



GENERAL PERMIT PAG-02 FOR COVERAGE UNDER GENERAL NPDES PERMIT FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES

FACT SHEET

EXECUTIVE SUMMARY

Federal regulations require earth disturbance activities that will result in stormwater discharges from construction activities to obtain coverage under a National Pollutant Discharge Elimination System (NPDES) Permit. In compliance with the provisions of the Clean Water Act, 33 U.S.C. Section 1251 *et seq.* ("the Act") and Pennsylvania's Clean Streams Law, as amended, 35 P.S. Section 691.1 *et seq.*, the Department of Environmental Protection (Department) provides general permit coverage to discharge stormwater to surface water(s) from a site with greater than or equal to one (1) acre of earth disturbance. These discharges are subject to the Department's enclosed PAG-02 which incorporates all effluent limitations, monitoring and reporting requirements, and other terms, conditions, criteria and special requirements for the discharge of stormwater associated, in whole or in part, with construction activity, as defined in this general permit, to surface waters of this Commonwealth, including through municipal separate storm sewers and non-municipal separate storm sewers. Authorization to discharge is subject to the implementation of the plans and additional associated information submitted as part of the Notice of Intent.

General Permit PAG-02 provides a simplified process to meet both the federal and state requirements. In some cases, such as where an applicant is not eligible for general permit coverage because the proposed activity discharges to a "Special Protection" watershed, an individual permit is needed. See "activities that are not eligible" for a complete list.

LENGTH OF THE PERMIT

The Department is reissuing the NPDES General Permit for Stormwater Discharges Associated with Construction Activities (PAG-02, 2012 amendment) for five years from the effective date.

FEES

The revised Chapter 102 Erosion and Sediment Control regulations including post construction stormwater management became effective on November 19, 2010. Under the revised regulations, application fees of \$500 for general permits and \$1500 for individual permits plus a \$100 disturbed acreage fee apply to all new and all renewal notice of intent applications.

WHO CAN USE GENERAL PERMIT PAG-02?

This permit applies to persons proposing earth disturbance activities, other than agricultural plowing and tilling and animal heavy use areas, timber harvesting activities, road maintenance activities, or oil and gas exploration activities that disturb five (5) or more acres, or an earth disturbance on any portion, part, or during any stage of, a larger common plan of development or sale that involves one (1) or more acres of earth disturbance.

WHAT ACTIVITIES ARE NOT ELIGIBLE TO USE THE PERMIT?

- (1) Discharges to waters, including wetlands, with a designated or existing use of High Quality or Exceptional Value pursuant to 25 Pa. Code Chapter 93 (relating to Water Quality Standards);
- (2) Discharges which contain hazardous pollutants, toxics, or any other substance which - because of its quantity, concentration, or physical, chemical, or infectious characteristics - may cause or contribute to an increase in mortality or morbidity in either an individual or the total population, or pose a substantial present or future hazard to human health or the environment when discharged into surface waters of this Commonwealth;
- (3) Discharges which individually or cumulatively have the potential to cause significant adverse environmental impact;
- (4) Discharges to waters for which NPDES general permit coverage is prohibited under 25 Pa. Code Chapter 92a (relating to NPDES permitting, monitoring and compliance);

- (5) Discharges which are not, or will not be, in compliance with any of the terms or conditions of this general permit;
- (6) Discharges for which the responsible party (person) has failed and continues to fail to comply or has shown a lack of ability or intention to comply with a regulation, permit, and schedule of compliance or order issued by the Department or authorized conservation district;
- (7) Discharges subject to categorical point source effluent limitations promulgated by EPA for categories other than construction or post construction;
- (8) Discharges which do not, or will not, result in compliance with applicable effluent limitations or water quality standards;
- (9) Discharges from construction activities for which the Department requires an Individual NPDES permit to ensure compliance with the Clean Water Act, the Clean Streams Law, or rules and regulations promulgated thereto; or where a change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source;
- (10) Discharges associated with coal mining or noncoal mining activities pursuant to the Department's regulations at 25 Pa. Code Chapters 77 and 86-90;
- (11) Discharges associated with a construction activity that may adversely affect a Pennsylvania or federal endangered or threatened species or its critical habitat;
- (12) Discharges from a site where other point source(s) require the issuance of an Individual NPDES permit;
- (13) Discharges to surface waters identified as impaired waters where the proposed discharge will result in a net change (pre-condition to post condition) in volume or rate or water quality of the stormwater unless an analysis is completed which documents that the discharge will neither cause nor contribute to an impairment of the receiving water;
- (14) Discharges of pollutants of concern to waters for which there is a Total Maximum Daily Load (TMDL) established or approved by EPA including the Chesapeake Bay unless the E&S and PCSM Plans include implementation measures or controls that are consistent with the assumptions and requirements of such TMDL. To be eligible for coverage under this general permit, persons must implement conditions applicable to their discharges necessary for consistency with the assumptions and requirements of such TMDL. If a specific wasteload allocation has been established that would apply to the discharge, persons must implement necessary steps to meet that allocation;
- (15) Discharges to MS4 and CSO municipal systems without the written consent of the MS4 or CSO permit holder unless those discharges result in no net change (pre-condition to post condition) in volume or rate or water quality;
- (16) Discharges of (a) wastewater from washout of concrete, unless managed by an appropriate control; (b) wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials; (c) fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance; and (d) soaps or solvents used in vehicle and equipment washing.

