Regulatory Analysis Form

(Completed by Promulgating Agency)

(All Comments submitted on this regulation will appear on IRRC's website)

INDEPENDENT REGULATORY REVIEW COMMISSION

(1) Agency
Department of Environmental Protection

(2) Agency Number: 7

Identification Number: 533

IRRC Number**:**

(3) PA Code Cite: 25 Pa. Code Chapter 91 (General Provisions)
25 Pa. Code Chapter 92a (National Pollutant Discharge Elimination System Permitting, Monitoring and Compliance)

(4) Short Title: Water Quality Management (WQM) and National Pollution Discharge Elimination System (NPDES) Permit Application Fees and Annual Fees

(5) Agency Contacts (List Telephone Number and Email Address):

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(6) Type of Rulemaking (check applicable box):

☒ Proposed Regulation
☐ Final Regulation
☐ Final Omitted Regulation
☐ Emergency Certification Regulation;
  ☐ Certification by the Governor
  ☐ Certification by the Attorney General

(7) Briefly explain the regulation in clear and nontechnical language. (100 words or less)

This proposed rulemaking adjusts the existing fee schedules for water quality permit applications and annual fees contained in 25 Pa. Code §§ 91.22, 92a.26 and 92a.62. The Clean Streams Law requires the Department to develop and implement a permitting program to prevent and eliminate water pollution within the Commonwealth and authorizes the Department of Environmental Protection (Department) to charge and collect reasonable filing fees for applications filed and for permits issued. 35 P.S. §§ 691.4 – 691.6. These fees support the whole range of activities involved with water quality protection by the Department. Chapter 91 establishes regulations for the water quality management (WQM) program and Chapter 92a establishes regulations for the National Pollution Discharge Elimination System (NPDES) program. The U.S. Environmental Protection Agency (EPA) has approved Pennsylvania's NPDES program as consistent with the federal NPDES program established by the Clean Water Act (33 U.S.C. § 1342) and has authorized the Department to administer the federal program in Pennsylvania.

In both Chapters 91 and 92a, the proposed rulemaking also adds a provision that requires the Department to adjust fees according to changes to the United States Bureau of Labor Statistics Employment Cost Index for State and Local Government Compensation (ECI) every two years. The adjustment would be based on the cost difference, if any, of the ECI for the most recent two-year period. The Department would publish any adjustments based on the ECI in the *Pennsylvania Bulletin*. The Department would continue to evaluate the adequacy of the fees every three years and recommend any regulatory changes necessary to

fund the programs to the Environmental Quality Board (EQB). Further, fees will not be adjusted if application of the index would result in fees exceeding the Department's costs to administer the Clean Water Program.

The proposed Section 92a.26 removes permit reissuance fees for all permits that have annual fees. The current regulation requires annual fees to be due on the anniversary of the effective date of the permit. This date often changes each permit renewal cycle. The proposed amendment to Section 92a.62 would ease the administrative burden on the Department and on permittees by setting one due date for the life of each permit and would make the reissuance fee unnecessary.

The proposed Section 92a.32 codifies the process of submitting "No Exposure Certifications" for certain stormwater discharges and waivers from NPDES permit requirements for small MS4 operators.

Section 91.1 (definitions) would be amended to define new terms under Chapter 91, which would refer to existing definitions in Chapter 92a (section 92a.2). References to Chapter 92 and sections within Chapter 92 would be updated to corresponding sections in Chapter 92a, which replaced Chapter 92 in 2010, in Sections 91.1, 91.27, 91.36, and 91.52.

(8) State the statutory authority for the regulation. Include specific statutory citation.

Sections 5(b)(1) and 6 of The Clean Streams Law, 35 P. S. §§ 691.5(b)(1) and 691.6, and Section 1920-A of The Administrative Code of 1929 (71 P.S. § 510-20).

(9) Is the regulation mandated by any federal or state law or court order, or federal regulation? Are there any relevant state or federal court decisions? If yes, cite the specific law, case or regulation as well as any deadlines for action.

Under the Clean Streams Law, Department permits are required for any discharge of sewage or industrial waste or for any other activity that creates a danger of pollution of waters of the Commonwealth. 35 P.S. §§ 691.202, 691.307, and 691.402. The Clean Streams Law also requires a permit from the Department prior to the construction of infrastructure that is used to treat or convey sewage and industrial wastes. 35 P.S. §§ 691.206 and 691.308. The Department is also authorized to charge and collect reasonable filing fees for applications filed and for permits issued. 35 P.S. § 691.6. While charging fees for permits under Chapters 91 and 92a is not mandated by any federal or state law or court order or federal regulation, the Department must have the funding necessary to meet statutory and regulatory obligations and to carry out the NPDES permitting program to retain authority to administer the program under the Clean Water Act.

(10) State why the regulation is needed. Explain the compelling public interest that justifies the regulation. Describe who will benefit from the regulation. Quantify the benefits as completely as possible and approximate the number of people who will benefit.

The fee increases proposed in this rulemaking are necessary for the Department to administer the WQM program and NPDES program (collectively, "Clean Water Program") established in Chapters 91 and 92a to implement the Clean Streams Law, as well as the federal NPDES program mandated by the Clean Water Act. These programs are essential to the compelling public interest of preventing and eliminating pollution of the waters of the Commonwealth, promoting both public health and economic benefits.

The treatment of wastewater required by Department permits helps lower rates of acute and chronic illnesses in citizens by reducing the occurrence of pathogens, nutrients, and other contaminants in Pennsylvania's waterways. Citizens may come into contact with these pollutants through drinking improperly treated water, recreational activities, or consuming tainted food sources. High levels of some pathogens like E. coli can cause illness if accidentally consumed during recreational activities, by eating contaminated food, or from drinking improperly-treated water. Nutrient pollution can facilitate the occurrence of harmful algal blooms, which may produce toxic byproducts that harm recreational water users and render drinking water sources unusable during the duration of the bloom. Nutrient pollution is also known to impact downstream waters such as the Chesapeake Bay. Finally, other contaminants like heavy metals can accrue in fish tissue and cause sickness in people who consume the contaminated fish. This list of examples is not exhaustive of the types and causes of illnesses that can be associated with polluted waters. Preservation of public health is a standalone benefit of environmental regulation, but it also provides economic benefits. While it is difficult to assign a specific monetary value to the prevention of acute and long-term illnesses or disease by improving water quality, healthier citizens are able to work, are more productive, and live longer lives, all of which provide positive economic effects.

Pennsylvania receives other economic benefits from the proper administration of these programs through reduced costs to treat drinking water, increased property values, job creation, increased fishery resources and tourism, and enhanced aquatic habitat available to support the diverse species that depend upon clean water. Additionally, healthy watersheds help Pennsylvania avoid expensive restoration activities, reduce its vulnerability to natural disasters, and maintain natural ecosystems that provide water treatment at far lower costs than can be achieved through human-engineered services. For more information about the economic benefits of effectively managing water resources, please see the EPA document, "The Economic Benefits of Protecting Healthy Watersheds," available on EPA's website at https://www.epa.gov/sites/production/files/2015-10/documents/economic_benefits_factsheet3.pdf.

The proposed fees in this rulemaking will allow the Department to properly administer the Clean Water Program to protect the quality of water resources within the Commonwealth without any increases in the appropriation of general tax revenue to the Department. The Department acknowledges that new fees may impact some regulated entities negatively; instead of collecting a large up-front fee to support the Department's water pollution control efforts, the regulation is structured to fairly spread fees among permit applications and annual fees, as applicable, to ease the burden on the regulated community. Despite the proposed increases, the Department's fees would still be less than the fees for many comparable states.

The administration of the Clean Water Program involves many activities including permit application reviews, inspections, enforcement, surface water assessments and related activities such as the development of federally required Total Maximum Daily Loads (TMDLs). In order to implement the program, the Department must develop and maintain Pennsylvania's water quality standards. Water quality standards are established to protect human health, aquatic life, and ensure that our waters are safe for drinking water consumption and recreation. Water quality standards have two parts: designated uses and specific water quality criteria. Department-issued NPDES permits require discharges to meet those water quality standards and adhere to state and federal technology-based standards. Department-issued WQM permits assure that appropriate engineering standards are applied to prevent pollution to waters of the Commonwealth.

The Department is required by EPA to monitor and assess surface waters to determine if streams are meeting their designated uses. This is performed in a variety of ways including biological sampling,

chemical sampling, and evaluation of aquatic habitats. Monitoring and assessment is performed to assure that the Department has appropriate water quality standards in place and has issued effective permits. Monitoring and assessment of our state waters are the vital components for the Clean Water Program.

Chapter 91 – Proposed Modifications to Section 91.22

The Department needs to increase the fees in 25 Pa. Code § 91.22 because the Department's costs to process and issue WQM permits and perform follow-up compliance activities far exceed the current amount of fees generated. These fees have not been increased to reflect the increased costs to administer this program for many years. The Department receives, on average, between 500-600 WQM permit applications annually. The primary costs incurred by the Department to administer this program include the cost to review permit applications, the cost to monitor and inspect permitted facilities, and the cost to take actions to ensure compliance with the terms and conditions of the WQM permits.

The Department published 25 Pa. Code Chapter 91 on September 2, 1971, to implement provisions of the Clean Streams Law. Chapter 91 establishes, among other things, a WQM permitting program for the construction of water pollution control facilities and for land application of sewage and industrial wastes. Chapter 91 also requires a joint approval or permit with the PA Fish and Boat Commission for the use of algicides, herbicides, and fish control chemicals (pesticides) in waters of the Commonwealth (generally referred to as joint pesticide permits; see 25 Pa. Code § 91.38).

The Department's total cost to administer the WQM program for fiscal years from 2014 to 2018 are summarized in Table 1 below. The revenue sources and amounts used to cover the cost to administer the WQM program are also provided. As this table shows, the revenue generated by the current fees only pays for approximately 10% of the total program costs. The remainder of the costs are paid through the Department's annual appropriation from the General Fund. Revenue and expenses for FY2018 are estimated.

Table 1 – WQM Program Revenue and Expenses

Fiscal Year:	FY2014	FY2015	FY2016	FY2017	FY2018
Fee Revenue	$141,000	$139,000	$140,000	$125,000	$140,000
Expenses	$1,344,700	$1,371,500	$1,399,000	$1,427,000	$1,455,500
General Fund	$1,203,700	$1,232,500	$1,259,000	$1,302,000	$1,315,500

The application fees for sewer extension permits and other WQM permits were first established in 1971. The application fees in this section were amended in 1980 and 2000 to include a lower fee for single residence sewage treatment plant (SRSTP) application fees and to add General WQM permits. However, for 47 years the WQM permit application fees for most projects have not changed despite escalating program expenses. In that time, the change in the consumer price index (CPI) has been over 600%. Accounting for inflation alone, the typical WQM permit application fee of $500 in 1971 would now be over $3,500. Additionally, the existing regulations do not establish fees for the processing of joint pesticide permits and are being added in this proposed rulemaking.

Chapter 92a – Proposed Modifications to Sections 92a.26 and 92a.62

The Department published 25 Pa. Code Chapter 92 on August 4, 1978, to implement provisions of Pennsylvania's Clean Streams Law and to satisfy federal requirements for a state NPDES program

under the federal Clean Water Act (33 U.S.C. §§ 1251-1387). On October 8, 2010, the Department reserved Chapter 92 and replaced it with Chapter 92a. Chapter 92a included a revised fee schedule for permit applications (Section 92a.26) and introduced annual fees for individual NPDES permits (Section 92a.62). The fee increases in Chapter 92a represented the first increases in 32 years and were generally modest. The original fee schedule was intended to produce sufficient revenue to pay the required match for the grant the Department receives from EPA under Section 106 of the Clean Water Act and to reduce reliance on taxpayer dollars. Despite being increased in 2010, NPDES fees in Pennsylvania are still well below what is needed to support the program and protect the public health. Additionally, the fees are much lower than those of most neighboring and comparable states.

Table 2 below provides revenues and expenses for the NPDES program for fiscal years 2014 to 2018. Currently, fee revenue from the NPDES program only covers approximately $3.7 million of program expenditures on average, or 18% of the cost to administer the NPDES Program. Federal funding provides approximately 33% of program costs. Revenue from the General Fund makes up the difference between Total Revenue and Expenses in Table 2. Revenue and expenses for FY2018 are estimated.

Table 2 – NPDES Program Revenue and Expenses

Fiscal Year:	FY2014	FY2015	FY2016	FY2017	FY2018
Fee Revenue	$3,473,825	$3,341,925	$3,361,150	$4,145,200	$3,700,000
Federal Funds	$6,648,800	$6,648,800	$6,648,800	$6,648,800	$6,648,800
Total Revenue	$10,122,625	$9,990,725	$10,009,950	$10,794,000	$10,348,800
Expenses	$19,369,439	$19,623,852	$20,016,329	$20,416,656	$20,824,989
General Fund	$9,246,814	$9,633,127	$10,006,379	$9,622,656	$10,476,189

Purpose of Proposed Changes

The Department has determined that the fee increases are necessary to ensure that the Department is able to meet all its statutory and regulatory obligations concerning water quality protection. Based on the current fees and funding structure, the Department's ability to adequately comply with federal and state environmental requirements relating to the Clean Water Program is continually strained due to a lack of program solvency. Without adequate funding for all required aspects of these programs, public health may suffer, and environmental gains previously made may be lost due to a reduced capacity to conduct compliance and enforcement efforts. Additionally, the Department's ability to efficiently and timely process permit applications, meet its obligations under the Clean Streams Law, satisfy federal requirements, and promptly serve the public in areas including but not limited to municipal separate storm sewer systems (MS4s) and agriculture are all negatively impacted by current insufficient funding.

The Department has worked to evaluate and improve its business processes by becoming more efficient in its processing of permits and other functions; however, due to insufficient funding for these programs, the Department is often compelled to choose between competing priorities for utilization of its staff. The Department has been innovative by modifying job responsibilities of its staff when important programs or initiatives are pursued or required by EPA, but these changes are often at the expense of other core program activities. For example, EPA expects Pennsylvania to improve its performance meeting the objectives of the Chesapeake Bay TMDL. Existing staff have been asked to take on additional responsibilities, such as inspecting unpermitted farms in Pennsylvania, to meet EPA expectations and requirements. These new responsibilities are in addition to the work needed to support

the Clean Water Program. As a result, the Department has been forced to reduce the frequency of a core responsibility, the inspection of permitted farms (CAFOs), to once every five years to accommodate EPA's expectation that the Department inspect unpermitted farms. Prior to this change, the Department had been inspecting CAFOs at least annually. New staff are necessary to meet core obligations to the public, regulated community, and federal agencies.

EPA has conducted several performance audits on the Department's NPDES program since 2010 in which EPA has opined that the Department needs additional resources to carry out its responsibilities under the EPA-Department Memorandum of Agreement (MOA) (establishing the Department's primacy to administer the federal NPDES program in Pennsylvania) and 40 CFR Part 123. The most recent audit occurred in 2016 in which the Department's performance in the areas of municipal and construction stormwater permitting and compliance monitoring was evaluated. EPA found several shortcomings and proposed a workload analysis in an attempt to demonstrate that the Department needs more staff. EPA's report is presented as **Attachment A**.

