivalent to a 32-in. compost filter sock.	Yes	Yes	8/22/2018	Siltron Fence - MKB Enterprises (Siltron Details)
Chinking sock or toe sock	A 4” filter sock, compost or switchgrass, that is used in place of the blown in material for sock placement. Cotton or other material listed on the fabric specifications for a sock (Table 4.1) may be used. Contact between the chinking sock the large sock and the ground should be managed by staking at a 10’ max spacing using a 1”x1”X18” min stake. It is desirable to also pinch the chinking sock between the ground and the large sock (see example).	N/A	N/A	9/5/2018	BEG Chinking Sock Detail
Belted Strand Retention Fabric Fence (in lieu of Standard Silt Fence)	In field use, it appears to be as effective as standard silt fence.	No	No	4/1/2012	Silt Saver BSRF
Stacking Compost Socks to equal larger diameter Compost Socks	Stacking of socks has already been approved when used in compost sock traps.	Yes	Yes	4/1/2012	Refer to Page 35 of the E&S Manual for proper stacking.
Foam Trench Breakers	This BMP has already been approved by FERC and was successfully demonstrated in a field test.	N/A	N/A	10/1/2011	Spray Foam Solutions

Alternative E&S BMP	Description / Comments	ABACT – HQ	ABACT – EV	DEP Review Date	Example
Public street sweeping with a vacuum sweeper and rolling of dirt and gravel roads at the end of each workday (or more frequently as needed); manual cleaning of tires prior to site egress.	Topography or the absence of electricity and water can make wash racks infeasible in some locations. Vacuum sweepers can remove accumulated sediment from streets before it is washed into surface waters. Tires can be cleaned off manually with a broom prior to exiting. Rolling of dirt roads can stabilize areas affected by tracked mud. Requires continuous maintenance. This alternative BMP is a substitute for wash racks in special protection watersheds.	Yes	Yes	8/1/2012	
Use of Forebays and Turbidity Barriers (i.e., Silt Curtains) in lieu of Required Surface Area for Sediment Basins	Already approved for traps. Fulfills the purpose for increased surface area, making sediment basins more efficient and reducing thermal pollution. If Turbidity Barriers are used, they must conform to the specifications in DEP's E&S Manual.	Yes	Yes	8/1/2012	Refer to Page 177 of Chapter 6 of the PA Stormwater BMP Manual for forebay design recommendations
Sock Diversions	Approved conditional upon infill material being modified to reduce permeability and promote vegetative growth.	N/A	N/A	12/12/2012	Filtrexx MKB Diversion Sock
HDPE Composite Mat for wetland crossings	Tests show product to be safe, non-toxic, and stable. Product is easily transported, stored, and installed, and it is reusable.	N/A	N/A	9/13/2013	Dura-Base® Mat
Staked Compost Sock Ring surrounding pumped water filter bag	Compost sock ring will increase efficiency of sediment removal of the pumped water filter bag while providing additional water quality benefits.	Yes	Yes	10/10/2013	Example Diagram

Alternative E&S BMP	Description / Comments	ABACT – HQ	ABACT – EV	DEP Review Date	Example
Filter inserts for Cross Culverts	For use as a backup BMP in culverts or other pipes when used per manufacturer's recommendations. A recommended maximum tributary drainage area = 1 acre. Filter insert should be used in conjunction with other sediment control/removal BMPs, not as the sole BMP for a disturbed area. Filter inserts should only be used where sufficient area exists to allow for ponding of water above the pipe. Filter inserts alone are not ABACT, but can be used to raise another non-ABACT BMP (e.g., silt fence) to ABACT for HQ (but not EV).	No	No	11/12/2012	Sedjacket™
Curled Wood Sediment Logs	This BMP was already approved for use in other watersheds. The evidence supports their use as ABACT for HQ. Sediment removal potential is high compared to other similar BMPs. Since the water quality benefits derived from compost socks is not provided, ABACT designation is not extended to EV watersheds.	Yes	No	12/18/2012	Curlex® Sediment Log®
Inverted Discharge Rate Skimmer	For use as a dewatering skimmer in sediment basins and traps where peak flows must be delayed to avoid flooding downstream.	Yes	Yes	1/30/2013	Reverse Q Pond Outlet
Compost Sock Diversions in lieu of Waterbars on surface waterline ROWs for Oil & Gas drilling	Usually no earthmoving during installation of surface waterlines, so no material from which to construct waterbars. Clearing/grubbing in wooded areas means protective cover removed from soils, so BMP needed to direct runoff off ROW.	No	No	2/13/2013	Example Diagram
Portable Sediment Tank w/Inclined planes for sediment removal	Tests have shown this BMP to be more effective than a sediment filter bag along with the capabilities to remove oils from the flow.	Yes	Yes	6/14/2014	Aqualete WTS2000

