CHAPTER 12, APPENDIX A
E&S RELATED REGULATIONS

12A.0 INTRODUCTION

The following paragraphs summarize some of the important laws and regulations related to erosion, sediment, and stormwater control programs. Some of these laws and regulations contain specific permitting requirements for earth disturbances that have been incorporated into PA DEP's application package for the National Pollutant Discharge Elimination System (NPDES) Permit for Stormwater Discharges Associated with Construction Activities. Other laws and regulations involve permitting programs, such as 25 PA Code § 105, which are focused primarily on issues other than erosion and sediment control, but which contain requirements that permit applications include plans to minimize the potential effects of accelerated erosion and sedimentation, or that permit applications be accompanied by copies of erosion and sediment control plans with a letter from a regulatory review authority that indicates the erosion and sediment control plan is satisfactory (e.g. 25 PA Code § 105.13(f)). Additional information regarding the laws and regulations related to control of erosion and sediment can be obtained from the agencies responsible for the programs (i.e. Environmental Protection Agency (EPA), United States Army Corps of Engineers (USACE), and the Pennsylvania Department of Environmental Protection (PA DEP)).

12A.1 REGULATORY REQUIREMENTS

A. The Federal Clean Water Act, 33 U.S.C. § 1251 et seq. The Clean Water Act, which was enacted in 1972, was formerly known as the Federal Water Pollution Control Act. Its purpose is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." The Clean Water Act sets requirements for water quality standards for the discharge of pollutants into waterways.

The three primary sections of this Act pertaining to stormwater management regulations are Sections 401, 402, and 404 (33 U.S.C. §§ 1341, 1342, and 1344 respectively).

1. Section 401. Section 401 is triggered if the construction or operation of a facility (1) requires a Federal license or approval (e.g. a Section 404 Permit from the U.S. Army Corps of Engineers) and (2) the construction or operation of the facility will cause a discharge into navigable waters. Section 401 requires that an individual applying for a Federal license or permit to discharge into navigable waters provide the permitting agency with a certification from the State (from PA DEP; in Pennsylvania) indicating that the discharge will comply with provisions in Sections 301, 302, 303, 306, and 307 of the Clean Water Act. The aforementioned sections provide the effluent limitations, water quality standards, and performance standards for certain types of activities and discharges. The PA DEP approves this certification, which is commonly referred to as a "401 Water Quality Certification" or 40 CFR Part 121.

2. Section 402. This section of the Clean Water Act requires a permit for the discharge of any pollutant, or combination of pollutants into waters of the United States. This permit is referred to as the National Pollutant Discharge and Elimination System (NPDES) Permit. The purpose of the permit is to ensure that necessary actions are taken to protect water quality and quantity. This section provides for permits for discharges associated with industrial activity and permits for discharges from municipal storm sewers (stormwater). This section defines stormwater associated with construction activity as "industrial activity." EPA has enacted regulations defining the NPDES Permit process. 40 CFR Part 122. PA DEP's NPDES program has been approved by EPA; therefore PA DEP is responsible for the issuance of NPDES Permits.

3. Section 404. This section of the Clean Water Act prohibits the discharge of dredged or fill material into waters of the United States without a permit from the USACE. This permit is referred to as a "Section 404 Permit." As part of the Section 404 Permit, a 401 Water Quality Certification is required from PA DEP.

The USACE provides for two types of Section 404 permits, general and individual, depending upon the project's complexity, environmental impacts, and location. (It should be noted that general permits include nationwide, regional, and programmatic Section 404 permits). For projects that require a Section 404 Permit
and a PA DEP Chapter 105 Permit (as discussed below), a Joint Permit Application is available through the PA DEP, and may be used and submitted to satisfy both the Section 404 and Chapter 105 Permit requirements (the use of the Joint Permit is restricted depending upon certain project conditions). The USACE regulations 33 CFR Parts 325, 320, 323, 330 and EPA regulations 40 CFR Part 122 also apply.

Details regarding Section 404 Permits can be obtained by contacting the USACE, or through their website at www.usace.army.mil. Details regarding the NPDES Permits and Section 401 Water Quality Certification can be obtained from the PA DEP through their website at www.dep.state.pa.us/efacts.