EPA has promulgated new NPDES program rules over the past two decades without commensurate increases in the funds it provides to states to implement those rules. Pennsylvania has the most NPDES-regulated MS4 communities in the nation. After EPA's Phase II stormwater rule went into effect, the Department began issuing NPDES permit coverage to those MS4s but did not implement a compliance monitoring (inspection) program because the Department did not have the resources. The Department was warned by EPA in 2011 that it must begin inspecting MS4s. As a result, the Department is now inspecting MS4s while continuing to review applications and issue MS4 permits with fewer resources than the Department has ever had. In turn, this has resulted in forgoing other programmatic goals and obligations. It is important to note that the Department's MS4 inspection program still does not meet EPA's expectations.

The Department's total appropriations from the General Fund have been decreasing in recent years. During this same period, the Department's costs for staff salaries and benefits, as well as other operational costs, have been increasing. The result has been an overall decrease in staffing for the statewide Clean Water Program of approximately 25% since 2007. As discussed below, these staff reductions have led to a steady decline in the Department's ability to perform services necessary to ensure compliance with federal and state requirements. Continued failure or inability to provide these services may result in an increased risk to public health as well as the loss of primacy for administration of the federal NPDES program.

The Department has conducted a thorough workload analysis to evaluate its staffing needs for the Clean Water Program in the Department's Bureau of Clean Water (Central Office) and six regional offices, which is documented in **Attachment B**. The following explains the components of Attachment B:

- Attachment B-1: Workload Analysis for NPDES Permit Reviews. The NPDES permit application review process in the Department's regional offices was broken down into nine tasks. The amount of time necessary to complete each task by type of facility and type of application was estimated based on direct observation and experience. The number of applications expected each year was used to calculate the total time needed for administrative and technical staff. This analysis determined that 37 NPDES permit application review staff are needed.

- Attachment B-2: Workload Analysis for WQM Permit Reviews. The WQM permit application review process in the Department's regional offices was broken down into eight tasks. The amount of time necessary to complete each task by type of facility and type of application was estimated

based on direct observation and experience. The number of applications expected each year was used to calculate the total time needed for administrative and technical staff. This analysis determined that 12 WQM permit application review staff are needed.

- Attachment B-3: Workload Analysis for Monitoring and Compliance (Inspection) Activities. The annual number of hours that regional inspection staff spend on inspections was estimated based on the number of facilities with permits, the required inspection frequency for those facilities, and the average amount of time needed to conduct thorough inspections for each type of facility. Also considered were additional tasks such as the review of reports and the preparation of referrals for enforcement. This analysis determined that 55 inspection staff are needed.

- Attachment B-4: Workload Analysis for Enforcement-Related Activities. This analysis considered the rate of effluent violations, late permit renewal applications and expired permits, and other violations identified during inspections that would be expected in a typical year. A majority of these violations are currently going unresolved due to a lack of compliance and enforcement staff. The analysis determined that 13 compliance specialists are needed.

- Attachment B-5: Workload Analysis for Supporting Activities Related to Functions of Soils Scientists and Hydrogeologists. This analysis examined the supporting functions of soils scientists and hydrogeologists. These staff assist engineers in the review of applications related to groundwater remediation and land application of sewage and industrial wastes, and assist inspectors in compliance evaluations of these activities. The analysis determined that three soils scientists and two hydrogeologists are necessary to support the Clean Water Program.

- Attachment B-6: Workload Analysis for Surface Water Assessment Activities. This analysis examined all of the Department's required activities concerning surface water assessment and monitoring as well as assisting engineers and inspectors with permitting and compliance activities in the regional offices. This work is completed by regional water pollution control biologists. The Department's resources to conduct critical surface water assessment activities are significantly lower than in the past. During the period of 1997 to 2006, the Department assessed over 81,000 miles of surface waters throughout the Commonwealth. At that time, the Department had 26 biologists in its regional offices, and the biologists assessed an average of approximately 13,500 miles of surface waters per year. Currently the number of regional biologists is down to 14, and due to competing priorities, the Department is able to assess or reassess only 2,600 stream miles per year. EPA recommends that surface waters be reassessed every ten years. At its current pace, the Department will need thirty years. At current staffing levels the Department is concerned that acute and chronic pollution problems may go undetected for many years. The analysis determined that 26 biologists are needed to fulfill the Department's responsibilities.

- Attachment B-7: New Positions Required for Clean Water Program and Justification. As a result of the workload analyses presented in Attachments B-1 through B-6, the Department determined that 38 additional positions are necessary in the Department's regional offices to implement responsibilities under Chapters 91 and 92a. In addition, the Department requires new positions within the Bureau of Clean Water for administering the statewide Clean Water Program. With inadequate staffing, the Bureau of Clean Water is unable to update obsolete guidance documents from the 1990s or issue new guidance to benefit the regulated community. Inadequate staffing also hinders the Bureau's ability to renew statewide general permits in a timely manner – the majority of general NPDES permits are administratively extended, which causes problems for the regulated

community who are unable to obtain coverage during the extension period and must seek NPDES permit coverage under individual permits, with increased review timeframes. The Department believes that 25 additional staff are necessary in the Bureau of Clean Water to adequately support the statewide Clean Water Program.

The Water Resources Advisory Committee, consisting of some members whose employers would be subject to increased fees, supports the Department's efforts to increase compliment through fee increases. The increases would benefit the regulated community by producing faster decisions on permit applications, and benefit the public through improved programs for the protection of Pennsylvania's water resources.

The proposed rulemaking's amendment to allow the Department to increase permit fees according to changes in the ECI is needed to offer certainty to the regulated community as to how much to budget for future fee costs and to allow the Department to stay on top of funding issues.

(11) Are there any provisions that are more stringent than federal standards? If yes, identify the specific provisions and the compelling Pennsylvania interest that demands stronger regulations.

No. No federal standards have been established for WQM permit application fees, NPDES permit application fees or NPDES permit annual fees.

(12) How does this regulation compare with those of the other states? How will this affect Pennsylvania's ability to compete with other states?

Chapter 91

Most states have a permitting or licensing program for water pollution control facilities, although the terminology and approaches taken in establishing permit application fees varies drastically from state to state. The following is a review of neighboring and comparable states' water pollution control construction permit fees:

- Ohio charges a $100 permit application fee plus 0.65% of the estimated project cost, up to a maximum of $15,000, for construction projects. Most new sewage and industrial wastewater treatment facilities of moderate to large size would be required to pay the maximum $15,000 fee in Ohio. By comparison, this rulemaking proposes to establish a fee for a new major sewage treatment facility (i.e., a facility with a design flow of one million gallons per day (MGD) or more) at $10,000 and a fee for a new major industrial wastewater treatment facility at $15,000.

- Virginia charges new industrial wastewater treatment plants with discharges to surface waters or groundwater a fee of $15,000 and new municipal sewage treatment facilities up to $13,500.

- Florida charges new water pollution control facilities one fee for the permit application and a separate fee for review of design plans; for a major sewage treatment facility, the overall fee would be $10,000.

- New Jersey charges fees based on a formula, with a minimum fee plus an additional fee that is calculated; it is believed that major sewage and industrial wastewater treatment facilities are required to pay in excess of $10,000 for New Jersey construction permits.

In comparison, the Department's current fee for these types of water pollution control facilities is $500. The proposed fees for these types of facilities would be as follows:

- $15,000 for new major industrial wastewater treatment facilities with discharges to surface waters;
- $7,500 for new minor industrial wastewater treatment facilities with discharges to surface waters;
- $10,000 for new industrial wastewater treatment facilities with discharges to groundwater;
- $10,000 for new major sewage treatment facilities with discharges to surface waters;
- $5,000 for new minor sewage treatment facilities with discharges to surface waters; and
- $5,000 for new sewage treatment facilities with discharges to groundwater.

Chapter 92a

The Department has researched the NPDES fees for neighboring and comparable states and found that there are significant differences in how fee schedules are established. Some states have a base fee with a supplemental fee determined by the mass of pollutants discharged, and all have fee categories that are unique to the individual states. Table 2 below presents the Department's review of annual fees assessed for individual permits in neighboring and comparable states. Annual fees comprise the largest source of revenue for state NPDES programs. Pennsylvania's existing and proposed annual fees are shown in the far-right columns. Where a range of fees is shown, other factors are used by the state to determine the precise fee that must be paid.

Table 2: Comparison of Annual Fees for NPDES Permits in PA and Neighboring/Comparable States

Category	NJ[1]	VA	NY	IL	MI	PA – Existing	PA – Proposed
Minor Sewage Facility (< 0.05 MGD)	$4,200	$2,166	$330-$425	$500	$1,950	$250	$750
Minor Sewage Facility (≥ 0.05 MGD and < 1 MGD)	$4,200	$2,166-$2,707	$425-$2,000	$500-$7,500	$1,950	$500	$1,000
Minor Sewage Facility with CSO[2]	$9,450	$2,707	$2,000	$1,000-$5,000	$6,000	$750	$2,500
Major Sewage Facility (≥ 1 MGD and < 5 MGD)	$11,150	$6,949-$7,852	$8,000	$15,000	$5,500	$1,250	$3,750
Major Sewage Facility (≥ 5 MGD)	$11,150	$6,949-$8,573	$15,500-$38,500	$30,000-$50,000	$5,500-$20,000	$2,500	$5,000
Major Sewage Facility with CSO[2]	$11,150	$6,949-$8,573	$8,000-$38,500	$5,000-$20,000	$5,500-$20,000	$5,000	$7,500
Minor Industrial Waste Facility with ELG[3]	$4,200	$2,166-$3,682	$675-$33,500	$1,000-$10,000	$1,650-$3,650	$1,500	$3,750
Minor Industrial Waste Facility without ELG[3]	$4,200	$2,166-$3,682	$675-$33,500	$15,000-$20,000	$1,650-$3,650	$500	$2,500
Major Industrial Waste Facility (< 250 MGD)	$9,950	$8,663	$2,300-$56,000	$30,000-$50,000	$8,700	$5,000	$7,500

Major Industrial Waste Facility (≥ 250 MGD)	$9,950	$8,663	$56,000	$50,000	$8,700	$25,000	$50,000
Industrial Stormwater	$4,100	$2,599	$675-$6,700	$1,000-$20,000	$1,650-$3,650	$1,000	$2,000

Notes:

1 The base annual fee for New Jersey is shown; supplemental fees are added to this fee based on the amount of pollutants discharged.
2 CSO means Combined Sewer Overflow resulting from the commingling of sewage and stormwater.
3 ELG means Effluent Limitation Guideline, which is a federal technology-based treatment standard for industrial facilities.

There are also drastic differences among states in assessing fees on agricultural facilities. Many states, such as Nebraska, assess a fee based on the animal population on a farm. Some states have very low fees for agriculture. The Department-permitted CAFOs currently pay $1,500 for new individual permits, $750 for permit renewals and $0 for annual fees. The proposed rulemaking would double the fees for new and renewed permits, and would institute an annual fee of $1,500. A list of states with CAFO annual fees with workloads similar to the Department's is as follows:

- New Jersey - $2,300;
- Maryland - $1,200;
- Alabama - $725 - $2,725;
- California - $0 - $13,250; and
- Minnesota - $1,230.

In addition, the Department researched CAFO fees in Michigan, New York, and Wisconsin.

In Michigan, the application fee for individual NPDES permits for CAFOs is $400 and the annual fee is $600.

In New York, there are no application fees for CAFOs. However, New York follows a much different process. All CAFOs are covered under a general permit registration. The annual fee is $50/year. However, New York does not issue permits and verify compliance like most other states. They rely on certified third parties to regulate CAFOs.

Wisconsin does not charge application fees for CAFOs. There is, however, an annual fee of $345.

The Department often expends significant resources on permit application reviews, public meetings and hearings, and compliance monitoring due to the high level of public interest these permits typically generate. The Department believes the fee increase for CAFOs is reasonable and justified. Pennsylvania currently has 444 CAFOs with valid NPDES permits, 346 of which are under a general permit (PAG-12) and 98 have individual NPDES permits (primarily because they exist in watersheds classified for special protection).

A major sewage facility with a design flow of one MGD in Pennsylvania currently pays, over the course of a 5-year NPDES permit term, fees in the amount of $6,250. This would increase under the rulemaking to $18,750. If the same facility were located in comparable states, the facility would pay $27,500 to $75,000.

The Department believes that the proposed fee increases in Chapters 91 and 92a are reasonable in comparison to other states.

(13) Will the regulation affect any other regulations of the promulgating agency or other state agencies? If yes, explain and provide specific citations.

No, this proposed rulemaking would not affect any other regulations in Pennsylvania.

(14) Describe the communications with and solicitation of input from the public, any advisory council/group, small businesses and groups representing small businesses in the development and drafting of the regulation. List the specific persons and/or groups who were involved. ("Small business" is defined in Section 3 of the Regulatory Review Act, Act 76 of 2012.)

On April 28, 2016, and October 26, 2017, the proposed rulemaking was presented to the Department's Agriculture Advisory Board (AAB) because of the impact to CAFOs, which require NPDES permits, and because Chapter 91 requires a WQM permit for manure storage facilities when certain thresholds are met.

On September 21, 2016, and October 25, 2017, the proposed rulemaking was presented to the Department's Water Resources Advisory Committee (WRAC). WRAC voted in support of the proposed fee increases. Following the meeting, WRAC submitted a letter of support for the fee increases but also encouraged the Department to consider other sources of revenue that would enable the Department to develop comprehensive water pollution control programs for controlling not only point sources of pollution but also non-point sources.

(15) Identify the types and number of persons, businesses, small businesses (as defined in Section 3 of the Regulatory Review Act, Act 76 of 2012) and organizations which will be affected by the regulation. How are they affected?

The types of persons, businesses and organizations needing NPDES and/or WQM permits is highly diverse, including but not limited to homeowners, mobile home parks, churches, campgrounds, apartment complexes, gas stations, municipalities, developers, manufacturers, power companies, airports, state agencies and commissions, federal facilities, school districts, etc.

<u>Chapter 91</u>

The Department receives between 500-600 WQM permit applications annually for projects such as new sewage treatment facilities, new industrial wastewater treatment facilities, new pump stations and sewer line extensions, new manure storage facilities, along with requests to amend or transfer permits associated with those facilities. The majority of WQM permit applicants are municipalities, but it is estimated that up to 25% are potentially small businesses. The applicants of these facilities would pay more for WQM permits under this proposal, but the speed at which the Department will process the permits should increase due to the increase in program staff.

<u>Chapter 92a</u>

Approximately 4,000 facilities with individual NPDES permits are affected by the existing Chapter 92a permit application and annual fee requirements. These facilities fall into the categories of sewage, industrial waste, industrial stormwater, municipal stormwater and CAFOs. Chapter 92a also applies to

another 5,700 facilities that have general NPDES permit coverage in that 92a currently includes a fee ceiling of $2,500 for general permit Notices of Intent (NOIs). Under the proposed Chapter 92a rulemaking, this ceiling would be replaced by a requirement that NOI fees do not exceed equivalent individual permit application fees.

The Chapter 92a fee increase proposal would affect all these facilities.