WHAT ARE THE PERMIT REQUIREMENTS?

- (1) Persons proposing to discharge stormwater associated with earth disturbance activities (other than agricultural plowing or tilling, animal heavy use areas, timber harvesting, road maintenance, or oil and gas activities) of one (1) acre or more of earth disturbance must apply for an NPDES permit. Also eligible persons proposing to expand the scope of previously authorized earth disturbance activity which discharges stormwater, must apply for a modification to the permit. Persons who wish to be covered by this general permit must submit an administratively complete and technically sound Notice of Intent (NOI) to the Department or authorized conservation district and receive authorization from the Department or authorized conservation district prior to commencing the construction activity. The NOI shall be filed in accordance with the detailed instructions specified in the NOI instruction package.
- (2) Operators of all construction activities shall develop, implement, and maintain E&S and Post Construction Stormwater Management (PCSM) Best Management Practices (BMPs) and other pollution prevention measures required by this permit to minimize accelerated erosion and sedimentation and stormwater runoff before, during, and after construction activities.

- (3) E&S BMPs shall be designed and implemented to meet the standards and specifications identified in the Department's *Erosion and Sediment Pollution Control Manual*, No. 363 2134 008, as amended and updated, or an approved alternative, when legally authorized.
- (4) PCSM BMPs shall be designed and implemented to meet the standards and specifications identified in the Department's *Pennsylvania Stormwater Best Management Practices Manual*, No. 363-0300-002, as amended and updated, or an approved alternative, when legally authorized.
- (5) The E&S Plan, PCSM Plan, and Preparedness, Prevention and Contingency (PPC) Plan shall identify appropriate BMPs that will be implemented to ensure that existing and designated uses of surface water are protected and maintained. The E&S and PCSM Plans must be reviewed and approved by the Department or the delegated conservation district prior to commencing the construction activity.
- (6) The permittee or co-permittee shall develop and implement the E&S Plan, PPC Plan, PCSM Plan, and have all of the plans and other documents required by this permit maintained at the site and available for review by the Department or conservation district.

EROSION AND SEDIMENT CONTROL PLANS

- a. Unless otherwise authorized by the Department or conservation district after consultation with the Department, earth disturbance activities shall be planned and implemented to the extent practicable in accordance with the following:
 - (i) Minimize the extent and duration of earth disturbance.
 - (ii) Maximize protection of existing drainage features and vegetation.
 - (iii) Minimize soil compaction.
 - (iv) Utilize other measures or controls that prevent or minimize the generation of increased stormwater runoff.
- b. An E&S Plan shall be prepared and implemented in accordance with the requirements of 25 Pa. Code Chapter 102 and by a person trained and experienced in erosion and sediment control methods and techniques applicable to the size and scope of the project being designed. Each E&S Plan must be submitted to and approved by the Department or authorized conservation district. The BMPs shall be designed to minimize the potential for accelerated erosion and sedimentation in order to protect, maintain, reclaim, and restore water quality and existing and designated uses. Various BMPs and their design standards are listed in the *Erosion and Sediment Pollution Control Program Manual*, No. 363-2134-008, as amended and updated. The manual is available from the Department or authorized conservation district or can be downloaded from the Department's website at www.dep.state.pa.us. E&S Plans and BMPs, and revisions thereto, which meet the requirements of 25 Pa. Code Chapters 93, 96 (relating to water quality standards implementation), and 102, are conditions of this permit and are incorporated by reference.
- c. E&S Control Plans required under this permit are considered reports that shall be available to the public under Section 607 of the Clean Streams Law and 25 Pa. Code Chapter 92a of the Department's regulations. The owner or operator of a facility with stormwater discharges covered by this permit shall make E&S Plans available to the public upon request. E&S Plans must be made available at the site of the construction activity at all times.
- d. The approved E&S plan, including the staging of earth disturbance activities and maintenance requirements, must be followed.
- e. Upon the installation or stabilization of all perimeter sediment control BMPs and at least three (3) days prior to proceeding with the bulk earth disturbance activities, the permittee or co-permittee shall provide notification to the Department or authorized conservation district.
- f. The E&S Plan must be consistent with the assumptions and requirements of any assigned Wasteload Allocations (WLAs) as set forth in any applicable Total Maximum Daily Loads (TMDLs) established for the receiving waters.