B. Pennsylvania's Clean Streams Law, Act of June 22, 1937 (P.L. 1987, No. 394) as amended 35 P.S. § 691.1 et seq. The Clean Streams Law was enacted in 1937 in order to "preserve and improve the purity of the waters of the Commonwealth for the protection of public health, animal and aquatic life, and for industrial consumption, and recreation..." This law provides for protection of water supplies and water quality, regulates discharges of sewage and industrial waste, regulates mine operations and their impact on water quality, supply and quantity, and regulates stormwater associated with construction activities. Therefore, construction activities fall under the Clean Streams Law. Through this law, the PA DEP is given the power to "establish policies for effective water quality control and water quality management in the Commonwealth of Pennsylvania and coordinate and be responsible for the development and implementation of comprehensive public water supply, waste management, and other water quality plans." This law requires permit approval for discharges from mines, discharge of sewage or industrial waste, and discharge of any other substance that would result in pollution, both directly and indirectly, into waters of the Commonwealth.

Several PA DEP permit processes have been generated through regulations promulgated in part or in whole, pursuant to the Clean Streams Law. Of these, the following list includes, but is not limited to, those permits that have a link to erosion and sediment control and stormwater management:

- NPDES Permit for Stormwater Discharges Associated With Construction Activities.
- NPDES Phase II MS4 Permit.
- E&S Control Permit.

Details regarding these permits can be obtained from the PA DEP through their website at www.dep.state.pa.us/efacts. Select the link to the "Guide to DEP Permits and Other Authorizations."

C. Pennsylvania's Stormwater Management Act, Act of October 4, 1978, P.L. 864 No. 167, 32 P.S. § 680.1 et seq. (as amended by Act 63). The purpose of Act 167 is to encourage planning and management of storm water runoff in each watershed, authorize a comprehensive program of storm water management designated to preserve and restore the flood carrying capacity of Commonwealth streams, and to encourage local administration and management of storm water consistent with the Commonwealth's duty as trustee of natural resources.

The county stormwater management plans are commonly referred to as "Act 167 Plans." The plans evaluate both the hydrologic and hydraulic characteristics of the drainage basins, and are designed to manage stormwater from a quantity and quality perspective. Act 167 Plans are adopted by counties and approved by PA DEP. After an Act 167 Plan is adopted and approved, each municipality is required to adopt and implement ordinances necessary to regulate development and activities within the municipality in a manner consistent with the Act 167 Plan. Moreover, construction using Commonwealth funds within a watershed with an approved Act 167 plan shall be completed in a manner consistent with the plan.

The Pennsylvania Stormwater Management Act (Act 167) is the legislative basis for stormwater management. Section 11 (a) of the Act states that "after adoption and approval of a watershed storm water plan in accordance with this act, the location, design and construction within the watershed of storm water management systems, obstructions, flood control projects, subdivision and major land developments, highways and transportation facilities, facilities for the provision of public utility services and facilities owned or financed in whole or part in by funds from the Commonwealth shall be conducted in a manner consistent with the watershed storm water plan." Thus, wherever an adopted and approved Act 167 plan exists, consistency with that plan is a statutory requirement for PennDOT.

Often, these Act 167 Plans overlap with requirements from the NPDES Construction Stormwater Permit. For NPDES Construction Permits, the Post Construction Stormwater Management (PCS) Plan always needs to be
consistent with the approved Act 167 Plan. PCSM plans also need to meet the design requirements contained in the NPDES construction stormwater permit application. In the rare case that the design requirements in the NPDES construction permit application directly conflict with the requirements in an approved Act 167 plan, the requirements in the approved Act 167 plan take precedence; however, all requirements can usually be satisfied.

This Act also requires any land developer to implement measures: (1) "to assure that the maximum rate of stormwater runoff is no greater after development than prior to development activities;" or (2) "to manage the quantity, velocity and direction of the resulting stormwater in a manner which otherwise adequately protects health and property from possible injury."