The persons or businesses needing NPDES and WQM permits are highly diverse, ranging from homeowners to municipalities to Fortune 500 companies. For example, there are over 2,000 homeowners with NPDES and WQM permits in Pennsylvania for the construction, operation and discharge of treated sewage from SRSTPs. The majority of these homeowners qualify for general NPDES and WQM permits with a total fee of $25 for both permits. Municipalities are frequently the operators of publicly owned treatment works (POTWs) requiring both NPDES and WQM permits. Fees for POTWs would increase as a result of this proposed rulemaking. Municipalities are also typically the operators of municipal separate storm sewer systems (MS4s), which require NPDES permit coverage. Operations such as automobile salvage yards are required to obtain NPDES permits for stormwater discharges associated with industrial activity under federal regulations and may be considered small businesses. Other small businesses that may be affected by the proposed rulemaking include owners or operators of mobile home parks, churches, campgrounds and apartment complexes with sewage treatment facilities and other commercial or industrial establishments such as gas stations and light manufacturers with stormwater or process-related discharges to surface waters or groundwater. It is estimated that approximately 2,500 small businesses with NPDES permits may be affected by this rulemaking.

(16) List the persons, groups or entities, including small businesses, which will be required to comply with the regulation. Approximate the number that will be required to comply.

Up to 10,300 NPDES-permitted facilities and persons seeking WQM permits will be required to comply with this rulemaking. As discussed in question 15 above, the types of persons, businesses and organizations needing NPDES and/or WQM permits is highly diverse.

<u>Chapter 91</u>

The Department receives between 500-600 WQM permit applications annually for projects such as new sewage treatment facilities, new industrial wastewater treatment facilities, new pump stations and sewer line extensions, new manure storage facilities, along with requests to amend or transfer permits associated with those facilities. All applicants will be required to comply with this proposed rule.

<u>Chapter 92a</u>

Currently, approximately 4,000 facilities with individual NPDES permits are required to comply with Chapter 92a permit application and annual fee requirements and thus will be required to comply with this proposed rulemaking. These facilities fall into the categories of sewage, industrial waste, industrial stormwater, municipal stormwater, and CAFOs. Chapter 92a also impacts another 5,700 facilities with general NPDES permit coverage in that a ceiling of $2,500 is established in Chapter 92a for general permit Notices of Intent (NOIs). Under the proposed Chapter 92a rulemaking this ceiling would be replaced by a requirement that NOI fees do not exceed equivalent individual permit application fees.

(17) Identify the financial, economic and social impact of the regulation on individuals, small businesses, businesses and labor communities and other public and private organizations. Evaluate the benefits expected as a result of the regulation.

The impact of the proposed Chapters 91 and 92a rulemaking is financial. Persons, including small businesses, that construct facilities for controlling water pollution or engage in activities that result in the discharge of pollutants to waters of the Commonwealth would, under the proposed rulemaking, need to pay a higher fee than what is currently required in many cases. Collectively, the owners or operators of at least 5,000 facilities statewide (4,500 individual NPDES applicants and permittees and at least 500 WQM applicants) would pay the Department approximately $6 million per year more than what those facilities are paying today. The Department is also seeking the removal of an existing cap on general NPDES permit NOI fees, replacing it with a requirement that NOI fees may not exceed the equivalent in individual permit fees, which could result in the collection of an additional $2 million per year from 5,700 facilities with general NPDES permit coverage in Pennsylvania. The overall financial impact of the Chapters 91 and 92a rulemaking therefore could be up to $8 million per year.

While many NPDES applicants would need to pay higher fees under this proposed rulemaking, the Department has already instituted some changes that have significantly reduced costs for NPDES permittees. For example, the Department has modified many of its general permits to reduce self-monitoring requirements, saving analytical laboratory fees for many general permit holders. The Department has also eliminated requirements to renew general permit coverage, which saves on consulting costs, and other requirements relating to the development of emergency response plans by professional engineers. The Department has posted many of its permitting tools to its website in simplified formats, allowing more owners and operators to prepare permit applications and NOIs, saving on consulting costs. In addition, the Department has changed some of its traditional processes regarding permit amendments, allowing permittees to make certain changes at facilities without the need to submit permit amendment applications and associated fees.

This proposed rulemaking would provide the Department the resources it needs to properly administer the Clean Water Program to protect the quality of water resources within the Commonwealth and to better serve the public and regulated community without any increases in the appropriation of general tax revenue. Specific benefits associated with this proposed rulemaking include:

- Increased staff and resources to provide more timely permit application reviews, which would be beneficial to owners and operators of new facilities desiring permits as expeditiously as possible.

- Increased staff and resources to allow more thorough reviews of impacts to public health and the environment and a greater presence in the field. The public benefits from these service by providing a greater level of protection for waters of the Commonwealth. The regulated community benefits from this through enhanced compliance assistance before enforcement is considered. The Department prefers to work with the regulated community to promote compliance. Compliance assistance has, in some cases, reduced expenses for permittees while providing adequate protection to human health and the environment.

- Increased staff to provide the resources necessary to evaluate existing programs, policies, guidance and regulation, evaluate what is and what is not working for the Department, the public and regulated community, and make necessary changes more expeditiously. The Department is aware of some areas of the program that could be improved or enhanced in order to, for example, make the permit

process less onerous and save applicants money, but an increase of positions in the Department's Bureau of Clean Water is necessary to complete this work.

- Increased revenue from fees to assist the Department in funding electronic solutions to improve business efficiency.

The Department believes that these benefits would result in cost savings to the regulated community although such savings are difficult to quantify.

(18) Explain how the benefits of the regulation outweigh any cost and adverse effects.

The Department believes that the public health, economic, and program efficiency benefits discussed in Questions 10 and 17 above outweigh the increased financial cost to the regulated community. The fee increase ensures the Department can meet its mission and legal obligations without placing more financial strain on tax payers. Stabilizing program funding through fee collection and removing the burden from tax payers is a reasonable approach to this complex problem.

(19) Provide a specific estimate of the costs and/or savings to the **regulated community** associated with compliance, including any legal, accounting or consulting procedures which may be required. Explain how the dollar estimates were derived.

The regulated community (i.e., those persons requiring an NPDES and/or WQM permit) would be impacted by collectively paying up to an additional $8 million per year to the Department. No additional costs to the regulated community with respect to legal, accounting or consulting fees are anticipated.

Chapter 91 – WQM Permits

Approximately $1 million in additional revenue would be generated from the receipt of WQM permit applications, and an average of 500-600 applications are received annually. The balance of program expenses would continue to be paid for through the Department's general fund allocation. The increase in WQM fees is designed to cover the majority of the Department's costs in reviewing applications (including reports, specifications and design plans) and, where necessary, inspecting construction. Construction costs for water pollution control facilities are variable and depend on a number of factors.

The Department reviewed the typical costs for construction projects subject to WQM permits and analyzed how this proposed fee increase would affect those costs. As an example, the Department estimates that the average cost of a new minor sewage treatment facility is approximately $3 million. A professional engineer must design or oversee and approve the design of all construction projects under existing Chapter 91 regulations. The Department estimates that the design and engineering costs associated with a $3 million sewage treatment project is approximately $200,000. The proposed WQM permit application fee would increase from $500 to $5,000, but the increase would represent only 0.15% of overall project costs and 2.5% of engineering costs. Similar considerations were made for other types of projects.

Chapter 92a – NPDES Permits

Approximately $5 million in additional revenue would be generated from the receipt of NPDES permit applications and assessment of annual fees on approximately 4,000 facilities with individual NPDES

permits. If the ceiling of $2,500 on NPDES general permit NOIs is removed from Chapter 92a as proposed, the Department may be able to collect up to $2 million in additional revenue. The Department will decide whether to increase fees for general permit NOIs as these 5-year general permits come up for reissuance. These decisions will consider the characteristics of the regulated community, including the prevalence of small businesses.

The Department evaluated the actual operating budgets of several large (> 1 MGD) sewage treatment facilities in Pennsylvania. The average cost to treat a gallon of wastewater is approximately $0.68/gallon (this value increases when flow is less, and decreases when flow is more), meaning that the average treatment cost to plants is $3.4 million. A 5 MGD sewage treatment plant currently pays $12,500 over a 5-year permit term and would pay $25,000 under the proposed rulemaking. The increase of $12,500 over 5 years represents an increase of only 0.07% of the estimated operating expenses ($3.4 million) for the 5 MGD facility, using the average cost to treat wastewater identified above.

For smaller sewage treatment facilities, the average cost per gallon for sewage treatment and operation is greater. According to EPA, the average cost to treat sewage for a 0.015 MGD (15,000 gallons per day) facility is $10/gallon and the average cost to treat sewage for a 0.04 MGD (40,000 gallons per day) facility is $7/gallon. This is the typical size of a facility at a mobile home park. A mobile home park owner with a 0.015 MGD sewage treatment facility currently pays $1,250 over a 5-year permit term and would pay $3,750 over 5 years under the proposed rulemaking, representing an increase of only 0.3% of estimated operating expenses. Assuming the owner wishes to pass these costs onto the users of the facility and there are 75 mobile homes, the estimated rate increase would be $0.55/month.

(20) Provide a specific estimate of the costs and/or savings to **local governments** associated with compliance, including any legal, accounting or consulting procedures which may be required. Explain how the dollar estimates were derived.

Local governments that build new sewage treatment facilities, pump stations, and sewers would pay more for WQM permits. Local governments that operate sewage treatment facilities would pay more for NPDES permits. Local governments that have urbanized areas with separate storm sewer systems would not pay more for NPDES permits. Of the $6 million in anticipated increased revenue from WQM and NPDES fees (not including possible general NPDES permit NOI fee increases), approximately $1.7 million would come from municipalities, based on an analysis of the number of sewage treatment facilities within each of the NPDES fee categories, the number of MS4s, and the expected number of municipal sewage projects annually. No further costs with respect to legal, accounting or consulting fees are anticipated.

(21) Provide a specific estimate of the costs and/or savings to **state government** associated with the implementation of the regulation, including any legal, accounting, or consulting procedures which may be required. Explain how the dollar estimates were derived.

WQM permit application fees are currently waived for state agencies, but under the proposed rulemaking, state agencies that do not contribute funding to the WQM program would be required to pay fees for new water pollution control construction projects. The Department estimates that the fee increase would be less than $10,000 annually (total). The existing Chapter 92a regulations provide a fee exemption for any state or federal agency that provides funding to the Department for the implementation of the NPDES program, which would not be affected by this rulemaking. There are a few state agencies that do not provide funding to the Department that would be affected, including but

not limited to the Department of Corrections and the PA Historical and Museum Commission. The estimated increase for these agencies is $10,000 per year.

(22) For each of the groups and entities identified in items (19)-(21) above, submit a statement of legal, accounting or consulting procedures and additional reporting, recordkeeping or other paperwork, including copies of forms or reports, which will be required for implementation of the regulation and an explanation of measures which have been taken to minimize these requirements.

The proposed amendments to Chapters 91 and 92a clarify existing processes but do not add to or change the existing reporting, recordkeeping or other paperwork requirements for the regulated community, local governments, or state government.

(22a) Are forms required for implementation of the regulation?

No new forms are required for the implementation of this regulation.

(22b) If forms are required for implementation of the regulation, attach copies of the forms here. If your agency uses electronic forms, provide links to each form or a detailed description of the information required to be reported. Failure to attach forms, provide links, or provide a detailed description of the information to be reported will constitute a faulty delivery of the regulation.

While no new forms are required for the implementation of this regulation, attached to this document are edited existing forms to reflect the increased fees.

(23) In the table below, provide an estimate of the fiscal savings and costs associated with implementation and compliance for the regulated community, local government, and state government for the current year and five subsequent years.

	Current FY Year 18/19	**FY+1 Year 19/20**	**FY+2 Year 20/21**	**FY+3 Year 20/22**	**FY+4 Year 22/23**	**FY+5 Year 23/24**
SAVINGS:	**$**	**$**	**$**	**$**	**$**	**$**
Regulated Community	0.00	0.00	0.00	0.00	0.00	0.00
Local Government	0.00	0.00	0.00	0.00	0.00	0.00
State Government	0.00	0.00	0.00	0.00	0.00	0.00
Total Savings	0.00	0.00	0.00	0.00	0.00	0.00
COSTS:	**$**	**$**	**$**	**$**	**$**	**$**
Regulated Community	0.00	3,217,500	4,290,000	4,290,000	6,290,000	6,290,000
Local Government	0.00	1,275,000	1,700,000	1,700,000	1,700,000	1,700,000
State Government	0.00	7,500	10,000	10,000	10,000	10,000
Total Costs	0.00	4,500,000	6,000,000	6,000,000	8,000,000	8,000,000

REVENUE LOSSES:	$	$	$	$	$	$
Regulated Community	0.00	0.00	0.00	0.00	0.00	0.00
Local Government	0.00	0.00	0.00	0.00	0.00	0.00
State Government	0.00	0.00	0.00	0.00	0.00	0.00
Total Revenue Losses	0.00	0.00	0.00	0.00	0.00	0.00

Note – the Department assumes that the final rulemaking would be published in the fourth quarter of FY 2019-2020. The costs to the regulated community, local government and state government would total $6 million/year during the first full two years of implementation and is assumed to increase by $2 million/year starting in FY 2022-2023 when the Department reissues certain NPDES general permits (although these decisions will be made when the general permits come up for reissuance). The table assumes the regulated community is comprised of all WQM and NPDES applicants that are not associated with local and state government. The Department did not attempt to quantify savings that the Department believes would occur with additional staff in the program because of the difficult nature of that quantification.

(23a) Provide the past three-year expenditure history for programs affected by the regulation.

Program	FY -3 (2015/2016)	FY -2 (2016/2017)	FY -1 (2017/2018)	Current FY (2018/2019)
WQM (Chapter 91)	$1,371,500	$1,259,000	$1,427,000	$1,455,500
NPDES (Chapter 92a)	$19,623,852	$20,016,329	$20,416,656	$20,824,989

(24) For any regulation that may have an adverse impact on small businesses (as defined in Section 3 of the Regulatory Review Act, Act 76 of 2012), provide an economic impact statement that includes the following:

(a) An identification and estimate of the number of small businesses subject to the regulation.

The Department does not store information concerning whether or not a WQM or NPDES permit applicant is considered a small business. Of the 4,000 active facilities in PA discharging sewage, industrial waste, and stormwater under individual NPDES permits, approximately half are owned or operated by private commercial or industrial interests. Conservatively, half of these facilities may be small businesses.

(b) The projected reporting, recordkeeping and other administrative costs required for compliance with the proposed regulation, including the type of professional skills necessary for preparation of the report or record.

There are no anticipated reporting, recordkeeping or other administrative costs associated with the proposed Chapters 91 and 92a rulemakings.

(c) A statement of probable effect on impacted small businesses.

It is not anticipated that this rulemaking would adversely impact small businesses. The fee increases are not considered significant when compared to normal operating expenses, as the examples in the response to No. 19 illustrate, and are not considered unreasonable when compared to neighboring and comparable states.

(d) A description of any less intrusive or less costly alternative methods of achieving the purpose of the proposed regulation.

No less costly alternative exists for this regulation.

(25) List any special provisions which have been developed to meet the particular needs of affected groups or persons including, but not limited to, minorities, the elderly, small businesses, and farmers.