Alternative E&S BMP	Description / Comments	ABACT – HQ	ABACT – EV	DEP Review Date	Example
Sump & Compost Filter Sock at Waterbar Outlet on Utility Lines	Used to filter runoff from ROW before being discharged.	Yes	Yes	8/27/2014	Example Diagram
Float Skimmer Attached to Ridged Pipe	Information submitted shows device effectively regulated discharge from impoundments	Yes	Yes	9/2/2014	Marlee Float™ Skimmer
Inlet Filter Mat	Coir mat that is a replacement for an Inlet Filter Bag. Tests show that the mat meets removal efficiencies of Inlet filter bags.	Yes	No	4/18/2016	Blackhawk Inlet Filter Mat
Inlet Filter Mat	Fabric mat the rests on top of the inlet grate held in place with strong magnets. The testing showed the mat meets the removal efficiencies of Inlet Filter Bags.	Yes	No	8/9/23	Flo-Water EZ-Flo, EZ-Flo CC, EZ-Flo OF, and EZ-Flo CCOF
Prefabricated HDPE channels	Prefabricated HDPE channel sections will not erode and can be easily cleaned and maintained.	No	No	8/9/2016	SmartDitch
Alternative Rock Construction Entrance (has a combination of 2RC and AASHTO #1)	The rolled 2RC will provide a stable surface to turn into, helping to prevent tires from getting stuck while entering. Will also help to eliminate the AASHTO #1 from being drug onto the road.	Yes	Yes	12/1/2016	Example Diagram
Compost Filter Sock J-Hook	A Compost Filter Sock J-Hook is when a compost filter sock is turned to create a J shape, with the J-Hook usually being at the downslope end of a diversion. In order for the Compost Filter Sock J-Hook to be an alternative BMP, the straight portion of the J-Hook is to be sized/designed as a diversion berm and the hook portion of the J-Hook is to be sized/designed as a compost sock sediment trap.	Yes	Yes	5/8/2019	Example Diagram

Alternative E&S BMP	Description / Comments	ABACT – HQ	ABACT – EV	DEP Review Date	Example
Heavy-duty Woven Geotextile Sediment Fence	Testing shows that this sediment fence product results in water quality equivalent to silt fence. This sediment fence is 30-in. or 34-in. above the surface of the ground, with the sediment fence trenched 6-in. or 8-in., respectively, into the existing soil (similar to silt fence). The 30-in. sediment fence is supported by wooden stakes spaced every 8-ft., while the 34-in. sediment fence is supported by galvanized steel posts and wooden stakes alternating every 5-ft. The 30-in. sediment fence will use slope lengths equivalent to reinforced silt fence, and the 34-in. sediment fence will use slope lengths equivalent to super silt fence.	No	No	12/12/2018	Friendly Environment SMARTfence® 36 and SMARTfence® 42
Portable plastic barrier primarily used to contain or divert flood water, stormwater, and sediment laden flows.	The barriers are rotationally molded, water filled structural components of a stormwater /erosion system. The product is wrapped with 6-8-ounce geotextile fabric and the sections are linked together. The product may be used as the embankment for sediment basins and traps.	No	No	5/17/2023	MuscleWall

Alternative E&S BMP	Description / Comments	ABACT – HQ	ABACT – EV	DEP Review Date	Example
Soil Binders and Flocculants with Polyacrylamides	The use of soil binders and flocculants containing polyacrylamides (PAMs) can be effective for stabilizing steep slopes and other disturbed areas when used properly and in accordance with manufacturer's recommendations. Soil binders with PAMs can be used in conjunction with hydraulic blankets; however, the hydraulic blankets should have a minimum functional longevity of at least one year. The following uses do not require Bureau of Clean Water approval before use: Any use of anionic PAMs where treated stormwater will flow into a sediment trap or basin. The following uses require Bureau of Clean Water approval before use: Any use of anionic PAMs where treated stormwater will flow directly to surface waters or storm sewers without settlement in a sediment trap or basin, or application directly to sediment traps or basins. The following uses are prohibited: The use of any flocculant or material containing cationic PAMs for stormwater treatment. **NOTE** – Upon cessation of earth disturbance activities the permittee is expected to properly dispose of all sediment or material containing PAMs collected in sediment trap(s) or basin(s).	Yes	Yes	8/31/2018	Refer to Page 276 of the E&S Manual for additional guidance on the use and application of PAMs.