POST CONSTRUCTION STORMWATER MANAGEMENT (PCSM) PLANS

- a. The management of post construction stormwater shall be planned and conducted to the extent practicable in accordance with the following;
 - (i) Preserve the integrity of stream channels and maintain and protect the physical, biological, and chemical qualities of the receiving stream.
 - (ii) Prevent an increase in the rate of stormwater runoff.
 - (iii) Minimize any increase in stormwater runoff volume.
 - (iv) Minimize impervious areas.
 - (v) Maximize the protection of existing drainage features and existing vegetation.
 - (vi) Minimize land clearing and grading.
 - (vii) Minimize soil compaction.
 - (viii) Utilize other structural or nonstructural BMPs that prevent or minimize changes in stormwater runoff.
- b. A PCSM Plan shall be prepared and implemented in accordance with the requirements of 25 Pa. Code Chapter 102 and by a person trained and experienced in PCSM design methods and techniques applicable to the size and scope of the project being designed. The management of post construction stormwater shall be planned and conducted in accordance with 25 Pa. Code §102.8. Various BMPs and their design standards are listed in the *Pennsylvania Stormwater Best Management Practices Manual*, No. 363-0300-002, as amended and updated. The manual is available from the Department or authorized conservation district or can be downloaded from the Department's website at www.dep.state.pa.us. Each PCSM Plan must be submitted to the Department or authorized conservation district. The PCSM plan must employ stormwater management BMPs to control the volume, rate, and water quality of the postconstruction stormwater runoff so as to protect and maintain the chemical, physical, biological properties, and existing and designated uses of the waters of this Commonwealth.
- c. PCSM Plans required under this permit are considered reports that shall be available to the public under Section 607 of the Clean Streams Law and 25 Pa. Code Chapter 92a of the Department's regulations. The owner or operator of a facility with stormwater discharges covered by this permit shall make PCSM Plans available to the public upon request. The PCSM Plans must be made available at the site of the construction activity at all times.
- d. A licensed professional or their designee shall be present onsite and be responsible for oversight of critical stages of implementation of the approved PCSM Plan. The licensed professional will be responsible to provide a final certification, pursuant to 25 Pa. Code § 102.8(l) along with the required NOT and record drawings, indicating that the project site was constructed in accordance with the approved or modified PCSM Plan.
- e. The PCSM Plan must be consistent with the assumptions and requirements of any available WLAs as set forth in any applicable TMDLs established for the receiving waters.
- f. The portion of a site reclamation or restoration plan that identifies PCSM BMPs to manage stormwater from pipelines or other similar utility infrastructure may be used to satisfy the PCSM requirements if the PCSM reclamation, or restoration plan meets the requirements of 25 Pa. Code § 102.8(b), (c), (e), (f), (h), (i) and (l), and when applicable, (m).

PREPAREDNESS, PREVENTION AND CONTINGENCY (PPC) PLANS

If toxic, hazardous, or other polluting materials will be on site, the permittee or co-permittee(s) must develop a PPC Plan for use while those materials are on site in accordance with 25 Pa. Code § 91.34 (relating to activities utilizing pollutants). The PPC Plan shall identify areas which may include, but are not limited to, waste management areas, raw material storage areas, fuel storage areas, temporary and permanent spoils storage areas, maintenance areas, and any other areas that may have the potential to cause noncompliance with the terms and conditions of this permit due to the storage, handling, or disposal of any toxic or hazardous substances such as oil, gasoline, pesticides, herbicides, solvents, concrete washwaters, etc. BMPs shall be developed and implemented for each identified area. The PPC Plan shall be maintained on site at all times and shall be made available for review at the Department's or authorized conservation district's request.

SUMMARY OF THE PERMIT REVISIONS FOR PAG-02, 2012 Amendment

Coverage of Permit – The approval to discharge in accordance with the terms and conditions of this permit will be valid for a period of five years from the date of the approval of coverage issued.

Threshold of earth disturbance for which permit coverage must be obtained – The federal permitting threshold requirements have been incorporated into the revised Chapter 102 regulations reducing the threshold for permit coverage from 5 acres or greater and 1 to 5 acres with a point source to 1 acre or greater.

Areas for which coverage does not apply – Animal heavy use areas and oil and gas activities have been added as areas where permit coverage does not apply.

Definitions – New definitions added include: administrator, antidegradation best available combination of technologies (ABACT), critical stages, licensed professional, long-term operation and maintenance, MCM, MS4, nondischarge alternative, post construction stormwater, project site, riparian buffer, riparian forest buffer, and Total Maximum Daily Load (TMDL).

Notice of Intent (NOI) Submittal – Citations were added for conditions 3 and 4 referencing relevant sections of 25 Pa. Code Chapter 102.

Activities not Eligible for Coverage under this Permit –

Paragraph (b)(1) was modified to include wetlands.

Paragraph (b)(7) was added which states that discharges subject to categorical point source effluent limitations promulgated by EPA for categories other than construction or post construction are not eligible for coverage under PAG-02.

Paragraph (b)(13) was modified which states that PAG-02 may not be used for discharges to surface waters identified as impaired waters where the proposed discharge will result in a net change (pre-condition to post condition) in volume or rate or water quality of the stormwater unless there is an analysis completed which documents that the discharge will neither cause nor contribute to the impairment of the receiving water.

Paragraph (b)(15) was added which states that discharges to MS4 and CSO municipal systems may not be authorized without the written consent of the MS4 or CSO entity unless the discharge results in no net change in rate, volume and water quality.