No provisions meeting these criteria have been developed for this proposed rulemaking.

(26) Include a description of any alternative regulatory provisions which have been considered and rejected and a statement that the least burdensome acceptable alternative has been selected.

The Department considered other options for assessing fees. For example, New Jersey's model of a base fee plus an additional fee that is calculated based on estimates of pollutant loads discharged was considered, but was ultimately rejected due to the significant resources needed to operate this type of fee program. The Department's current fee schedule that considers only the type and size of projects and activities is preferred.

(27) In conducting a regulatory flexibility analysis, explain whether regulatory methods were considered that will minimize any adverse impact on small businesses (as defined in Section 3 of the Regulatory Review Act, Act 76 of 2012), including:

(a) The establishment of less stringent compliance or reporting requirements for small businesses.

The proposed regulatory amendments do not address compliance or reporting requirements.

(b) The establishment of less stringent schedules or deadlines for compliance or reporting requirements for small businesses.

Members of the regulated community most likely to be considered small businesses would have lower fees because the types of applications small businesses submit to the Department are generally less complex than the applications submitted by larger businesses, and the Department has proposed the fee increases commensurate with the level of effort necessary to process such applications and inspect these permitted facilities.

(c) The consolidation or simplification of compliance or reporting requirements for small businesses.

This proposal does not change the fee categories used by Chapter 92a, although one category has been added. Under Chapter 91, the Department proposes to develop fee categories by project and facility type, which would provide clarification for small businesses.

(d) The establishment of performing standards for small businesses to replace design or operational standards required in the regulation.

This is not applicable to this proposed rulemaking.

(e) The exemption of small businesses from all or any part of the requirements contained in the regulation.

Although there are no exemptions for small businesses proposed in this rulemaking, small businesses will typically have the lowest fees on the fee schedule, depending on the amount of time needed to review and process permits.

(28) If data is the basis for this regulation, please provide a description of the data, explain in detail how the data was obtained, and how it meets the acceptability standard for empirical, replicable and testable data that is supported by documentation, statistics, reports, studies or research. Please submit data or supporting materials with the regulatory package. If the material exceeds 50 pages, please provide it in a searchable electronic format or provide a list of citations and internet links that, where possible, can be accessed in a searchable format in lieu of the actual material. If other data was considered but not used, please explain why that data was determined not to be acceptable.

The proposed rulemakings are based on the need for the Department to adequately serve the public and regulated community through timely permit application reviews, adequate compliance monitoring and assistance, and updated regulations, policy and guidance, which requires increased compliment. Despite numerous efficiency measures, the Department is not capable at existing staffing levels of maintaining its core responsibilities while pursuing other initiatives and federal mandates. No scientific data were used to develop the proposed rulemakings. In its workload analysis to determine the number of positions needed in the statewide Clean Water Program (Attachment B), the Department used its standard operating procedures (SOPs) and operational experience in determining the tasks necessary to implement each component of program activities and the average amount of time necessary to complete each task. The developer of the Department's Clean Water SOPs (who has direct experience implementing the tasks) analyzed the average time to complete each task, which was reviewed and agreed to by the Department's Clean Water Program Managers.

(29) Include a schedule for review of the regulation including:

A. The date by which the agency must receive public comments:	45 days after publication
B. The date or dates on which public meetings or hearings will be held:	TBD
C. The expected date of delivery of the proposed regulation as a final-form regulation:	Quarter 3, 2019
D. The expected effective date of the final-form regulation:	Upon Publication
E. The date by which compliance with the final-form regulation will be required:	Publication
F. The date by which required permits, licenses or other approvals must be obtained:	N/A

(30) Describe the plan developed for evaluating the continuing effectiveness of the regulations after its implementation.

The Department is proposing to allow for the periodic adjustment of fees based on changes to the ECI. If adjustments are made, they would not require the approval of the Environmental Quality Board. If fee increases are deemed necessary by the Department that are above the change in ECI, a proposed rulemaking would need to be developed and approved by EQB. The Department would continue to develop a report every three years summarizing its fee program for the EQB. Further, fees will not be adjusted if application of the index would result in fees exceeding the Department's costs to administer the Clean Water Program.

ATTACHMENT A

FINAL SUMMARY REPORT – PENNSYLVANIA STORMWATER PROGRAM REVIEW UPDATE

Final Summary Report

Pennsylvania Stormwater Program Review Update

U.S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

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June 2, 2017

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Appendices

1. Introduction

On June 22–23, 2016, the U.S. Environmental Protection Agency (EPA) Region III and EPA's contractor, PG Environmental, (collectively the EPA Review Team) conducted a stormwater program review of the Commonwealth of Pennsylvania (hereinafter referred to as the "2016 review"). The 2016 review's purpose is to update information obtained in a previous review, which was conducted in 2011 (hereinafter referred to as the "2011 review"). The 2016 review focused on the state's municipal separate storm sewer system (MS4) and construction stormwater programs. This report describes the observations made related to the implementation of each program, and changes made to each since 2011.

1.1 Purpose of Effort

EPA conducts periodic reviews of state programs as part of its oversight responsibilities under the Clean Water Act (CWA). EPA also discusses program goals and objectives with authorized states as part of annual CWA section 106 grant negotiations.[1] In 2011, EPA Region III began integrating stormwater into the annual review process. Between 2011 and 2013, EPA conducted thorough stormwater program reviews in the five states located within EPA Region III's territory (Virginia, Pennsylvania, Maryland, Delaware, and West Virginia), reviewing Pennsylvania's program in July 2011. As a continuation of that effort, EPA has begun a process to follow up on the initial review observations and to update EPA's knowledge of the state program implementation status. This report describes the observations associated with Pennsylvania's MS4 and construction stormwater programs, which are implemented by the Pennsylvania Department of Environmental Protection (DEP). Where applicable, this report presents comparisons between information reported in the 2011 review report and observations made during the 2016 review.

1.2 Background

DEP has been authorized to administer the CWA's National Pollutant Discharge Elimination System (NPDES) program (33 U.S.C. § 1251 et seq.) since June 30, 1978, and a general permitting program since August 2, 1991. DEP's stormwater programs are governed by the CWA, the Pennsylvania Clean Streams Law (P.L. 1987, June 22, 1937), Pennsylvania's Stormwater Management Act (P.L. 867, October 4, 1978), section 1917-A of the Administrative Code of 1929, Act of April 9, 1929 (P.L. 177, as amended, 71 P.S. § 510-17), and implementing regulations (25 PA Code chapters 92, 93, and 102).

1.3 Basic Structure of Pennsylvania's Stormwater Programs

DEP consists of a central office (CO) plus six regional offices (ROs)—Northwest, Northcentral, Northeast, Southwest, Southcentral, and Southeast. The CO and ROs each play a key role in implementing DEP's stormwater programs. In the CO, the Bureau of Clean Water has oversight, policy, and guidance development responsibilities for the MS4 program. The Bureau of Waterways, Engineering, and Wetlands had similar responsibility for the construction stormwater program (i.e., erosion and sediment control) at the time of the 2016 review. However, due to recent DEP reorganization, the responsibility for the construction stormwater program has been transferred to the Bureau of Clean Water. The ROs are organized in a similar fashion.

[1] EPA awards section 106 grants to CWA-authorized states on an annual basis (subject to congressional appropriations).

2. Program Review Approach

Prior to the 2016 review, the EPA Review Team sent a questionnaire (hereinafter the Review Questionnaire) to DEP's construction and MS4 CO contacts requesting background information on the programs. The "Municipal Stormwater Program" and "General Program Information" portions of the questionnaire were completed and delivered to the EPA Review Team on July 27, 2016, and the "Construction Stormwater Program" portion of the questionnaire was completed and delivered on July 29, 2016. A copy of the Review Questionnaire is provided as Appendix A to this report.

The following members comprised the EPA Review Team:

- EPA Region III: Andy Dinsmore, Chris Menen, Elizabeth Ottinger, and Aryel Abramovitz.
- EPA Contractor: Jake Albright (PG Environmental).

The EPA Review Team met with DEP CO stormwater program staff in Harrisburg on June 22, 2016. The attendance sign-in sheet is included in Appendix B to this report. The following DEP CO staff participated in the 2016 review:

- Ken Murin, Division Chief – Bureau of Waterways, Engineering, and Wetlands.
- Aneca Atkinson, Acting NPDES Construction Chief – Bureau of Waterways, Engineering, and Wetlands.
- Sean Furjanic, Program Manager – Bureau of Clean Water.

The EPA Review Team met with DEP Northeast Regional Office (NERO) stormwater program staff in Wilkes-Barre on June 23, 2016. The attendance sign-in sheet is included in Appendix B to this report. The following NERO staff participated in the 2016 review:

- Bharat Patel, Program Manager – Bureau of Clean Water.
- Paul Grella, Environmental Engineer – Bureau of Clean Water.
- Amy Bellanca, Permit Chief – Bureau of Clean Water.
- Joseph Buczynski, Program Manager – Bureau of Waterways, Engineering, and Wetlands.
- Carl Deluca, Section Chief – Bureau of Waterways, Engineering, and Wetlands.

The 2016 review consisted of office-based discussions and demonstrations at the CO and NERO, a document review, and information obtained during permit reviews and compliance investigations; the EPA Review Team did not conduct any field-based assessments. A log of all documents received from DEP as part of this activity is included in Appendix C.

3. MS4 Program

As part of the 2016 review, the EPA Review Team held discussions with DEP staff and reviewed data related to implementation of the MS4 program.

3.1 Staffing

The Bureau of Clean Water has primary responsibility for implementing the MS4 program. At the time of the 2016 review, the CO employed approximately 2–3 full time equivalents (FTEs),

made up of about 6 employees with varying degrees of involvement, dedicated to the MS4 program. CO staff stated they were hopeful they could eventually have staff dedicated specifically to the MS4 program. Each of the six ROs maintained varying levels of staff, who may also have other responsibilities, for MS4 program implementation. According to response A.9.c of the Review Questionnaire, "There are no staff in any regional office whose duties are solely limited to MS4 activities. Some regional offices have a point of contact for MS4s, although this contact also does other work. Some regional offices use all permits staff for processing MS4 NPDES permits and all operations staff for inspecting MS4s. If an estimate must be made based on time allotted to these activities, the average FTEs per region would be 1–2."

Observation 1. The 2011 review report states staffing was insufficient in the CO and ROs to fully implement the MS4 program. At that time, the review team determined there was not enough personnel to conduct MS4 oversight activities at the CO and RO levels. The 2011 review report cites staff turnover and budget cuts as the primary reasons for the shortfall.

2016 Update: CO staff stated that at the time of the 2016 review, there were few vacancies statewide for positions related to the MS4 program. However, the CO Bureau of Clean Water Program Manager stated approximately 30 additional staff are needed statewide to fully and effectively implement the MS4 program. He stated that in addition to that 30, about 10 additional staff are needed just to address Chesapeake Bay action items. The CO Bureau of Clean Water Program Manager stated that each RO was responsible to develop a staffing plan to deal with the MS4 workload for their region. As a result, there is a great deal of variety in the regions. Some ROs do not even have personnel dedicated to MS4 compliance (e.g., NERO), which puts strain on permits staff to pick up that additional workload. CO staff indicated that under current conditions in the Pennsylvania government, it would be nearly impossible to obtain the desired level of staffing in the near future.

NERO staff echoed the concerns of the CO staff, explaining that the lack of dedicated MS4 compliance staff within the Bureau of Clean Water has been a major hindrance to effective MS4 program implementation. The environmental engineer who typically conducts field-based compliance work in the Northeast Region also has responsibilities for MS4 permitting, as well as in the concentrated animal feeding operation (CAFO) program. According to data provided by DEP, there are 146 permittees in the Northeast Region, including one of only two Phase I permittees (Allentown).

Recommendation: DEP and EPA should perform a work load analysis of both the CO and ROs to identify appropriate staffing and resource levels required to adequately implement the authorized program.

DEP Response 5/18/17 – DEP will participate in an EPA-led work load analysis.

EPA Response 05/23/17 – EPA will coordinate with DEP to perform the work load analysis for administration of the NPDES Program.

Observation 2. DEP was unable to provide a budget estimate for implementing the stormwater program. According to response A.6.b of the Review Questionnaire, "DEP does not have an operating budget for the NPDES MS4 program. It has an overall operating

budget for the water pollution control program – this includes the overall administration of the delegated NPDES program (of which EPA contributes about $6.5 million per year in the form of a CWA Section 106 grant), the state Water Quality Management program (addressing construction of treatment works, storage facilities and land application of wastewater), and monitoring of Pennsylvania's streams. DEP's expenses for the water pollution control program are approximately $20 million annually."

Recommendation: See recommendation under Observation #1.

3.2 Facility Universe

At the time of the 2016 review, Pennsylvania had 2 Phase I permittees, 638 Phase II general permittees, and 169 individual Phase II permittees. (See Table 1 for a distribution of Phase I and Phase II permittees by region; data was provided by the CO.) The Phase I permittees consist of 2 major cities (Philadelphia and Allentown). The Phase II permittees are mostly cities, boroughs, towns, townships, villages, or counties, but also include 25 non-traditional permittees, such as military facilities, universities, colleges, highway systems, airports, and state/federally owned campuses (e.g., prisons and hospitals).

Table 1. Distribution of MS4 Permittees by Region

Region	Phase I Permits Individual	Phase II Permits General	Phase II Permits Individual	Total No. of Permits Waived	Total Permits Issued
Northwest	0	22	5	*12*	27
Northcentral	0	2	8	*3*	10
Northeast	1	92	53	*19*	146
Southwest	0	196	28	*68*	224
Southcentral	0	162	23	*37*	185
Southeast	1	164	52	*6*	217
Statewide Total	**2**	**638**	**169**	***145***	**809**

At the time of 2011 review, the CO had reported approximately 741 permittees statewide. At the time of the 2016 review, the CO reported the number of permittees in the state had grown by 68 since the 2011 review, to a total of 809. DEP staff expected that, as a result of the 2010 census, approximately 120 new MS4s will need to apply for permit coverage or a waiver for the first time in 2017. According to response C.9 of the Review Questionnaire, "These MS4s received notification letters on August 26, 2015 and again on July 6, 2016, specifying that they must apply by September 16, 2017 (180 days prior to the effective date of the reissued PAG-13 General Permit)."

Observation 3. The 2011 review report states that, while the universe of MS4 facilities is relatively static, the number of permittees reported by the CO varied from the numbers reported by the ROs. In addition, the CO reported that only one federal facility had an MS4 permit.

2016 Update: There appeared to still be some discrepancy between the CO and the ROs in the total number of Phase II permittees. For example, NERO staff stated there were 128

Phase II permittees in the region (48 individual and 80 general permits), and data provided by the CO indicated there were 145 Phase II permittees (53 individual and 92 general permits). NERO staff also indicated there were 38 waivers, opposed to the 19 reported by the CO.

Recommendation: DEP central office should coordinate MS4 data collection with DEP regional offices to ensure accuracy of facility universe counts.