Disapproved Alternative E&S BMPs

Alternative E&S BMP	Description	ABACT – HQ	ABACT – EV	DEP Review Date	Example
Solid panels for use as sediment barrier/diversion	Not permeable enough to let runoff through in sufficient quantities to prevent overtopping, and not totally impermeable to prevent uncontrolled runoff.	N/A	N/A	10/1/2011	
Temporary Diversion Fence (used to channelize and convey runoff)	Temporary fabric is not durable enough and could get torn by debris being conveyed in the channel. Animals could easily compromise the fabric by forming holes in the material.	No	No	4/18/2016	

Approved Alternative PCSM SCMs

Alternative PCSM SCM	Description	Function	DEP Review Date	Example
Inlet Filter Bags with Metal Frames configured to fit the Inlet	Information provided showed such bags can remain functional during high runoff conditions conventional inlet filter bags.	WQ	2/13/2013	FlexStorm
Buoyant Flow Control Devices (BFDs)	Information submitted shows device effectively regulates discharges from impoundments. These devices should be used according to manufacturer's specifications.	RC	12/17/2014	Thirsty Duck Constant Q – Lane Enterprises
Flat Gravel Pad Detention	Use of subsurface rock to store stormwater under a Well Pad. This is for rate control only. Water quality is to be handled with a different SCM.	RC	3/07/2017	Flat Gravel Pad Details
Jellyfish Filter	Jellyfish Filter, manufactured by Contech Engineered Solutions, is a stormwater quality treatment technology featuring high flow pretreatment and membrane filtration. This product has been evaluated and determined to have the following pollutant removal efficiencies: 85% for TSS, 50% for TP, and 38% for TN. This device should be used according to manufacturer's specifications.	WQ	12/13/2018	Contech Engineered Solutions Jellyfish Filter

Alternative PCSM SCM	Description	Function	DEP Review Date	Example
Managed Release Concept (MRC)	MRC provides for the controlled release of a portion of the stormwater captured by an SCM, preferably vegetated, at a rate similar to the lateral unsaturated flow to surface waters from undeveloped areas, and management of the post-construction 2-year peak flow back to the pre-construction 1-year peak flow. A PA-licensed Professional Engineer must design any SCM that uses MRC. MRC may be used only under limited situations. **NOTE** – The MRC Spreadsheet or MRC Simplified Design Spreadsheet (as applicable) must be used for all MRC SCMs starting March 8, 2025. Until then DEP/CCD will accept either the spreadsheets or the MRC Design Summary Sheet (Word / PDF). **Important links:** • **MRC Concept Paper** • **MRC Simplified Design Spreadsheet** (**XLSX**) – Complete for each SCM meeting MRC Simplified Design Standards • **MRC Spreadsheet (XLSM) –** Complete for each SCM not meeting MRC Simplified Design Standards • **MRC Spreadsheet Instructions** • **MRC Frequently Asked Questions** • **MRC Design Examples**	VM, WQ	11/18/2024	See MRC Concept Paper for illustrations and MRC Training Course
End of Pipe Unit	Modular Filtration Unit that utilizes ABtech Industries Smart Sponge technology. This product has been evaluated and determined to have the following pollutant removal efficiencies: TSS 80% and TP 50%. This device should be used according to manufacturer's specifications.	WQ	1/2/2019	EOP Unit -AbTech

Alternative PCSM SCM	Description	Function	DEP Review Date	Example
SmartPAK	Modular filtration cartridges designed for use in smart vault and point treatment applications. The SmartPAK utilizes AB Tech Industries Smart Sponge technology. This product has been evaluated and determined to have the following pollutant removal efficiencies: TSS 80% and TP 50%. This device should be used according to manufacturer's specifications.	WQ	1/2/2019	Smart Pak | AbTech Industries
Up-Flo Filter CPZ Media	Up-Flo Filter CPZ Media uses a treatment train that incorporates gravitational separation of floating and settling materials, screening and filtration of stormwater flows. Removal efficiencies for Up-Flo Filter CPZ Media: TSS 80%, TP 48% and TN 39%.	WQ	9/4/2020	Up-Flo Filter CPZ Media
Ultra Urban Filter with Smart Sponge technology	The Ultra-Urban Filter is a modular filtration unit designed in a variety of shapes and sizes for use in curb opening and grated inlet storm drains. This product is approved for use with AB Tech Industries Smart Sponge technology. The device should be installed and maintained according to the manufacturer's specifications. Removal efficiencies: TSS 80% and TP 50%	WQ	12/14/2020	Ultra Urban Filter with Smart Sponge technology | AbTech Industries
Kraken™ Filter	The Kraken™ Membrane Filtration System provides a maximum amount of filtration surface area in a compact footprint. The system uses built-in pretreatment followed by high surface area membrane filtration to target particulate pollutants in stormwater. Removal efficiencies: TSS 80% and TP 50%	WQ	9/9/2021	Contech Kraken