Paragraph (b)(16) was added to include those categories that are excluded from coverage in 40 C.F.R. 450.21(e).

Paragraph (e) was added which states that the approval of coverage is granted based upon information provided by the applicant in the NOI. All information provided by the applicant is incorporated by reference as part of the approval. Any conflicts between the permit and the NOI will be resolved by the more environmentally protective of the two.

Insufficient Funds – This section was added to address situations in which a permit has been authorized and the funds for the permit application fees are found to be insufficient during review or at a later date. In this case, the permit will be suspended until sufficient funds are received. Activity at the site must cease and the site will be temporary stabilized. If funds are not received, the permit authorization will be revoked.

Notice of Termination (NOT) – Termination of Coverage

This section was added to list the information that must be provided as a prerequisite for permit termination. The permittee will be responsible for compliance with the permit terms and conditions, including long-term operation and maintenance of the PCSM BMPs. The Department or authorized conservation district will conduct a follow-up inspection and approve or deny the NOT within 30 days of its submittal.

Final Certification – Language was added regarding the new requirement in the revised Chapter 102 to have a licensed professional on site during critical stages of construction and to provide a written certification statement with the filing of the NOT. Permittees must also retain a copy of the record drawings for the project site.

Part A. Effluent Limitations, Monitoring and Reporting Requirements

Effluent Limitations - BMPs – An item incorporating the federal effluent limitations guidelines by reference was added.

Monitoring, Inspection and Reporting Requirements - Licensed Professional Oversight of Critical Stages – This item was added to address the revised Chapter 102 requirement that a licensed professional must be on site and responsible during critical stages of implementation. Critical stages include structurally engineered BMPs, underground BMPs, and other BMPs as deemed appropriate by the Department or authorized conservation district.

Monitoring, Inspection and Reporting Requirements - Noncompliance Reporting – Language was added to the phrase “during an inspection or any other time” to include the language “the permittee becomes aware of any incident causing or threatening pollution as described in 25 Pa. Code § 91.33 (relating to incidents causing or threatening pollution), as required by 25 Pa. Code § 92a.41(b) (relating to conditions applicable to all permits) has resulted in a period of noncompliance”. This is to clarify times when the Department must be notified of noncompliance.

Monitoring, Inspection and Reporting Requirements - Availability of Reports – This section was added to assure that reports and other information will be available for public inspection at the appropriate Department or conservation district.

Part B. Standard Conditions

Management Requirements - Reduction, Loss or Failure of BMP – Language was added to this section: “These actions should be undertaken to ensure that there are no pollutional discharges to the waters of the Commonwealth. This requirement is applicable in situations where the BMP is rendered ineffective, whether the cause or source of the reduction, loss or failure is within or beyond the control of the permittee or co-permittee”.

Management Requirements – Removed sections “Termination of Coverage” and “Completion Certificate and Final Plans” as these two sections are covered in other areas throughout the permit.

Part C. Other Conditions

Preparedness, Prevention and Contingency (PPC) Plans – Added in the citation for 25 Pa. Code § 91.34. Added concrete washwaters to the list of toxic or hazardous substances that must be addressed in the plan.

Erosion and Sediment Control Plans – This section has been modified to reflect additional requirements in Chapter 102 related to general E&S planning and design principles.

Post Construction Stormwater Management Plans – This section has been modified to reflect additional requirements in Chapter 102 as follows:

- a. General PCSM planning and design principles.
- d. A licensed professional or a designee shall be present onsite and be responsible for oversight of critical stages of implementation of the approved PCSM plan. The licensed professional will be responsible to provide a final certification, pursuant to 25 Pa. Code § 102.8(l) along with the required NOT and record drawings, certifying that the project site was constructed in accordance with the approved or modified PCSM plan.
- f. The portion of a site reclamation or restoration plan that identifies PCSM BMPs to manage stormwater from pipelines or other similar utility infrastructure may be used to satisfy the PCSM requirements if the PCSM reclamation or restoration plan meets the requirements of 25 Pa. Code Chapter 102.8(b), (c), (e), (f), (h), (i), and (l), and when applicable, (m).

Stabilization - Language has been added to reflect the change in 25 Pa. Code § 102.22 that requires temporary stabilization to be completed within 4 days of the temporary cessation of earth disturbance activities.

Long-term Operation and Maintenance – This section was added to reflect additional requirements in 25 Pa. Code § 102.8 as follows:

- a. The permittee or co-permittee shall be responsible for long-term operation and maintenance of PCSM BMPs unless a different person is identified in the NOT and that person has agreed to long-term operation and maintenance of the PCSM BMPs.
- b. For any property containing a PCSM BMP, the permittee or co-permittee shall record an instrument with the Recorder of Deeds which will assure the disclosure of the PCSM BMP and the related obligations in the ordinary course of a title search of the subject property. The recorded instrument must identify the PCSM BMP, provide for necessary access related to the long-term operation and maintenance of the PCSM