3.2 Permitting Activities

The majority of MS4 permittees (i.e., Phase II and non-traditional MS4s) in Pennsylvania are permitted under DEP's NPDES general permit for stormwater discharges from small MS4s (PAG-13), which was published September 17, 2011, with an effective date of March 16, 2013. As stated previously, there are only two Phase I MS4 permittees in Pennsylvania. This is due in part to the presence of combined sewer systems in Pennsylvania's larger urbanized areas. The distribution of permittee types is shown in Table 1 above.

The Bureau of Clean Water has responsibility for the MS4 permitting program. The CO develops policies and guidance, and issues standard permit templates. The ROs are in charge of reviewing notice of intent (NOI) submissions and issuing the permits within their respective regions.

Response C.27 of the Review Questionnaire states, "[The] Central Office reissued the PAG-13 General Permit on June 4, 2016, effective March 16, 2018, which will require significant on-the-ground BMPs [best management practices] and pollutant reductions to achieve compliance; Central Office has conducted numerous trainings in 2015 and 2016 to prepare permittees for this reissued permit (training ongoing)."

Observation 4. The 2011 review report states that DEP's individual MS4 permit template is almost identical to the general MS4 permit template. The individual permit does not have any special requirements or require reviews for discharges to high-quality or exceptional-value (HQ/EV) waters.

2016 Update: At the time of the 2016 review, the general permit template and individual permit template were still largely the same. CO staff stated that total maximum daily load (TMDL) requirements will be added to the individual permit template when the 2018 version of PAG-13 becomes effective. According to response A.13 of the Review Questionnaire, "The development and submission of TMDL Plans is required for any MS4 that has wasteload allocations (WLA) in the applicable TMDL. Under the existing PAG-13 General Permit, expiring March 15, 2018, these plans can be implemented under either type of permit. Starting March 16, 2018, TMDL Plans can only be implemented under individual permits, and TMDL Plans are limited to those MS4s with wasteload allocations for nutrients and/or sediment, only." Under federal requirements, a WLA must be established for point sources discharging into TMDL waters and NPDES permits must be consistent with the assumptions and requirements of a TMDL, including WLAs. This is a particular concern with the existing Pennsylvania Department of Transportation (PennDOT) individual MS4 permit, where the permittee maintains in its annual report that it is not required to develop TMDL implementation plans, as WLAs have not been assigned to PennDOT for its discharges to impaired waters. As a result, these point source discharges into TMDL waters are assumed to have a zero WLA, and the permittee needs to develop TMDL plans consistent

with this requirement. DEP CO maintains that they are not able to evaluate each PennDOT right of way for its potential to pass through a watershed with an applicable impairment and/or TMDL. CO is trying to develop a more holistic solution to this issue and will be establishing the requirement for PennDOT to develop and implement pollutant reduction plans and TMDL plans during the next permit term.. CO staff stated that in 2016 DEP completed a comprehensive list of known MS4 dischargers and corresponding discharge locations in order to identify permittees that would qualify for individual permits.

Recommendation #1: DEP should develop a template for RO permit writers to utilize for drafting individual permits. This will ensure that discharges to HQ/EV waters are properly addressed via appropriate permit conditions.

DEP Response 05/18/17 – DEP has completed the individual permit template.

Recommendation #2: DEP should develop an individual permit template or separate general permit for discharges to waters with nutrient and/or sediment TMDLs to ensure permit requirements are consistent throughout the regions.

DEP Response 05/18/17 – DEP has completed the individual permit template.

Recommendation #3: DEP should ensure that dischargers into TMDL waters have a WLA assigned to the discharge and the permittee understands its obligations so that the permittee can develop feasible TMDL plans.

DEP Response 05/18/17 – DEP is not planning to revise TMDLs that did not assign a WLA to an MS4 or did not address municipal stormwater entirely. DEP plans to work through these issues by requiring that those entities deal with their possible impact to impaired waters through Pollutant Reduction Plans.

EPA Response 05/23/17 – EPA will commit to working with DEP to develop a path forward that allows permittees to discharge into impaired waters consistent with the applicable TMDL. This issue is of particular importance in dealing with the soon to be reissued PennDOT and Pennsylvania Turnpike Commission MS4 Permits.

Observation 5. The 2011 review report states that DEP had identified and permitted only one federal facility under its MS4 program. At that time, the review team urged DEP to investigate where federal facilities are located in the state and to determine whether those facilities need MS4 coverage. At the time of the 2011 review, CO staff reported having sent notification letters to federal facilities informing them of their requirement to apply for MS4 permit coverage, but the facilities had not been responsive.

2016 Update: Data provided in the Review Questionnaire indicates that there were three permitted federal facilities at the time of the 2016 review. CO staff indicated that the state does not have specific guidance for identifying federal facilities in need of MS4 permit coverage. Response C.7 of the Review Questionnaire indicates that the original designation of non-municipal facilities (federal and non-federal) was done in the early 2000s, and there is little documentation on how it was done. DEP staff indicated they could benefit from

guidance provided by EPA for identifying applicable non-traditional/non-municipal entities for MS4 permitting.

Recommendation: EPA and DEP will work to identify non-traditional MS4s including federal facilities and determine whether NPDES permit coverage is appropriate.

Observation 6. NERO staff stated that they anticipate needing more staff support (at least one more person) in order to meet the effort required to review NOIs for the 2018 re-issuance of PAG-13. They stated that there is no plan yet at DEP to address this issue. NERO staff stated that any new staff will need to be trained on what to look for in a permit application submittal. Further, in addition to and at the same time as submitting NOIs, permittees will be required to submit any applicable Pollution Reduction Plans (PRPs) for review and approval. NERO staff stated this will only exacerbate the understaffing problem.

The NERO Environmental Engineer raised a concern that some permittees may not be well-equipped to generate and process the datasets needed to develop an adequate PRP, which could further hold up the permit approval process.

Recommendation #1: See recommendation under Observation #1 addressing resource considerations.

Recommendation #2: DEP should continue to provide training and outreach to MS4 permittees to assist with development of PRPs. EPA will consider providing support if available for the "Circuit Rider" technical assistance program.

DEP Response 05/18/17 – DEP has delivered a formalized program training for MS4 permittees throughout the state. DEP intends to follow up with one-on-one and small group trainings where needed. These trainings are taking place to support specific follow-up questions of the permittees as they work to develop their plans.

EPA Response 05/23/17 – EPA will offer its assistance to DEP and permittees to ensure compliance with the MS4 permit requirements.

3.3 Compliance and Enforcement Activities

The ROs are responsible for receiving and reviewing MS4 annual reports, as well as performing inspections. The ROs are also responsible for any subsequent follow-up actions.

Observation 7. The 2011 review report states the ROs' ability to perform MS4 inspections was limited because of budget cuts and staff changes. At that time, no formal compliance inspections of MS4 permittees had been conducted by the ROs or the CO for either the Phase I or Phase II MS4s. Some ROs had conducted a limited number of compliance assistance visits (not formal compliance inspections).

2016 Update: CO staff stated that a formal MS4 inspection program, wherein every MS4 permittee would be inspected in a 5-year span, began in 2013. NERO staff demonstrated DEP's standard inspection report, which consists of hand-written carbon copy forms. The

reports include both checklist and open response items covering office-based and field-based topics.

DEP's *NPDES Compliance Monitoring Strategy and Annual Compliance Inspection Plan October 1, 2015–September 30, 2016* states, "All Phase I and II MS4s (individual and general permits) will receive an on-site inspection within 5 years of permit issuance or permit coverage approval. The inspection will include one or two components: 1) for MS4s located outside the Chesapeake Bay watershed and not discharging to waters with an EPA-approved TMDL, an office inspection of records constitutes a Data Audit Inspection (DAI); and 2) for MS4s in the Chesapeake Bay watershed and/or discharging to TMDL waters, an office inspection of records and a field inspection to verify reported BMPs constitutes a CEI [compliance evaluation inspection]."

Recommendation: DEP should continue performing Phase I and II MS4 compliance evaluations as set forth in the DEP annual compliance monitoring strategy (CMS) commitments, and in accordance with federal CMS guidance.

Observation 8. Although DEP had started a formal inspection program by the 2016 review, ROs do not typically take formal enforcement actions when issues are detected. CO staff stated that DEP's strategy is to offer compliance assistance at the RO's discretion. NERO staff stated that they provide a copy of the inspection report, which contains issues observed, to each permittee, but that typically no formal enforcement is taken by DEP. NERO does not always follow up on issues noted in the reports.

The EPA Review Team also noted that DEP should notify its permittees that they are not eligible to obtain coverage under a new MS4 permit (i.e., the 2018 version of PAG-13) until all violations have been resolved.

Recommendation #1: DEP should consider escalation of enforcement responses in accordance with the state's "Guidelines for Identifying, Tracking, and Resolving Violations for Water Quality."

Recommendation #2: DEP should develop a template cover letter to accompany inspection reports. The letter should identify deficiencies, require the permittee to perform corrective actions within a specified timeframe, and report completion of activities to DEP.

Observation 9. CO staff estimated that through the ROs' efforts, DEP had completed inspecting about half of the MS4 inventory and planned to meet the 2018 goal. NERO staff indicated that this may not be the case in their region. Specifically, they stated they had been on track to meet the inspection goal as of 2014, but had since fallen off the pace and would need to catch up in order to inspect all permittees by 2018. It was unclear whether other ROs were in a similar situation or if the CO was unaware of the true status of the program.

Data provided by NERO indicates the region had conducted 31 onsite CEIs and 15 data audits between January 1, 2013 and July 13, 2016 (approximately 32% of the total number of permittees). As stated previously, there are 146 permittees in the Northeast Region. Data provided by the CO indicated 178 compliance evaluation inspections (also labeled as "Routine/Complete Inspection" or "Routine/Partial Inspection" in some cases) and 79 data

audits had been performed statewide between January 1, 2014 and July 19, 2016 (approximately 32% of the total number of permittees). It should be noted some permittees were listed more than once in each dataset, meaning the actual documented percentage of inspections/audits performed is lower than 32%. After reviewing the data provided, it was unclear to the EPA Review Team whether DEP would meet its inspection goal by 2018.

Recommendation 1: See recommendation under Observation #1.

Recommendation 2: DEP should review MS4 FY 2017-18 inspection commitments and progress toward inspection goals for each RO and revise inspection commitments as appropriate in accordance with the federal CMS guidance.

Observation 10. The 2011 review report states RO staff relied on annual reports as their means for assessing permittee MS4 program compliance; however, formal compliance actions were not taken when issues were found. DEP staff interviewed at the time cited a lack of funding and resources as the primary reason for not following up.

2016 Update: NERO staff stated that the Bureau of Clean Water has one engineer at the regional level who dedicates approximately 25% of their time (0.25 FTE) to annual report review and follow-up. NERO staff stated that the annual report reviewer position was added in response to the recommendations made in the 2011 review report. The review team did not verify whether other ROs had added similar positions.

NERO staff stated that if issues or deficiencies are identified during an annual report review, a letter is sent to the permittee requesting revisions. They explained that the issues are typically not followed up on until the next annual report is submitted. They stated that in some cases, permittees may be given a 15–30 days to correct recurring issues. Annual report review violations, which appear to mostly be limited to the failure to submit a report, are logged into DEP's eFACTS as "Administrative/File Review" inspections. WMS data provided by NERO appear to indicate at least three permittees (Dickson City Borough, Jackson Township, and Old Forge Borough) that failed to submit annual reports in both 2014 and 2015, with no record of resolution.

Recommendation #1: See recommendations under Observation #1.

Recommendation #2: See Recommendation #1 under Observation #8

Observation 11. The 2011 review report recommends that a new annual report form be developed for the Phase II MS4 program. During interviews conducted in 2011, regional staff explained that the reporting requirements did not clearly articulate what is expected of MS4s; therefore, the ROs did not receive the best information from permittees to accurately assess compliance.

2016 Update: The annual report form has been updated. CO staff stated that DEP hopes to launch an updated electronic version of the form in 2017, in advance of the rollout of the 2018 version of PAG-13 to support the NPDES Electronic-Reporting Rule. They explained that the electronic annual reporting form would also eventually function as the NOI for continuing coverage under the general permit.

Response C.19 of the Review Questionnaire states, "DEP is working with Penn State University to develop an electronic annual reporting system for MS4 permittees, which should be in use by 2017."

Recommendation: DEP should update the annual report form for 2018 PAG-13 and include prospective NPDES Electronic Reporting Rule requirements for annual report electronic submissions beginning in December 2020.

3.4 Data Management

DEP uses a centralized database (*Environment, Facility, Application, Compliance Tracking System* (eFACTS)) to track permitting, compliance, and enforcement activities relating to its permittees. DEP's WMS (described in section 3.3 above) can communicate with eFACTS in order to enter MS4 permit details, create permit and facility documents, and manage various monitoring reports. As part of the review process, the EPA Review Team asked DEP CO staff and NERO staff to generate different datasets and reports through eFACTS and WMS. The data is referenced where applicable throughout the report.

Observation 12. The 2011 review report states the eFACTS system had little utility to the MS4 program. CO staff reported their desire to develop a module for the MS4 program or a separate database system. The 2011 review report states the CO and ROs should have ready access to data on permitted MS4s at all times.

2016 Update: DEP was still utilizing eFACTS at the time of the 2016 review; however, it appeared as though the database had become more useful to the MS4 program since 2011. For example, ROs were updating the database to include information related to compliance observations made during data audits, administrative file reviews, and compliance evaluations. Also, the use of WMS appeared to be an improvement over the systems in place in 2011.

CO staff explained that although eFACTS had become more useful for the program, there were still some shortcomings. Specifically, eFACTS does not have a mechanism or module for permittees to submit NOIs or annual reports electronically. At the time of the 2016 review, permittees needed to download permit forms (e.g., NOIs) and mail them to the appropriate RO, where a staff member manually populates the information in eFACTS, as time allows. As stated in observation 11, DEP hopes to launch an electronic version of the annual report form in 2017; this would also eventually function as the NOI for continuing coverage under the general permit.

Recommendation: DEP should ensure compliance with MS4 data requirements as set forth in the NPDES Electronic Reporting Rule.

3.5 Training, Education, and Communication

Training, education, and communication was discussed with both CO and NERO personnel.

Observation 13. The 2011 review report states that RO staff reported that training was limited to on-the-job training. Outside training was available, but funding limitations restricted RO participation.

2016 Update: CO staff stated that there was no standard training for staff to implement the municipal part of the stormwater program, and that staff education was still largely limited to on-the-job-training. CO staff stated that in advance of the next permit cycle, the CO will have training for the ROs to cover permit content and enforcement expectations, as well as how to prioritize NOI review.

According to response C.23 of the Review Questionnaire, DEP does conduct some periodic training on standard operating procedures for regional staff. Ongoing guidance and discussions via e-mail with permits and operations chiefs are also used to ensure consistency in DEP's approach to MS4 activities.

Recommendation: DEP should develop stormwater personnel training/career development plans for RO staff in order to identify training needs and allocate necessary training resources.

DEP Response 05/18/17 - CO has identified a training need for regional office staff related to stormwater program implementation and has planned MS4 training for regional office staff in 2017.

EPA Response 05/23/17 – EPA will continue to offer its assistance in developing and delivering training to DEP staff. EPA requests that DEP keep EPA informed of its training efforts.