D. Federal National Pollutant Discharge Elimination System Phase II. The NPDES Phase II MS4 Program is designed to ensure that government entities located within designated urbanized areas take actions to control/manage stormwater runoff and associated discharges into surface waters. An MS4 is a "municipal separate storm sewer system." Any municipality operating an MS4 within a designated urbanized area must obtain an NPDES Phase II MS4 Permit from DEP. Included within the requirements of this permit process are the development and implementation of a plan to meet six minimum control measures (MCMs); with a time schedule, series of BMPs, and measurable goals required for each MCM. The MCMs include the following:

- Public Education and Outreach.
- Public Participation and Involvement.
- Illicit Discharge Detection and Elimination.
- Construction Site Runoff Control.
- Post-Construction Stormwater Management.
- Pollution Prevention and Good Housekeeping for Municipal Operations and Maintenance.

PennDOT has an NPDES Phase II MS4 Permit which permits the discharge of stormwater from PennDOT facilities to surface waters within the designated urbanized areas. Under the MS 4 Permit, part of PennDOT's compliance with the six minimum control measures described above is to renew and update PCSM and E&S design guidance periodically. Therefore, the designer is not responsible for updating the permit, but following the design guidance provided by PennDOT.

E. Pennsylvania's Dam Safety and Encroachments Act (Act of November 26, 1978 (P.L. 1375 No. 325) as amended, 32 P.S. § 693.1 et seq.) This Act provides for the regulation and safety of dams, reservoirs, water obstructions, and encroachments in the Commonwealth of Pennsylvania. It requires that regulations be developed establishing: 1) standards and criteria for the location and design of dams, water obstructions and encroachments; 2) requirements for operation of dams; 3) requirements for monitoring, inspection, and reporting of conditions affecting the safety of dams, water obstructions, and encroachments; and 4) requirements for emergency warning and action plans, etc. It applies to dams as well as other water obstructions and encroachments located in, along, across, or projecting into any watercourse, floodway, or body of water. Types of activities under this Act's jurisdiction include, but are not limited to, placing fill in waters of the Commonwealth (e.g. wetlands and streams) or the construction of bridges, culverts, or pipes in waters of the Commonwealth. Based on this statute, the construction, operation, maintenance, modification, enlargement, or abandonment of any dam, water obstruction, or encroachment is prohibited without a permit from the PA DEP. This permit is known as either a Chapter 105 Dam Safety Permit or Water Obstruction and Encroachment Permit as described in the following heading for PA Code, Title 25, Chapter 105. The Dam Safety Permit is specific to the design, construction, maintenance, operation, modification, and/or abandonment of dams, while the Water Obstruction and Encroachment Permit is specific to the construction, maintenance, operation, modification, and/or abandonment of water obstructions and encroachments.

F. Commonwealth of Pennsylvania, PA Code, Title 25, Chapter 105: Dam Safety and Waterway Management. Chapter 105 of PA Code, Title 25 is part of the regulatory mechanism for Pennsylvania's implementation of the Dam Safety and Encroachments Act. The Chapter 105 regulations serve to "provide for the comprehensive regulation and supervision of dams, reservoirs, water obstructions and encroachments in the Commonwealth in order to protect the health, safety, welfare and property of the people" by requiring a permit for the construction, operation, maintenance, modification, enlargement, or abandonment of a dam, water obstruction, or encroachment. This permit is typically referred to as a "Chapter 105 Permit."

From a stormwater run off standpoint, a Chapter 105 Permit requires an analysis of the project's impact on Act 167 Stormwater Management Plans and a letter from the municipality commenting on the analysis. If the stormwater
analysis reveals increases in peak rates of runoff or flood elevations, the permit application must also include a
description of property that may be affected and an analysis of the degree of risk to the property. Finally, except for
small projects, proof of an application for an erosion and sedimentation plan must be included.

There are three types of PA DEP Chapter 105 Permits. They include general permits, small project permits, and
individual permits. There are several general permits, each containing specific limits and restrictions. Copies of
these permits and their conditions can be obtained from the PA DEP website at www.dep.state.pa.us. Applicants for
these general permits need only register their intent to construct the project in accordance with the conditions of the
permit. No additional application information is required.

A small project application is required for projects that do not qualify for a general permit, but are considered to
have an "insignificant impact" on safety and protection of life, health, property and the environment as defined in
Chapter 105.1 of the regulations, and that do not impact wetlands. All other projects require an Individual Chapter
105 Permit.