- BMPs, and provide notice that the responsibility for long-term operation and maintenance of the PCSM BMPs is a covenant that runs with the land that is binding upon and enforceable by subsequent grantees, and provide proof of filing with the NOT under 25 Pa. Code § 102.7(b)(5).
- c. For Commonwealth owned property, a covenant that runs with the land is not required until the transfer of the land containing a PCSM BMP occurs. Upon transfer of the Commonwealth-owned property containing the PCSM BMP, the deed must comply with 25 Pa. Code § 102.8(m)(3). An agency of the federal government shall not be required to make or record a declaration of covenants on its property until transfer of the property to a non-federal or non-Commonwealth entity or individual. Upon transfer of the Commonwealth-owned or federally-owned property containing the PCSM BMP, the deed must comply with 25 Pa. Code § 102.8(m)(3).
 - d. The person responsible for performing long-term operation and maintenance may enter into a written agreement with another person, including a conservation district, nonprofit organization, municipality, authority, private corporation, or other person, to transfer the responsibility for PCSM BMPs or to perform long-term operation and maintenance and provide notice thereof to the Department.
 - e. A permittee or co-permittee that fails to transfer long-term operation and maintenance of the PCSM BMPs or otherwise fails to comply with this requirement, shall remain jointly and severally responsible with the landowner for long-term operation and maintenance of the PCSM BMPs located on the property.
 - f. Unless a later date is approved by the Department in writing, the permittee shall record an instrument as required under 25 Pa. Code § 102.8(m)(2) and condition b above within 45 days from the date of issuance of this permit or authorization. Unless the Department authorizes a different procedure, the long-term operation and maintenance plan shall be recorded along with the instrument. Unless a later date is approved by the Department in writing, the permittee shall provide the conservation district and the Department with the date and place of recording along with a reference to the docket, deed book or other record, within 90 days from the date of issuance of this permit or authorization.
 - g. Unless an alternative process is approved by the Department in writing, upon the sale or other transfer of any parcel, lot, road or other real property included within the permit boundary, the permittee shall notify the purchaser, grantee, or transferee of the long-term PCSM BMP operation and maintenance requirements. The permittee shall expressly identify the PCSM BMPs on each property, the schedule for inspection and reporting, the person or entity responsible for long-term operation and maintenance of the PCSM BMPs and how access to the BMPs will be achieved and shall obtain approval from the purchaser, grantee or transferee. Unless a later date is approved by the Department in writing, the permittee shall provide the conservation district and the Department with notice of compliance with this section within 45 days from the date of transfer of the property and at the time the permittee files a Notice of Termination.

Voluntary Riparian Forest Buffers – This section was added to reflect additional requirements in § 102.14 (relating to riparian buffer requirements) as follows:

Persons that protect, convert, or establish a new riparian forest buffer that meets the requirements of 25 Pa. Code § 102.14(b) may qualify for benefits under 25 Pa. Code §102.14(e)(1) and (2) relating to the antidegradation presumption and trading or offsetting of credits.

Municipal Separate Storm Sewer Systems (MS4s) MCM Fulfillment – This section was added to reflect coordination between the MS4 program and the construction stormwater program. This allows MS4s subject to PAG-13 coverage requirements to choose to rely on the Chapter 102 permitting program to satisfy MCM4 and part of MCM5 permit obligations related to construction stormwater and post construction stormwater.

Public Notices for Applications Including an Offset – This section was added to allow for a public notice process for PAG-02 permits proposing an offset. A 30 day public comment period is proposed for permit(s) that involve proposed offsets of either stormwater or riparian buffers.