Observation 14. NERO staff stated that communication between the different divisions/bureaus at the region could be better. For example, the NERO Environmental Engineer stated there was a case where the region's Bureau of Investigation had responded to an oily discharge (i.e., illicit discharge) event and had not relayed relevant information to the applicable Bureau of Clean Water personnel in a timely manner. He explained that similar events have occurred with other divisions/bureaus, including with emergency response personnel.

Recommendation: DEP should develop an SOP and/or update existing policy to outline communication protocols between RO divisions/bureaus.

4. Construction Stormwater Program

At the time of the 2016 review, the Bureau of Waterways Engineering, and Wetlands had primary responsibility for implementing Pennsylvania's construction stormwater program. Since the time of the review, a reorganization at DEP has moved the responsibility for the program to the Bureau of Clean Water. DEP authorizes coverage for construction activities under its construction general permit (PAG-02). Under certain conditions, it also issues individual NPDES permits for stormwater discharges associated with construction activities. DEP may choose to issue individual NPDES permits for a number of reasons. For example, any entity that discharges to waters with a designated or existing use of "high quality" or "exceptional value" is required to have an individual permit. DEP has delegated some responsibilities of the construction stormwater program to qualified county conservation districts (CCDs; see below).

Delegation of Authority

DEP delegates select implementation responsibilities for the construction general permits program to the CCDs by means of delegation agreements (DAs). The DAs specify the delegation responsibilities and required output measures (ROMs) for each of the three levels of CCD delegation. Level 1 CCDs carry out the educational and administrative aspects of the program (e.g., conducting educational programs, providing information to the public, maintaining application forms and other forms, maintaining erosion and sediment (E&S) control program agreements, submitting quarterly reports to DEP, and referring complaints). Level 2 CCDs perform the administrative functions, including the review of application forms, and some compliance functions, such as complaint handling and site inspections. The bulk of the state's CCDs are in this category. Level 3 CCDs handle the administrative and compliance functions in addition to retaining legal counsel for enforcement actions. ROs are responsible for any activities that have not been delegated to the CCDs in their respective regions.

Observation 15. At the time of the 2011 review, 6 of the 66 CCDs had been delegated PCSM oversight. The 2011 review report states that to effectively review post-construction stormwater management (PCSM) plans and check associated design calculations, CCDs must have a trained engineer on staff, which most did not have at that time. As a result, the workload was left to the ROs, which did not have the capacity to perform the reviews.

2016 Update: CO staff stated more CCDs have begun hiring professional engineering staff so they can conduct engineering reviews of PCSM plans and oversee the PCSM program. NERO staff stated that two of the four Level 3 CCDs in their region have PCSM oversight. They noted the requirement for PCSM oversight is that the CCD employs a professional engineer, not that it be categorized as a Level 3 CCD.

Recommendation: See recommendations under Observations #1, #16, and #20

Observation 16. At the time of the 2016 review, DEP was in the process of drafting new DAs with the CCDs. At the time of the review, CO staff stated that the new DA templates were scheduled to be finalized by the end of June 2016.

Recommendation: DEP must complete and finalize the new CCD delegation agreement.

DEP Response 05/18/17 – DEP completed and finalized the new delegation agreement.

Observation 17. The 2011 review report states that CCDs were scheduled to be evaluated by the CO every 3 years.

2016 Update: CO staff stated that they thought performing triennial evaluations of CCDs was an aggressive timeline, based on current staffing and resource levels. As part of the review process, DEP was asked to provide copies of the five most recent CCD evaluations, as well as a comprehensive list of all CCD evaluations and the dates they were conducted. In response, DEP provided copies of 12 CCD evaluation reports conducted between April 30, 2009 and November 26, 2013. Based on the information provided, it does not appear that DEP has conducted any evaluations more recently than 2013, and has only evaluated 12 of the 66 CCDs statewide (18%) since 2009.

Recommendation #1: See recommendation under Observation #1.

Recommendation # 2: DEP should work with EPA to develop a schedule for completion of CCD triennial evaluations. DEP should consider the use of contractor support to complete the CCD reviews including the potential use of EPA contract resources, if available.

4.1 Staffing

At the CO, the Bureau of Waterways, Engineering, and Wetlands employs six staff primarily dedicated to the construction stormwater program; several other staff in DEP have a partial hand in implementation of the construction program. CO staff stated that through the *Chesapeake Bay Regulatory and Accountability Program* (CBRAP), they were able to hire two full-time employees to help with targeted compliance and enforcement cases, primarily within the Chesapeake Bay watershed. CO staff indicated that there was one section chief staffing vacancy at the CO. It was unclear when this would be filled. NERO staff indicated there were 20 positions in the regional Bureau of Waterways, Engineering, and Wetlands, and that they had one vacancy for a T-21 permitting staff member (who primarily works with the Pennsylvania Department of Transportation (PennDOT)).

4.2 Facility Universe

According to the Review Questionnaire, there was a total of 4,776 active construction general permits (CGPs) and 717 individual permits statewide. The distribution of CGPs and individual permits across the regions is shown in Table 2.

Table 2: Number of Active Construction Stormwater Permits

Region	Number of Active CGPs	Number of Active Individual Permits
Northwest	401	33
Northcentral	409	82
Northeast	445	247
Southwest	976	56
Southcentral	1,716	110
Southeast	829	189
TOTAL	**4,776**	**717**

Observation 18. The 2011 review report states, "The CO does not readily know the number of active general permittees under the program, except when it receives annual reports from the CCDs. At all other times of the year, the CO must contact the six ROs for the information. The review team strongly believes that the CO, as the primary authority for managing and implementing the NPDES program, requires real-time knowledge of the number of active general permittees in the program."

2016 Update: The 2011 observation appeared to be largely unchanged at the time of the 2016 review. Neither CO nor NERO staff were readily able to provide the number of active permits at the time of the 2016 review. CO staff stated that CGP data is primarily housed at the CCDs, which report on the number of CGPs in their respective regions periodically. CO staff explained that DEP eventually gets the NOIs and the data into a permit database, as

interns or other staff have time. CO staff explained this is done sporadically throughout the year, and that the database does not necessarily represent the real-time facility universe. They stated that in addition to the basic permit information, DEP also documents information relating to PCSM BMPs and land use. CO staff further explained that individual permit NOIs are submitted directly to the ROs, which enter the pertinent information into eFACTS.

Recommendation: DEP should ensure compliance with the construction stormwater data requirements as set forth in the NPDES Electronic Reporting Rule. In addition, DEP should continue to work with CCDs to develop a more extensive site and inspection tracking system.

4.3 Permitting Activities

In most cases, DEP relies on the CCDs for reviewing general permit NOIs and issuing CGPs. An applicant submits an NOI to the delegated CCD office, which conducts a completeness review of the entire application package to ensure all required information is present. If the CCD determines the application is complete, the district conducts a technical review of the E&S plan. As stated above, some CCDs have also been delegated responsibilities for the PCSM program, in which case, they also conduct an engineering review of the PCSM plan. Once the application package is deemed technically sufficient, the district authorizes the use of the general permit. If the CCD finds deficiencies during the E&S plan technical review, the submittal is sent to the applicable RO for an elevated review. The ROs review, write, and issue individual permits. The CCDs may assist the ROs in reviewing E&S or PCSM plans if needed, and if they have the appropriate personnel. NERO staff stated that they had 62 permits pending review and approval at the time of the review (likely all individual permits).

Observation 19. The 2011 review report states that CO staff explained that DEP had had a problem with receiving incomplete or poor quality permit application packages (i.e., individual permit application packages) in the past.

2016 Update: NERO and CO staff stated that, since 2011, they have enacted a protocol to more efficiently screen individual permit applications and to promote technically complete submissions. Under the current system, permit submittals receive an initial administrative review. If any issues or incompletions are found during the administrative review process, applicants get up to 60 days to correct the applications. If after a resubmittal, the package is deemed complete, it is sent on for technical review and approval. If the package is still incomplete after the resubmittal, it is withdrawn and the applicant needs to start the process over. CO staff stated that DEP has a one-time fee for permit application, but CCDs have the ability to charge multiple fees, depending on the number of resubmissions.

NERO staff stated that if deficiencies are found or suspected during a CCD's technical review of a CGP, the district may refer the submittal to the RO for an elevated review. More information may be requested from the applicant during the elevated review process in order to determine whether the application can be approved.

Recommendation: DEP should continue to implement the screening protocol.

Observation 20. Technical reviews of PCSM plans are not typically conducted by the CCDs for CGP applications. During the 2016 review, the NERO Bureau of Waterways, Engineering, and Wetlands Program Manager stated that he routinely sees deficiencies

during the technical review of individual permit PCSM plan submittals-which are reviewed at the DEP regional office. He stated that this makes him believe that there was a high likelihood similar deficiencies are present in CGP PCSM plans that end up getting approved without a technical PCSM review.

Recommendation: DEP should consider requiring PCSM delegation for all CCDs and/or ROs should conduct a review of a representative sample of general permit PCSM plans.

DEP Response 05/18/17 - Delegation agreements are not something that DEP can require a conservation district to participate in. Conservation districts need to assess if they can adequately administer and accomplish the required delegation responsibilities and determine if they are able to hire and manage the staff necessary to carry out the agreement.

EPA Response 05/18/17 – EPA acknowledges that DEP cannot require PCSM delegation, but in the absence of CCD delegation, the ROs should consider a review of a representative sample of general permit PCSM plans to ensure consistency with regulatory requirements.

Observation 21. The 2011 review report states that general permittees rarely submitted notices of termination (NOTs). At that time, CO staff acknowledged that the NOT process was ineffective, noting that they were aiming to address the issue in the new construction general permit being developed at that time.

2016 Update: CO staff stated that CCDs and DEP have been doing a better job at implementing an NOT process since 2011. They stated that CCDs typically do NOT inspections of CGP and individual permit projects. CO staff explained that developers have been motivated to file for NOTs because they are not able to pass PCSM maintenance responsibilities to the property owners until the NOT is approved. Pennsylvania Code 102.7(c) states, "Until the permittee or co-permittee has received written approval of a notice of termination, the permittee or co-permittee will remain responsible for compliance with the permit terms and conditions including long-term operation and maintenance of all PCSM BMPs on the project site and is responsible for violations occurring on the project site. The Department or conservation district will conduct a final inspection and approve or deny the notice of termination within 30 days."

Recommendation: DEP should consider instituting an annual fee for ongoing permit coverage.

Observation 22. DEP's current CGP (PAG-02) expires in December 2017. CO representatives stated that DEP has begun thinking about changes to implement when the new permit gets issued, but did not provide any specific information about what those changes would be. They did state that DEP was thinking about implementing an annual fee for maintaining permit coverage.

Recommendation: DEP should submit a draft PAG-02 to EPA a minimum of 6 months (June 2017) prior to expiration to ensure timely reissuance of the permit.

4.4 Compliance and Enforcement Activities

Compliance and enforcement responsibilities for the construction stormwater program are largely left up to the ROs and the CCDs. The distribution of responsibility between the ROs and the CCDs depends on the level of CCD implementing the program. Level 2 and 3 CCDs review E&S plans; they host pre-construction meetings; and they conduct routine and follow-up inspections once a project has begun (for CGP and individual permit sites). ROs conduct inspections if a higher level of oversight or enforcement support is deemed needed.

All CCDs have the responsibility of receiving, and following up on complaints. If the ROs receive complaints about earth-moving activities, they forward such complaints to the appropriate CCD. DEP specifies inspection prioritization factors for the delegated CCDs in the ROMs attached to the DAs. The prioritization factors include compliance history, complexity of environmental problems, location with respect to sensitive waters, and other environmental risk criteria.

If issues and/or potential violations are found during an inspection, the CCD first tries to obtain voluntary compliance. If work on the site needs to be stopped, the CCD contacts the RO to issue a field order. NERO staff stated that CCDs are encouraged to take as much initiative as possible to accomplish voluntary compliance prior to referring a case to the ROs. ROs have the ability to issue field orders (stop work orders) and notices of violation (NOVs), and to utilize other enforcement tools if necessary.

Observation 23. At the time of the 2016 review, NERO staff stated that they prefer to use non-legal corrective action plans (CAPs) in lieu of implementing legal enforcement measures (e.g., Consent Order and Agreement (CO&A) or Consent Assessment of Civil Penalty (CACP)) to promote compliance because CAPs do not require litigation or support from state legal entities. Even though CAPs do not have the legal ramifications of a consent order or penalty, NERO staff stated they have had good luck in achieving compliance through this method.

A typical CAP describes agreed-upon milestones for a permittee to bring a project into compliance voluntarily. RO staff typically hold a meeting or discuss the issues and objectives of the CAP with the permittee prior to issuing the CAP letter. If the permittee does not voluntarily meet the terms of the CAP, the RO then progresses to legal enforcement (e.g., a CO&A).

NERO staff stated that contractors may be required to send operators to training as part of CO&A terms. They stated that partaking in training may be incentivized by a lower penalty assessment upon completion. As part of the 2016 review process, NERO was able to provide examples of CAP and CO&A cases.

In discussions with PennDOT regarding their construction site compliance status, PennDOT has argued that DEP is implementing a voluntary compliance program with regard to oversight of PennDOT construction sites. PennDOT has stated that until all voluntary compliance efforts to correct deficiencies documented during inspections have been exhausted, DEP does not consider these deficiencies to be violations of their construction permit or the Pennsylvania Clean Streams Law.

Recommendation #1: See Recommendation #1 under Observation #8

Recommendation #2: DEP should clarify with PennDOT that violations noted during inspection are violations of the permit and that they are subject to enforcement, including penalties.

Construction Permit Non-filers

NERO staff stated that construction permit non-filers are typically identified through complaints. They stated that when a non-filer is identified and investigated, the non-filer may be required to retroactively file E&S or PCSM plans, depending on the current progress of the project. Penalties may be assessed to recoup any fees.

ROs may issue a "102.43 Letter" (corresponding to 25 PA Code chapter 102.43) to a municipal entity in cases when a municipality has issued a building permit prior to the developer's having acquired CGP or individual permit coverage. 25 PA Code chapter 102.43 states, "With the exception of local stormwater approvals or authorizations, a municipality or county may not issue a building or other permit or approval to those proposing or conducting earth disturbance activities requiring a Department permit until the Department or a conservation district has issued the E&S or individual NPDES Permit, or approved coverage under the general NPDES Permit for Stormwater Discharges Associated With Construction Activities under § 102.5 (relating to permit requirements)." A 102.43 Letter does not immediately impose any penalty or enforcement, but does state that not addressing the matter in a timely manner may be cause for "appropriate enforcement action."

Observation 24. At the time of the 2016 review, NERO staff provided an example of an ongoing non-filer case. A developer had begun construction of a new golf course in Archibald Township without submitting for and obtaining a DEP stormwater permit. However, the township issued the building permit(s). NERO staff stated that the developer ignored requests to voluntarily stop work and obtain the proper permits; therefore, DEP issued a formal stop work order (i.e., field order). The developer was required to submit an interim E&S plan and was waiting for permit approval at the time of the 2016 review. NERO staff stated that they believed the case would eventually go into the formal/legal enforcement process. A 102.43 Letter had been issued to Archibald Township.