For projects that require both a PA DEP Chapter 105 Permit (small project or individual permit) and a USACE
Section 404 Permit (as discussed above), a Joint Permit Application is available through the PA DEP, and may be
used and submitted to satisfy both the Section 404 and Chapter 105 Permit requirements (the use of the Joint Permit
is restricted depending upon certain project conditions).

et seq. This Act provides for the regulation of land and water use for flood control purposes. It authorizes a
comprehensive and coordinated program, based upon the National Flood Insurance Program, to preserve and restore
the efficiency and carrying capacity of streams and floodplains in Pennsylvania. The adoption and administration of
floodplain management regulations necessary to comply with the National Flood Insurance Program is governed by
the provisions in the Pennsylvania Municipalities Planning Code.

is part of the regulatory mechanism for implementation of the Flood Plain Management Act. It requires individuals
to obtain a permit to construct, modify, remove, destroy, or abandon a highway obstruction or an obstruction in a
floodplain. Its primary purpose is to prevent flooding and protect people and property from such flooding, by
encouraging planning and development in floodplains that are consistent with sound land use practices. This permit
is obtained (for highway projects) from the Pennsylvania PA DEP under the Chapter 105 Program.

I. Commonwealth of Pennsylvania, PA Code, Title 25, Chapter 92: National Pollutant Discharge
Elimination System (NPDES) Permitting, Monitoring and Compliance. Chapter 92 was issued under Section 5
and 402 of the Clean Streams Law. Chapter 92 sets forth permitting, monitoring and compliance requirements with
regard to the PA DEP implementation of the NPDES program. As part of this process all construction projects with
greater than 2.0 ha (5 ac) of earth disturbance are required to obtain an individual NPDES permit to construct the
project. Those projects between 0.4 - 2.0 ha (1 - 5 ac) of earth disturbance, which also have a point source of
discharge are required to obtain a general NPDES permit. According the PA DEP, a point source discharge is
defined as "any discernible, confined and discrete conveyance, including but not limited to, any pipe, ditch, channel,
tunnel, well, discrete fissure, or container from which pollutants are or may be discharged."

If applicants meet either of the aforementioned criteria then the project is required to address post-construction
stormwater management as part of the permit application package. When completing the supporting documentation
for the NPDES permit and preparing a post-construction stormwater management plan applicants must consider the
following items.

1. PA DEP's policy strives for a no net change in stormwater runoff in terms of volume, rate, and water
   quality comparing pre-construction with post-construction runoff conditions. For runoff rate, PA DEP's policy
calls for the evaluation of the 1- through 100-year storm events. For runoff volume, PA DEP's policy calls for
   the evaluation of the 2-year 24-hour storm event or smaller.

2. Consistency with the standards of watershed-based stormwater management plans approved and
   implemented under the Stormwater Management Act (Act 167).
3. Application of both rate control and also volume control of stormwater runoff in High Quality or Exceptional Value watersheds. Volume increases may be permitted, if justified, in High Quality Watersheds but any increase in post-construction stormwater runoff volume must be mitigated in Exceptional Value watersheds. For a map or listing of High Quality or Exceptional Values watersheds in Pennsylvania contact the Pennsylvania Department of Environmental Protection (PA DEP). As the performance standards for post construction stormwater management controls in HQ or EV watersheds are frequently changing, designers should review current PA DEP requirements and contact the District Environmental Manager for current performance standards for a project prior to initiating the design.


J. Commonwealth of Pennsylvania, PA Code, Title 25, Chapter 93: Water Quality Standards. The provisions of this chapter were issued under sections 5 and 402 of the Clean Streams Law. Chapter 93 sets forth water quality standards for waters of the Commonwealth, including wetlands. In addition, this Chapter provides for the implementation of antidegradation requirements to protect existing use of waters of the Commonwealth. In watersheds designated as High Quality (HQ) or Exceptional Value (EV), Chapter 93 requires that nondischarge alternatives be considered. Where no environmentally sound and cost-effective nondischarge alternatives exist, Chapter 93 requires that the applicant demonstrate that the discharge will maintain and protect the existing quality of receiving surface waters. For High Quality Waters, DEP may allow a reduction in water quality (1) if necessary to accommodate important economic or social development in the area; and (2) a demonstration is made that said reduction will support applicable existing and designated uses, e.g. WWF, TSF, CWF. For a list of special protection watersheds, contact the PA DEP.