PUBLIC COMMENTS ADDRESSED

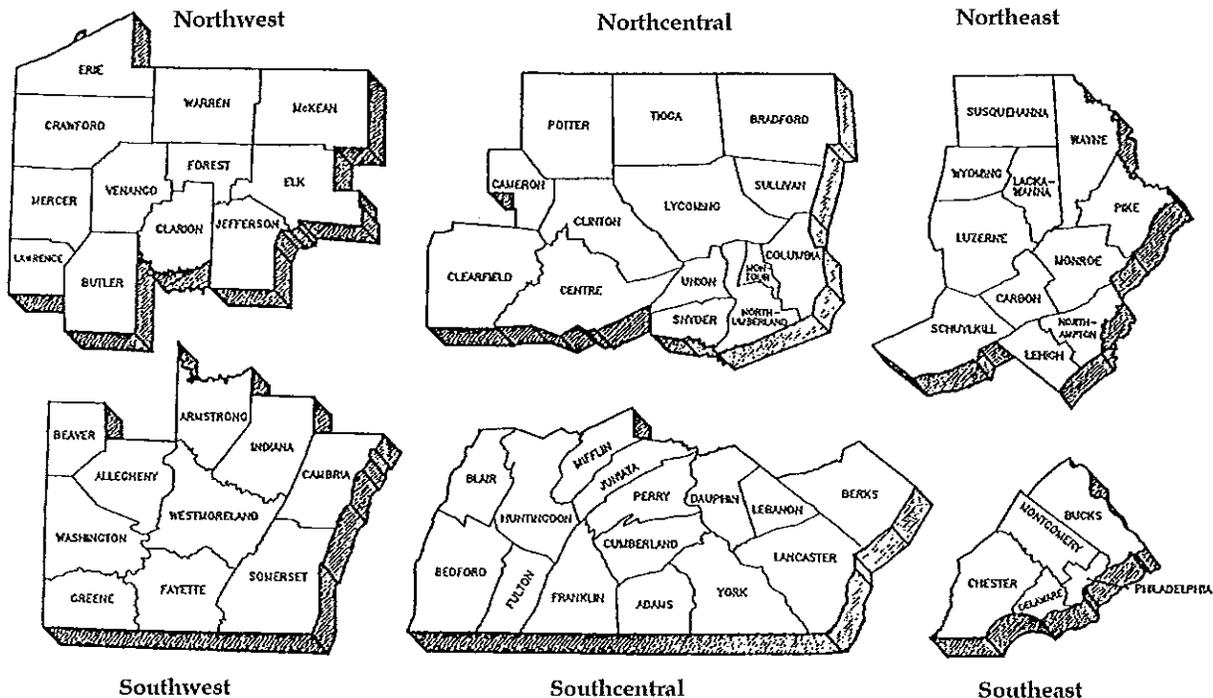
The Department conducted a 30-day comment period starting August 18, 2012 and ending September 17, 2012 to solicit comments from the public on the draft PAG-02. Due to a technical issue, the draft permit was not posted immediately so, to address the need for adequate time for public comment, the Department extended the comment period until October 2, 2012. Sixty (60) public comments were received from a total of five (5) commenters. The comment and response document will be posted in the Department's eLibrary along with the final PAG-02 and factsheet upon its publication as final in the *Pennsylvania Bulletin*.

For more information,

Call the DEP regional office in your area or contact:

Department of Environmental Protection
Bureau of Waterways Engineering and Wetlands
Division of Wetlands, Encroachments and Training
400 Market St.
P.O. Box 8460
Harrisburg, PA 17105
717-787-3411

DEP REGIONAL OFFICES



Southeast Region
2 East Main Street
Norrstown, PA 19401
484-250-5970

Counties: Bucks, Chester, Delaware, Montgomery and Philadelphia

Northwest Region
230 Chestnut St.
Meadville, PA 16335-3481
814-332-6984

Counties: Butler, Clarion, Crawford, Elk, Erie, Forest, Jefferson, Lawrence, McKean, Mercer, Venango and Warren

Southwest Region
400 Waterfront Drive
Pittsburgh, PA 15222-4745
412-442-4000

Counties: Allegheny, Armstrong, Beaver, Cambria, Fayette, Greene, Indiana, Somerset, Washington and Westmoreland

Northeast Region
2 Public Square
Wilkes-Barre, PA 18701-1915
570-826-2511

Counties: Carbon, Lackawanna, Lehigh, Luzerne, Monroe, Northampton, Pike, Schuylkill, Susquehanna, Wayne and Wyoming

Southcentral Region
909 Elmerton Ave.
Harrisburg, PA 17110
717-705-4700

Counties: Adams, Bedford, Berks, Blair, Cumberland, Dauphin, Franklin, Fulton, Huntingdon, Juniata, Lancaster, Lebanon, Mifflin, Perry and York

Northcentral Region
208 W. Third St., Suite 101
Williamsport, PA 17701
570-327-3636

Counties: Bradford, Cameron, Clearfield, Centre, Clinton, Columbia, Lycoming, Montour, Northumberland, Potter, Snyder, Sullivan, Tioga and Union



pennsylvania

DEPARTMENT OF ENVIRONMENTAL PROTECTION

MINIMIZING ACCELERATED SOIL EROSION AND PREVENTING SEDIMENT POLLUTION

WHAT IS SOIL EROSION?

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

Accelerated erosion is the removal of the surface of the land through the combined action of human activities and natural processes at a rate greater than would occur from natural processes alone.

IS SEDIMENT REALLY A POLLUTANT?

A certain amount of erosion and sediment occurs naturally. Because it is a natural process, nature is able to assimilate naturally occurring sediments without permanent adverse effects. Adverse effects most often result from accelerated erosion due to earth disturbance activities such as surface mining, agricultural plowing and tilling, construction and timber harvesting operations.

WHY IS SEDIMENT POLLUTION HARMFUL?

- Fish have gills, which extract oxygen from the water. These gills can become clogged when the water transports excessive amounts of sediment.
- Sediment can cover fish eggs and the gravel nests they rest in.
- Sediment can destroy the food supply for many species of fish by covering aquatic insect habitat on the stream bottom.
- Sediment clouds the water and deprives plants of light needed for photosynthesis.
- Sediment may carry other pollutants such as heavy metals, pesticides and excess nutrients that are spread by water action and cause problems not only at the source, but also downstream.
- Sediment loads in our waterways often result in eroded and unstable streambanks.
- Sediment increases public drinking water treatment costs or may render unfiltered drinking water supplies harmful for consumption.
- Excess sediment deposits in streams and rivers may necessitate the dredging of a reservoir or other body of water.