NERO staff stated the compliance issues related to the case above had been handled entirely by construction stormwater staff. They stated that MS4 staff had not been notified about the issues, even though the circumstances also present compliance implications under the MS4 program. The EPA Review Team recommended that the construction stormwater and MS4 staff develop better methods of communication in order to improve the oversight conducted by both programs.

Recommendation #1: See Recommendation #1 under Observation #8

Recommendation #2: See recommendation under Observation #14

4.5 Data Management

ROs use the eFACTS system to document and track individual permit actions, enforcement actions, and compliance actions. The CO is able to pull data and generate reports on individual permits through the use of eFACTS and WMS. Actions related to CGPs are only documented in eFACTS if DEP gets involved with enforcement/compliance and issues a formal order or action. NERO staff stated that CGP projects remain off their radar unless compliance issues become too big for the CCDs to handle, or if there are above-average water quality concerns.

The CO uses an electronic database system called Greenport for compiling CGP data provided by the CCDs for inclusion in quarterly and annual reports. Data is entered into Greenport as staff and information is available.

Observation 25. At the time of the 2016 review, CGP permitting and compliance data was primarily housed at the CCDs. As explained previously, DEP eventually gets CGP NOIs and the data into the permit database (i.e., Greenport) sporadically as interns or other staff have time. Information relating to project BMPs and land use is included in Greenport.

CO staff stated most CCDs have some form of an electronic data management and/or tracking system, but the systems are not uniform across the state. They stated that data management is not required in the DAs, but DEP was looking into eventually implementing a uniform electronic data system to make CCD data reporting more efficient and comprehensive.

Recommendation: DEP should ensure compliance with the construction stormwater data requirements as set forth in the NPDES Electronic Reporting Rule. In addition, DEP should include a uniform data collection requirement in the updated CCD delegation agreement.

Observation 26. At the time of the 2016 review, CO staff stated DEP was investigating the use of an electronic permitting system for construction stormwater permits. They stated that an electronic permitting system has been established for use with PennDOT projects that have 25 PA Code chapter 105 implications (i.e., dam safety and waterway management). CO staff stated the next step is to adopt the system for use with construction stormwater permittees statewide. However, CO staff stated that at the time of the 2016 review, DEP did not have the internal information technology staffing capacity to implement an electronic system statewide.

Recommendation #1: See recommendation under Observation #1

Observation 27. CO staff stated that they are working internally to provide e-reporting training to CCDs. They stated that they hoped to be able to rely on CCDs to begin entering data into EPA's *Integrated Compliance Information System* (ICIS) by the end of 2016. They stated that entry will be manual at first, with the hopes of being able to integrate an automatic system in the future.

Recommendation: See recommendation under Observation #18.

ATTACHMENT B

THE DEPARTMENT'S CLEAN WATER PROGRAM WORKLOAD ANALYSIS AND STAFFING JUSTIFICATION

ATTACHMENT B-1: WORKLOAD ANALYSIS FOR NPDES PERMIT REVIEWS[1]

Fee Category	Applicat-ion / Fee Type	Task 1 Time (hrs)	Task 2 Time (hrs)	Task 3 Time (hrs)	Task 4 Time (hrs)	Task 5 Time (hrs)	Task 6 Time (hrs)	Task 7 Time (hrs)	Task 8 Time (hrs)	Task 9 Time (hrs)	Total Admin Time / Applicat-ion (hrs)	Total Staff Time / Applicat-ion (hrs)	No. Applicat-ions or Requests Expected / Year	Total Admin Hours Needed / Year	Total Staff Hours Needed / Year
SRSTP - Individual Permit	New Permit	1	0.5	1	2	0.5	0.5	0.25	0.5	1	2.5	4.75	10	25	47.5
	Reissuance	0.75	0.5	0.75	1.5[a]	0.5	0.5	0.25	0.5	0.75	2	4	130	260	520
	Minor Amendment	0.75	0.25	0.25	0	0	0	0	0	0.75	1.5	0.5	0	0	0
	Major Amendment	0.75	0.25	0.5	0.5	0.5	0.25	0.25	0.5	0.75	1.75	2.5	1	1.75	2.5
	Transfer	0.75	0.25	0	0	0	0.25	0	0.5	0.75	1.75	0.75	8	14	6
SFTF - Individual Permit	New Permit	1	0.5	1	2	0.5	0.5	0.25	0.5	1	2.5	4.75	4	10	19
	Reissuance	0.75	0.5	0.75	1.5	0.5	0.5	0.25	0.5	0.75	2	4	41	82	164
	Minor Amendment	0.75	0.25	0.25	0	0	0	0	0	0.75	1.5	0.5	0	0	0
	Major Amendment	0.75	0.25	0.5	0.5	0.5	0.25	0.25	0.5	0.75	1.75	2.5	1	1.75	2.5
	Transfer	0.75	0.25	0	0	0	0.25	0	0.5	0.75	1.75	0.75	2	3.5	1.5
Minor Sewage Facility < 0.05 MGD – Individual Permit	New Permit	1.25	0.75	1.5	4	0.5	0.5	0.5	0.5	1.25	3	7.75	4	12	31
	Reissuance	1	0.75	1	3	0.5	0.5	0.25	0.5	1	2.5	6	197	492.5	1182
	Minor Amendment	0.75	0.25	0.25	0	0	0	0	0	0.75	1.5	0.5	6	9	3
	Major Amendment	0.75	0.25	0.5	0.5	0.5	0.25	0.25	0.5	0.75	1.75	2.5	2	3.5	5
	Transfer	0.75	0.25	0	0	0	0.25	0	0.5	0.75	1.75	0.75	4	7	3
Minor Sewage >= 0.05 MGD and < 1.0 MGD – Individual Permit	New Permit	1.25	0.75	2	16	1	0.5	0.75	0.75	1.25	3	21.25	4	12	85
	Reissuance	1	0.75	1.25	8	1	0.5	0.5	0.75	1	2.5	12.25	153	382.5	1874.25
	Minor Amendment	0.75	0.25	0.25	0	0	0	0	0	0.75	1.5	0.5	6	9	3
	Major Amendment	0.75	0.25	0.5	1	0.75	0.25	0.25	0.75	0.75	1.75	3.5	2	3.5	7
	Transfer	0.75	0.25	0	0	0	0.25	0	0.5	0.75	1.75	0.75	2	3.5	1.5
Minor Sewage with CSO – Individual Permit	New Permit	1.25	1	8	32	4	0.5	1	1	1.25	3	47	0	0	0
	Reissuance	1	1	6	24	4	0.5	0.5	1	1	2.5	36.5	5	12.5	182.5
	Minor Amendment	0.75	0.25	1	0	0	0	0	0	0.75	1.5	1.25	1	1.5	1.25
	Major Amendment	0.75	0.25	6	8	1	0.25	0.25	1	0.75	1.75	16.5	0	0	0
	Transfer	0.75	0.25	0	0	0	0.25	0	0.5	0.75	1.75	0.75	0	0	0

Fee Category	Applicat-ion / Fee Type	Task 1 Time (hrs)	Task 2 Time (hrs)	Task 3 Time (hrs)	Task 4 Time (hrs)	Task 5 Time (hrs)	Task 6 Time (hrs)	Task 7 Time (hrs)	Task 8 Time (hrs)	Task 9 Time (hrs)	Total Admin Time / Applicat-ion (hrs)	Total Staff Time / Applicat-ion (hrs)	No. Applicat-ions or Requests Expected / Year	Total Admin Hours Needed / Year	Total Staff Hours Needed / Year
Major Sewage >= 1.0 MGD and < 5.0 MGD – Individual Permit	New Permit	1.5	1.5	16	40	8	0.5	2	2	1.5	3.5	69.5	1	3.5	69.5
	Reissuance	1.25	1.5	8	24[b]	8	0.5	1.5	2	1.25	3	45	39	117	1755
	Minor Amendment	0.75	0.25	0.5	0	0	0	0	0	0.75	1.5	0.75	6	9	4.5
	Major Amendment	0.75	0.25	1	12	2	0.25	0.25	1	0.75	1.75	16.5	3	5.25	49.5
	Transfer	0.75	0.25	0	0	0	0.25	0	0.5	0.75	1.75	0.75	1	1.75	0.75
Major Sewage >= 5.0 MGD – Individual Permit	New Permit	1.5	1.5	24	64	8	0.5	2.5	2	1.5	3.5	102	0	0	0
	Reissuance	1.25	1.5	16	40	8	0.5	2	2	1.25	3	69.5	10	30	695
	Minor Amendment	0.75	0.25	0.5	0	0	0	0	0	0.75	1.5	0.75	2	3	1.5
	Major Amendment	0.75	0.25	2	16	2	0.25	0.25	1	0.75	1.75	21.5	2	3.5	43
	Transfer	0.75	0.25	0	0	0	0.25	0	0.5	0.75	1.75	0.75	1	1.75	0.75
Major Sewage with CSO – Individual Permit	New Permit	1.5	2	40	80	16	0.5	4	2	1.5	3.5	144	0	0	0
	Reissuance	1.25	2	24	48	16	0.5	2	2	1.25	3	94	14	42	1316
	Minor Amendment	0.75	0.25	0.5	0	0	0	0	0	0.75	1.5	0.75	1	1.5	0.75
	Major Amendment	0.75	0.25	24	16	2	0.25	0.25	1	0.75	1.75	43.5	1	1.75	43.5
	Transfer	0.75	0.25	0	0	0	0.25	0	0.5	0.75	1.75	0.75	0	0	0
Minor IW Facility not covered by ELG – Individual Permit	New Permit	2	1.5	16	32	8	0.5	2	2	2	4.5	61.5	6	27	369
	Reissuance	1.5	1.5	8	16	8	0.5	1	2	1.5	3.5	36.5	121	423.5	4416.5
	Minor Amendment	0.75	0.25	0.25	0	0	0	0	0	0.75	1.5	0.5	3	4.5	1.5
	Major Amendment	0.75	0.25	1	8	2	0.25	0.25	1	0.75	1.75	12.5	3	5.25	37.5
	Transfer	0.75	0.25	0	0	0	0.25	0	0.5	0.75	1.75	0.75	4	7	3
Minor IW Facility covered by ELG – Individual Permit	New Permit	2	2	32	40	12	0.5	4	2	2	4.5	92	1	4.5	92
	Reissuance	1.5	2	16	24	12	0.5	2	2	1.5	3.5	58	50	175	2900
	Minor Amendment	0.75	0.25	0.5	0	0	0	0	0	0.75	1.5	0.75	2	3	1.5
	Major Amendment	0.75	0.25	2	16	2	0.25	0.25	1	0.75	1.75	21.5	2	3.5	43
	Transfer	0.75	0.25	0	0	0	0.25	0	0.5	0.75	1.75	0.75	2	3.5	1.5

Fee Category	Applicat-ion / Fee Type	Task 1 Time (hrs)	Task 2 Time (hrs)	Task 3 Time (hrs)	Task 4 Time (hrs)	Task 5 Time (hrs)	Task 6 Time (hrs)	Task 7 Time (hrs)	Task 8 Time (hrs)	Task 9 Time (hrs)	Total Admin Time / Applicat-ion (hrs)	Total Staff Time / Applicat-ion (hrs)	No. Applicat-ions or Requests Expected / Year	Total Admin Hours Needed / Year	Total Staff Hours Needed / Year
Major IW Facility < 250 MGD – Individual Permit	New Permit	2	2.5	64	120	32	0.5	8	2	2	4.5	228.5	0	0	0
	Reissuance	1.5	2.5	32	80	32	0.5	4	2	1.5	3.5	152.5	19	66.5	2897.5
	Minor Amendment	0.75	0.25	0.5	0	0	0	0	0	0.75	1.5	0.75	2	3	1.5
	Major Amendment	0.75	0.25	24	24	2	0.25	1	1	0.75	1.75	52.25	1	1.75	52.25
	Transfer	0.75	0.25	0	0	0	0.25	0	0.5	0.75	1.75	0.75	1	1.75	0.75
Major IW Facility >= 250 MGD – Individual Permit	New Permit	2	3	128	240	64	0.5	16	2	2	4.5	453	0	0	0
	Reissuance	1.5	3	64	200[c]	64	0.5	8	2	1.5	3.5	341	2	7	682
	Minor Amendment	0.75	0.25	1	0	0	0	0	0	0.75	1.5	1.25	2	3	2.5
	Major Amendment	0.75	0.5	40	32	2	0.25	1	1	0.75	1.75	76.5	1	1.75	76.5
	Transfer	0.75	0.25	0	0	0	0.25	0	0.5	0.75	1.75	0.75	0	0	0
IW Storm-water – Individual Permit	New Permit	2	2	32	24	8	0.5	2	2	2	4.5	70	1	4.5	70
	Reissuance	1.5	2	16	16	8	0.5	1	2	1.5	3.5	45	70	245	3150
	Minor Amendment	0.75	0.25	0.5	0	0	0	0	0	0.75	1.5	0.75	1	1.5	0.75
	Major Amendment	0.75	0.25	8	8	2	0.25	0.25	1	0.75	1.75	19.5	1	1.75	19.5
	Transfer	0.75	0.25	0	0	0	0.25	0	0.5	0.75	1.75	0.75	1	1.75	0.75
CAFO – Individual Permit	New Permit	2	2	40	64	16	0.25	8	2	2	4.25	132	2	8.5	264
	Reissuance	1.5	2	24	40	16	0.25	4	2	1.5	3.25	88	25	81.25	2200
	Minor Amendment	0.75	0.25	0.25	0	0	0	0	0	0.75	1.5	0.5	1	1.5	0.5
	Major Amendment	0.75	0.25	24	24	2	0.25	0.25	1	0.75	1.75	51.5	1	1.75	51.5
	Transfer	0.75	0.25	0	0	0	0.25	0	0.5	0.75	1.75	0.75	2	3.5	1.5
MS4 – Individual Permit	New Permit	2	4	80	8	6	0.25	8	2	2	4.25	108	5	21.25	540
	Reissuance	1.5	4	80	8	6	0.25	8	2	1.5	3.25	108	225	731.25	24300
	Minor Amendment	0.75	0.25	1	0	0	0	0	0	0.75	1.5	1.25	0	0	0
	Major Amendment	0.75	0.25	40	4	2	0.25	0.25	1	0.75	1.75	47.5	0	0	0
	Transfer	0.75	0.25	0	0	0	0.25	0	0.5	0.75	1.75	0.75	0	0	0