Alternative PCSM SCM	Description	Function	DEP Review Date	Example
Stormwater Drainage Well (SDW)	SDWs are systems involving discharge of effectively treated stormwater to a receiving bedrock aquifer. These systems are most common in areas with carbonate geology and can be an approvable alternative PCSM SCM when the guidelines are followed. Due to their inherent complexity, SDWs can be a costly alternative that may be impractical at many sites. Prospective applicants should schedule a pre-application meeting with DEP's Regional Permit Coordination Office to discuss their project (www.dep.pa.gov/RPCO). A key distinction with SDWs compared to other PCSM SCMs is that a PA-licensed Professional Engineer and Professional Geologist must design any SDW system. As noted, SDWs may be used only under limited situations. **Important links:** • **Stormwater Drainage Wells as a Post-Construction Stormwater Management (PCSM) Best Management Practice (BMP)** • **Supplementary Geology and Groundwater Information for Stormwater Drainage Wells (Word)** Improved sinkholes are related but significantly different than SDWs. Improved sinkholes are not a PCSM SCM in their own right though in certain situations they may serve as an ultimate discharge point. If used the guidelines provided below should be followed including prospective applicants discussing their project with DEP during a pre-application meeting **Important link:** • **Permitting Related to Stormwater Discharges to Improved Sinkholes**	VM	3/18/2022	Example Diagrams

Revision History

Date	Revision Reason
5/13/2025	Added additional sizes to the Composite Filter Fence.
11/18/2024	Revised Managed Release Concept (MRC) listing to include two new crediting spreadsheets and an updated MRC Concept Paper.
10/29/2024	Added Composite Filter Fence as an approved alternative E&S BMPs.
4/19/2024	Updated links to example BMPs and removed Extruded Sediment Fence because proprietor is no longer in business.
8/22/2023	Added the EZ-Flo Inlet Filter Mat and its variations to the list.
5/17/2023	Added portable plastic barrier containment system as an approved alternative E&S BMP.
9/14/2022	Updated example names and links for the following alternative E&S BMPs: Use of Switchgrass in Compost Socks, Sock Diversions, and Inlet Filter Mat.
8/16/2022	Revised the name/description for Alternative Rock Construction Entrance (approved alternative E&S BMP).
3/18/2022	Added Stormwater Drainage Well as an approved alternative PCSM SCM.
10/26/2021	Added Trenchless Curved Silt Fence as an approved alternative E&S BMP.
9/16/2021	Added corn stover as a partial filler material in filter sock and rice hulls as a primary filler in filter socks as approved alternative E&S BMPs.
9/10/2021	Added Kraken Filter as an approved alternative PCSM BMP.
12/14/2020	Added use of kiln-dried wood chips as an approved alternative E&S BMP and Ultra Urban Filter with Smart Sponge Technology as an approved alternative PCSM SCM.
9/4/2020	Added Up-Flo Filter CPZ Media as an approved alternative PCSM SCM.
6/17/2020	Clarified that removal efficiencies apply only to E&S and Chapter 102 permits.
9/12/19	Added Extruded Sediment Fence (approved alternative E&S BMP)
5/15/2019	Added and updated the following: A mixture of switchgrass and compost is acceptable for compost socks; SmartPAK – ABTech Industries (approved alternative PCSM BMP); End of Pipe Unit – ABTech Industries (approved alternative PCSM SCM); Compost Filter Sock J-Hook (approved alternative E&S BMP); and updated Managed Release Concept.
12/13/2018	Added the following: Alternative BMP Submission Form; Managed Release Concept (approved alternative PCSM SCM); Jellyfish Filter by Contech Engineered Solutions (approved alternative PCSM BMP); Heavy-duty Woven Geotextile Sediment Fence (approved alternative E&S BMP); 16-in. height for Multi-Layer Geotextile Filter Fence (approved alternative E&S BMP); and Chinking/toe sock (approved alternative E&S BMP).
8/31/2018	Addition of Constant Q float, Flat Gravel Pad details, and multi-layer geotextile filter fence. Revised description and example for Soil Binders with Polyacrylamides (previously called Soil binders with Anionic Polyacrylamides). Removed FocalPoint Biofiltration System and Inclined Plate Hydrodynamic Separator from the Approved Alternative PCSM SCM list because DEP determined these devices are covered by the PA Stormwater BMP Manual.
3/29/2017	Added FocalPoint Biofiltration System as an approved alternative PCSM BMP.
3/21/2017	Original