HOW IS EROSION AND SEDIMENT CONTROL REGULATED?

Because of the soil erosion problems associated with earth disturbance activities, the Pennsylvania Environmental Quality Board (EQB) approved statewide regulations for Erosion and Sediment Control, 25 Pa. Code Chapter 102 in September 1972 and amended them on Nov. 19, 2010. These regulations are authorized by the Pennsylvania Clean Streams Law, 35 P.S. §§691.1 *et seq.*, and prohibit the discharge of any pollutant to Pennsylvania's waters. Under the Chapter 102 regulations, anyone conducting earth disturbance activities must use Best Management Practices (BMPs) to minimize the amount of sediment leaving the earth disturbance activity.

The Department of Environmental Protection (DEP) is responsible for the administration and enforcement of Chapter 102 regulations and the Clean Streams Law. Conservation districts with trained staff are delegated the responsibility to review Erosion and Sediment Control Plans (E&S Plans), conduct training, perform site inspections, and in some cases, conduct compliance and enforcement actions. Every county in Pennsylvania, except Philadelphia County, has a conservation district office.

WHAT IS REQUIRED?

An E&S Plan which meets the requirements of Chapter 102 must be properly designed, implemented and available on site for all earth disturbance activities. The E&S Plan must show how land and water resources are to be protected against accelerated erosion through the use of BMPs. Examples of BMPs include: minimizing earth disturbance, silt fence, mulch, diversion ditches, sediment traps, sediment basins, and the establishment of grasses for permanent stabilization. The E&S Plan must show the site, location of BMPs, and the timing and sequence of their installation for maximum effectiveness. Conservation districts are also able to provide guidance for E&S Plan development. Once completed, the E&S Plan is often submitted to the conservation district or DEP for review. Guidance for preparing an E&S Plan, as well as various BMPs that meet Chapter 102 requirements, can be found in DEP's "Erosion and Sediment Pollution Control Program Manual" (363-2134-008).

With the exception of agricultural plowing and tilling, animal heavy use areas, timber harvesting, road maintenance activities and oil and gas activities, projects that disturb equal to or greater than one acre of land must obtain an NPDES (National Pollutant Discharge Elimination System) Permit before commencing any earth disturbance. For more information regarding this permit, please refer to the DEP Fact Sheet "NPDES Permits for Stormwater Discharges Associated With Construction Activities" (3930-FS-DEP3042), or contact one of the offices listed at the end of this fact sheet.

Timber harvesting activities that disturb 25 acres or more of land for haul roads, skid trails, and landing areas; and road maintenance activities disturbing 25 acres or more of land, must obtain an Erosion and Sediment Control Permit. Oil and gas activities that involve five acres or more of earth disturbance over the life of the project shall obtain an E&S Permit (ESCGP-1). Agricultural plowing or tilling activities and animal heavy use areas are exempt from permit requirements, but they still require the development of an E&S Plan or conservation plan, which specifies the implementation and maintenance of BMPs. For more information on plans for agricultural plowing or tilling, please refer to DEP Fact Sheet "Sediment and Erosion Control Requirements for Agricultural, Plowing or Tilling Activities" (3930-FS-DEP2416) or contact one of the offices listed at the end of this fact sheet.

Conservation districts and DEP staff conduct periodic inspections of earth disturbance activities to ensure that E&S Plans are properly implemented and maintained. In addition, permittees, or anyone who conducts earth disturbance activities, must conduct routine site inspections and maintenance to ensure that BMPs are operational and effective and to minimize the potential for sediment pollution or other off-site impacts.

WHAT CAN YOU DO?

Proper planning and use of BMPs is the key to a successful project and the protection of the commonwealth's water resources. Before beginning the project, become familiar with the erosion and sediment control requirements. Inform the contractor or equipment operator of the need for E&S Plans or NPDES permits as part of the project. Assistance and additional information is available at the local conservation district or a DEP regional office.

If sediment pollution is occurring, or if there is evidence that sediment pollution has occurred due to an on-going earth disturbance activity, contact the conservation district for the county where the project is located. Be prepared to provide the location, type of activity, name of the project (if known), and whether sediment pollution is occurring.

For more information, visit www.dep.state.pa.us, keyword: Erosion Control

or contact:

The local county conservation district office

or

The local DEP Waterways and Wetlands program at one of the regional offices:

Northwest Region
230 Chestnut Street
Meadville, PA 16335-3481
814-332-6984

Northcentral Region
208 West Third Street
Williamsport, PA 17701-6448
570-327-0529

Northeast Region
2 Public Square
Wilkes-Barre, PA 18701-1915
570-826-2511

Southwest Region
400 Waterfront Drive
Pittsburgh, PA 15222-4745
412-442-4314

Southcentral Region
909 Elmerton Avenue
Harrisburg, PA 17110-8200
717-705-4802

Southeast Region
2 East Main Street
Norristown, PA 19401-4915
484-250-5970

or

Department of Environmental Protection
Bureau of Waterways Engineering and Wetlands
Division of NPDES Construction and Erosion Control
P.O. Box 8460
Harrisburg, PA 17105-8460
717-787-3411
Fax 717-772-0409

Don't Let Storm Water Run Off With Your Time and Money!