K. Commonwealth of Pennsylvania, PA Code, Title 25, Chapter 102: Erosion and Sediment Control. Chapter 102 of PA Code, Title 25, does not deal directly with long-term stormwater management but addresses the application of the National Pollution Discharge Elimination System as it relates to construction and maintenance projects in the state of Pennsylvania. The focus of Chapter 102 is to implement and maintain BMPs to minimize potential for accelerated erosion and sedimentation during construction activities. The Erosion and Sedimentation Pollution Control (E&SPC) Plan is the product of the Chapter 102 process. The E&SPC plan is normally reviewed and approved by the County Conservation Districts.
<table>
<thead>
<tr>
<th>Activity*</th>
<th>Regulations</th>
<th>Requirements/Permits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Discharging Stormwater Into Surface Waters</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PA Clean Streams Law</td>
<td>The NPDES regulations (40 CFR § 122), and Chapter 92 require that construction activities with disturbances of 5 or more acres, or those that disturb between 1 and 5 acres with a point source discharge be permitted, as per the NPDES Permit for Stormwater Discharges Associated With Construction Activities. Stormwater is then managed by NPDES after construction through the NPDES Phase II Permit.</td>
</tr>
<tr>
<td></td>
<td>Federal Clean Water Act, Sections 402</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Federal NPDES Regulations at 40 CFR Part 122</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PA Stormwater Management Act</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PA Code, Title 25, Chapter 92: NPDES Permitting, Monitoring, and Compliance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PA Code, Title 25, Chapter 102: Erosion and Sediment Control</td>
<td></td>
</tr>
<tr>
<td><strong>Stream Encroachment or Obstruction</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Federal Clean Water Act, Sections 401 and 404</td>
<td>Work that creates or allows water runoff, effluent, or other pollutants to be discharged into navigable waters requires a Section 401 Water Quality Certification to ensure water quality standards are met.</td>
</tr>
<tr>
<td></td>
<td>PA Dam Safety and Encroachments Act</td>
<td>A USACE Section 404 Permit is required to allow for the discharge of dredged or fill material into navigable waterways.</td>
</tr>
<tr>
<td></td>
<td>PA Code, Title 25, Chapter 105: Dam Safety and Waterway Management</td>
<td>A Chapter 105 Permit is needed for any structure or activity that changes, expands, or diminishes the course, current, or cross section of a watercourse, floodway, or body of water.</td>
</tr>
<tr>
<td></td>
<td>PA Code, Title 25, Chapter 102: Erosion and Sediment Control</td>
<td>In addition, these activities will likely involve earth disturbance activities and discharges into waters, thereby requiring permits as described above in this table and an E&amp;S Plan as per Chapter 102.</td>
</tr>
<tr>
<td></td>
<td>Federal NPDES Regulations at 40 CFR Part 122</td>
<td>The NPDES regulations (40 CFR § 122), and Chapter 92 require that construction activities with disturbances of 5 or more acres, or those that disturb between 1 and 5 acres with a point source discharge be permitted, as per the NPDES Permit for Stormwater Discharges Associated With Construction Activities. Structures that require less than 1 acre of earth disturbance will not require an NPDES permit.</td>
</tr>
<tr>
<td></td>
<td>PA Code, Title 25, Chapter 92: NPDES Permitting, Monitoring, and Compliance</td>
<td></td>
</tr>
<tr>
<td><strong>Dam Construction / Removal</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PA Dam Safety and Encroachments Act</td>
<td>Dam construction or removal will require a Dam Safety Permit, as well as a PA DEP Chapter 105 Permit (or qualify for a waiver). In addition, this activity may involve earth disturbance activities and discharges into waters, thereby requiring permits as described above in this table.</td>
</tr>
<tr>
<td></td>
<td>PA Code, Title 25, Chapter 105: Dam Safety and Waterway Management</td>
<td></td>
</tr>
</tbody>
</table>

* Activities that occur within EV or HQ Watersheds, as per PA Code, Title 25 Chapter 93, require an Individual NPDES Permit for Stormwater Discharges Associated With Construction Activities.