What the Construction Industry Should Know About Storm Water In Our Community

The construction industry plays an important role in improving our community's quality of life by not only providing new development, but also protecting our streams and rivers through smart business practices that prevent pollution from leaving construction sites.

Storm water runoff leaving construction sites can carry pollutants such as dirt, construction debris, oil, and paint off-site and into storm drains. In our community, storm drains carry storm water runoff directly to local creeks, streams, and rivers with no treatment. Developers, contractors, and homebuilders can help to prevent storm water pollution by taking the following steps:

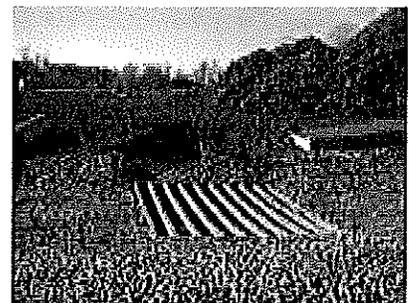
1. Comply with storm water permit requirements.
2. Practice erosion control and pollution prevention practices to keep construction sites "clean."
3. Conduct advanced planning and training to ensure proper implementation on-site.

The remainder of this fact sheet addresses these three steps.

Storm Water Permit Requirements for Construction Activity

Planning and permitting requirements exist for construction activities. These requirements are intended to minimize storm water pollutants leaving construction sites.

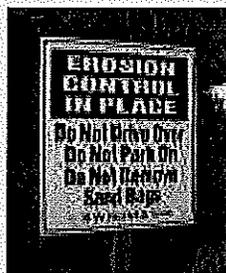
- Pennsylvania's Erosion and Sediment Pollution Control Program (25 Pa. Code, Chapter 102) requires Erosion and Sediment Control Plans for all earth disturbing activities.
- The National Pollutant Discharge Elimination System (NPDES) Permit Program (25 Pa. Code, Chapter 92) requires that construction activities disturbing greater than one acre submit a Notice of Intent for coverage under a general NPDES permit.



Knowing your requirements before starting a project and following them during construction can save you time and money, and demonstrate that you are a partner in improving our community's quality of life. For more information about these programs, contact your local county conservation district office or the Department of Environmental Protection.

Erosion Control Practices:

- Perimeter controls (e.g. silt fence)
- Sediment traps
- Immediate revegetation
- Phased, minimized grading
- Construction entrance
- Protection of streams and drainage ways
- Inlet protection



An Ounce of Prevention

Rain that falls onto construction sites is likely to carry away soil particles and other toxic chemicals present on construction sites (oil, grease, hazardous wastes, fuel). Storm water, if not properly managed, carries these pollutants to streams, rivers, and lakes. Erosion and sediment control practices can serve as a first line of defense,

Pollution Prevention Practices:

- Designated fueling and vehicle maintenance area away from streams.
- Remove trash and litter.
- Clean up leaks immediately.
- Never wash down dirty pavement.
- Place dumpsters under cover.
- Dispose of all wastes properly.

minimizing clean up and maintenance costs, and the impacts to water resources caused by soil erosion during active construction. Erosion controls can reduce the volume of soil going into a sediment control device, such as a sediment trap, therefore, "clean out" frequencies are lower and maintenance costs are less. When possible, divert water around the construction site using berms or drainage ditches.

In addition, use pollution prevention and "good housekeeping measures" to reduce the pollution leaving construction sites as well. This can be as simple as minimizing the pollution source's contact with rainwater by covering it, maintaining a "clean site" by reducing trash and waste, and keeping vehicles well maintained.

The Best Laid Plans

Plans such as erosion and sediment control plans and storm water pollution prevention plans are important tools for outlining the erosion control and pollution prevention practices that you will use to manage storm water runoff prior to breaking ground. Developing good plans allows for proper budgeting and planning for the life of the project. Proper installation and maintenance of erosion and storm water controls is essential to a plan that works. Training for on-site staff helps to ensure the proper installation and maintenance of erosion controls and pollution prevention practices. Inspect controls and management techniques regularly to ensure they are working, especially after storm events. If polluted storm water is leaving the site, you may need to repair or add additional storm water controls.



The Bigger Storm Water Picture

Your community is preventing storm water pollution through a comprehensive storm water management program. This program addresses storm water pollution from construction, but it also deals with new development, illegal dumping to the storm sewer system, and municipal operations. It will also continue to educate the community and get everyone involved in making sure the only thing that storm water contributes to our streams is . . . water! Contact your community or the Pennsylvania Department of Environmental Protection for more information about storm water management.

For more information:

Pennsylvania Association of Conservation District's:
<http://www.pacd.org/default.html>

Pennsylvania Handbook of Best Management Practices for Developing Areas:
http://www.pacd.org/products/bmp/bmp_handbook.html

Storm Water Manager's Resource Center:
<http://www.stormwatercenter.net>

Pennsylvania Department of Environmental Protection:
<http://www.dep.state.pa.us>