Fee Category	Applicat-ion / Fee Type	Task 1 Time (hrs)	Task 2 Time (hrs)	Task 3 Time (hrs)	Task 4 Time (hrs)	Task 5 Time (hrs)	Task 6 Time (hrs)	Task 7 Time (hrs)	Task 8 Time (hrs)	Task 9 Time (hrs)	Total Admin Time / Applicat-ion (hrs)	Total Staff Time / Applicat-ion (hrs)	No. Applicat-ions or Requests Expected / Year	Total Admin Hours Needed / Year	Total Staff Hours Needed / Year
CAAP – Individual Permit	New Permit	2	2	64	64	6	0.25	4	2	2	4.25	142	0	0	0
	Reissuance	1.5	2	32	32	6	0.25	2	2	1.5	3.25	76	5	16.25	380
	Minor Amendment	0.75	0.25	0.5	0	0	0	0	0	0.75	1.5	0.75	1	1.5	0.75
	Major Amendment	0.75	0.25	16	24	2	0.25	0.25	1	0.75	1.75	43.5	0	0	0
	Transfer	0.75	0.25	0	0	0	0.25	0	0.5	0.75	1.75	0.75	0	0	0
Pesticides – Individual Permit	New Permit	2	1.5	8	8	4	0.25	0.25	2	2	4.25	23.75	1	4.25	23.75
	Reissuance	1.5	1.5	8	8	4	0.25	0.25	2	1.5	3.25	23.75	4	13	95
	Minor Amendment	0.75	0.25	0.25	0	0	0	0	0	0.75	1.5	0.5	2	3	1
	Major Amendment	0.75	0.25	0.5	1	2	0.25	0.25	1	0.75	1.75	5	0	0	0
	Transfer	0.75	0.25	0	0	0	0.25	0	0.5	0.75	1.75	0.75	0	0	0
PAG-03 IW Storm-water – General Permit	New Permit	1	0.5	0.5	1	0	0.25	0.5	1	1	2.25	3.5	16	36	56
	Reissuance	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Amendment	0.75	0.25	0.25	0.25	0	0	0	0.25	0.75	1.5	1	0	0	0
	Transfer	0.75	0.25	0.5	0	0	0.25	0	0	0.75	1.75	0.75	6	10.5	4.5
PAG-04 SRSTP – General Permit	New Permit	1	0.25	0.25	1	0	0.25	0.25	1	1	2.25	2.75	20	45	55
	Reissuance	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Amendment	0.75	0.25	0	0.25	0	0	0	0.25	0.75	1.5	0.75	0	0	0
	Transfer	0.75	0.25	0	0	0	0.25	0	0	0.75	1.75	0.25	12	21	3
PAG-04 SFTF – General Permit	New Permit	1	0.25	0.25	1	0	0.25	0.25	1	1	2.25	2.75	6	13.5	16.5
	Reissuance	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Amendment	0.75	0.25	0	0.25	0	0	0	0.25	0.75	1.5	0.75	0	0	0
	Transfer	0.75	0.25	0	0	0	0.25	0	0	0.75	1.75	0.25	3	5.25	0.75
PAG-05 GW Remediat-ion - General Permit	New Permit	1	1	0.5	3	0	0.25	0.25	1	1	2.25	5.75	3	6.75	17.25
	Reissuance	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Amendment	0.75	0.25	0.25	0.25	0	0	0	0.25	0.75	1.5	1	0	0	0
	Transfer	0.75	0.25	0	0	0	0.25	0	0	0.75	1.75	0.25	1	1.75	0.25
PAG-06 CSO – General Permit	New Permit	1	1	1	16	0	0.25	1	1	1	2.25	20	0	0	0
	Reissuance	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Amendment	0.75	0.25	0.5	4	0	0	0	0.25	0.75	1.5	5	0	0	0
	Transfer	0.75	0.25	0	0	0	0.25	0	0	0.75	1.75	0.25	0	0	0

Fee Category	Applicat-ion / Fee Type	Task 1 Time (hrs)	Task 2 Time (hrs)	Task 3 Time (hrs)	Task 4 Time (hrs)	Task 5 Time (hrs)	Task 6 Time (hrs)	Task 7 Time (hrs)	Task 8 Time (hrs)	Task 9 Time (hrs)	Total Admin Time / Applicat-ion (hrs)	Total Staff Time / Applicat-ion (hrs)	No. Applicat-ions or Requests Expected / Year	Total Admin Hours Needed / Year	Total Staff Hours Needed / Year
PAG-10 Hydro-static Testing – General Permit	New Permit	1	1	0.25	4	0	0.25	0.5	1	1	2.25	6.75	10	22.5	67.5
	Reissuance	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Amendment	0.75	0.25	0	0.25	0	0	0	0.25	0.75	1.5	0.75	0	0	0
	Transfer	0.75	0.25	0	0	0	0.25	0	0	0.75	1.75	0.25	1	1.75	0.25
PAG-11 Aqua-culture – General Permit	New Permit	1	1	0.25	8	0	0.25	0.25	1	1	2.25	10.5	0	0	0
	Reissuance	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Amendment	0.75	0.25	0	0.25	0	0	0	0.25	0.75	1.5	0.75	0	0	0
	Transfer	0.75	0.25	0	0	0	0.25	0	0	0.75	1.75	0.25	0	0	0
PAG-12 CAFO – General Permit	New Permit	2	2	4	16	0	0.25	4	1	2	4.25	27	4	17	108
	Reissuance	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Amendment	0.75	0.25	2	4	0	0	0	0.25	0.75	1.5	6.5	2	3	13
	Transfer	0.75	0.25	0	0	0	0.25	0	0	0.75	1.75	0.25	2	3.5	0.5
PAG-13 MS4 – General Permit	New Permit	2	2	4	40	0	0.25	4	1	2	4.25	51	20	85	1020
	Reissuance (Waivers)	0	2	0.25	0	0	0	0	0	0	0	2.25	40	0	90
	Amendment	0.75	0.25	2	8	0	0	0	0.25	0.75	1.5	10.5	0	0	0
	Transfer	0.75	0.25	0	0	0	0.25	0	0	0.75	1.75	0.25	1	1.75	0.25
PAG-15 Pesticides – General Permit	New Permit	1	1	0.25	8	0	0.25	0.25	1	1	2.25	10.5	1	2.25	10.5
	Reissuance	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Amendment	0.75	0.25	0	0.25	0	0	0	0.25	0.75	1.5	0.75	2	3	1.5
	Transfer	0.75	0.25	0	0	0	0.25	0	0	0.75	1.75	0.25	0	0	0
IW Storm-water – No Exposure Certificat-ion	New	1	1	0.25	0	0	0.25	0.25	0.5	1	2.25	2	15	33.75	30
	Reissuance	0	1	0.25	0	0	0	0	0	0	0	1.25	205	0	256.25
	Amendment	0.75	0.25	0	0	0	0	0	0.25	0.75	1.5	0.5	0	0	0
	Transfer	0.75	0.25	0	0	0	0.25	0	0	0.75	1.75	0.25	2	3.5	0.5
													Subtotals:	**3,766**	**52,550**

Other Responsibilities				
Task	**Task Time (hrs)**	**No./Year**	**Admin Hours**	**Staff Hours**
Right to Know Law Requests	0.5	1,000	250	250
Temporary Discharge Authorizations	2	250	100	400
Pre-Application Meetings	2	200	0	400
Preliminary Effluent Limits	16	40	40	600
Other Information Requests	1	500	0	500
Site Visits / Field Work	8	100	0	800

Subtotals:	390	2,950
Totals:	4,156	55,500
FTEs – NPDES:	2.8	37
FTEs – WQM (from Attachment B-2):	0.8	12.3
Total NPDES/WQM Permitting FTEs:	3.6	49.3

Task Descriptions:
Task 1 – Administrative (Admin) Up-front Processing
Task 2 – Permits Staff (Staff) Completeness Review Time
Task 3 – Staff Technical Review
Task 4 – Staff Preparation of Fact Sheet
Task 5 – Staff Preparation of Draft Permit Documents
Task 6 – Admin Preparation of Public Notice(s)
Task 7 – Staff Meetings and Client Communications
Task 8 – Staff Preparation of Final Permit Documents
Task 9 – Admin Back-end Processing

Note:
1 The Department has SOPs for each type of NPDES permit application it receives, detailing the step by step procedures for processing and reviews. The tasks in this table were derived from the significant procedures within the SOPs. The amount of time necessary to complete each task was based on the experience of the Department staff who developed the SOPs and have implemented the tasks, and considered the complexity of the task. The following examples illustrate how the time estimates were derived based on this consideration (superscripts identified after task hours in the examples correspond to hours listed in the table above):

- SRSTP Individual Permit, Application Type = Reissuance, Task 4 (Preparation of Fact Sheet) Time = **1.5 hours[a]** (average).
  - Time to generate the fact sheet template using the Department's Water Management System (WMS) application = 15 minutes.
  - Time to review relevant SOPs, guidance and regulations to determine appropriate water quality-based and technology-based effluent limits and monitoring requirements = 15 minutes.
  - Time to set up and run water quality-based models for Total Residual Chlorine (TRC), Ammonia-Nitrogen and CBOD5 = 30 minutes.
  - Time to complete the fact sheet with a detailed narrative of how draft permit terms and conditions were developed = 30 minutes.
- Major Sewage Facility >= 1 MGD and < 5 MGD Individual Permit, Application Type = Reissuance, Task 4 (Preparation of Fact Sheet) Time = **24 hours[b]** (average).
  - Time to generate the fact sheet template using the Department's WMS application = 30 minutes.
    - **NOTE** – There are more sections to the fact sheet for a Major Sewage Facility compared to an SRSTP.
  - Time to review relevant SOPs, guidance and regulations to determine appropriate water quality-based and technology-based effluent limits and monitoring requirements = 4 hours.

    - **NOTE** – There are significantly more requirements associated with a Major Sewage Facility compared to an SRSTP. Depending on the nature of the wastewater to be received and treated by the facility, this step may take up to 16 hours.

- Time to conduct a reasonable potential (RP) analysis for toxic pollutants detected in facility's discharge (i.e., a determination of whether there is a reasonable potential to cause an excursion from water quality standards in Chapter 93) = 4 hours.

- Time to conduct an RP analysis for Whole Effluent Toxicity = 1 hour.

- Time to set up and run water quality-based models for TRC, Ammonia-Nitrogen, CBOD5, and toxic pollutants = 6 hours.
    - **NOTE** – The Department's TRC, WQM and PENTOXSD models are typically run for a Major Sewage Facility. The time needed to perform these analyses depends on the complexity of the discharge scenario (e.g., the presence of multiple dischargers in close proximity, the presence of dams downstream of the discharge, etc.).

- Time to evaluate the need for a compliance schedule based on a comparison of Discharge Monitoring Report (DMR) data to proposed effluent limits = 30 minutes.

- Time to complete the fact sheet with a detailed narrative of how draft permit terms and conditions were developed = 8 hours.

- Major Industrial Waste Facility > 250 MGD Individual Permit, Application Type = Reissuance, Task 4 (Preparation of Fact Sheet) Time = **200 hours[c]** (average).

    - Time to generate the fact sheet template using the Department's WMS application = 2 hours.
        - **NOTE** – There are more sections to the fact sheet for a Major Industrial Waste Facility compared to an SRSTP and Major Sewage Facility. There are also typically numerous discharges, which results in more processing time.

    - Time to review relevant SOPs, guidance and regulations to determine appropriate water quality-based and technology-based effluent limits and monitoring requirements = 16 hours.
        - **NOTE** – There are significantly more requirements associated with a Major Industrial Waste facility compared to an SRSTP and Major Sewage Facility (e.g., review and interpretation of federal technology-based standards and development documents).

    - Time to conduct a reasonable potential (RP) analysis for toxic pollutants detected in facility's discharge(s) = 12 hours.

    - Time to evaluate the use and approval of proposed chemical additives = 16 hours.

    - Time to set up and run water quality-based model for toxic pollutants = 16 hours.
        - **NOTE** – The Department's PENTOXSD is typically run for a Major Industrial Waste Facility to evaluate effluent limits necessary for multiple discharges. These discharges are often complex discharge scenarios requiring proper selection of input data such as background toxic pollutant data.

    - Time to review and incorporate recommendations from regional and Central Office biologists on 316(a) thermal variance request = 40 hours.
        - **NOTE** – A 316(a) thermal variance request is typically made by Major Industrial Waste Facilities with flows greater than 250 MGD as part of an application for permit reissuance. The requests are typically reviewed by regional and Central Office biologists, and recommendations are made to permits staff. Permits staff, as part of this step, will generally participate in multiple meetings with biologists to determine the appropriate methods for incorporating these recommendations into a permit.

    - Time to set up and run water quality-based model for thermal discharges = 16 hours.

    - Time to review and incorporate recommendations from regional and Central Office biologists on 316(b) cooling water intake structure requirements = 40 hours.
        - **NOTE** – Phase II of the federal 316(b) regulations requires that industrial facilities with cooling water intake structures that withdraw a volume of water above certain thresholds for cooling purposes conduct studies to support a decision by the Department on the site-specific Best Technology Available (BTA) for the site. These studies are typically reviewed by regional and Central Office biologists, and recommendations are made to permits staff. Permits staff, as part of this step, will generally participate in multiple meetings with biologists to determine the appropriate methods for incorporating these recommendations into a permit.

    - Time to evaluate the need for a compliance schedule based on a comparison of Discharge Monitoring Report (DMR) data to proposed effluent limits = 2 hours.

- Time to complete the fact sheet with a detailed narrative of how draft permit terms and conditions were developed = 40 hours.
    - **NOTE** – Fact sheets for Major Industrial Waste Facilities are commonly 100 pages or more. A strong record including the fact sheet is necessary to withstand scrutiny in the event the permit is appealed by the permittee or a third party.

ATTACHMENT B-2: WORKLOAD ANALYSIS FOR WQM PERMIT REVIEWS[1]

Fee Category	Application Type	Task 1 Time (hrs)	Task 2 Time (hrs)	Task 3 Time (hrs)	Task 4 Time (hrs)	Task 5 Time (hrs)	Task 6 Time (hrs)	Task 7 Time (hrs)	Task 8 Time (hrs)	Total Admin Time / Application (hrs)	Total Staff Time / Application (hrs)	No. Expected / Year	Total Admin Hours Needed / Year	Total Staff Hours Needed / Year
Joint Pesticides Permit	New	1	1	2[a]	1	0.25	0.25	1	1	2.25	5.25	20	45	105
	Renewal	0.75	1	2	1	0.25	0.25	1	0.75	1.75	5.25	50	87.5	262.5
	Amendment	0.75	0.25	1	0.25	0.25	0.25	0.5	0.75	1.75	2.25	20	35	45
	Transfer	0.75	0.25	0	0	0.25	0	0.5	0.75	1.75	0.75	1	1.75	0.75
WQM – Major Sewage Treatment Plants	New	1.5	4	80	16	0.25	16	4	1.5	3.25	120	1	3.25	120
	Renewal	0	0	0	0	0	0	0	0	0	0	0	0	0
	Amendment	0.75	2	8	2	0.25	2	2	0.75	1.75	16	15	26.25	240
	Transfer	0.75	0.25	0	0	0.25	0	0.5	0.75	1.75	0.75	3	5.25	2.25
WQM – Major Industrial Waste Treatment Plants	New	1.5	4	80[b]	24	0.25	24	4	1.5	3.25	136	1	3.25	136
	Renewal	0	0	0	0	0	0	0	0	0	0	0	0	0
	Amendment	0.75	2	8	2	0.25	4	2	0.75	1.75	18	4	7	72
	Transfer	0.75	0.25	0	0	0.25	0	0.5	0.75	1.75	0.75	2	3.5	1.5
WQM – Minor and Non-NPDES Sewage Treatment Plants	New	1.5	4	40	8	0.25	8	3	1.5	3.25	63	30	97.5	1890
	Renewal	0	0	0	0	0	0	0	0	0	0	0	0	0
	Amendment	0.75	2	8	2	0.25	1	1.5	0.75	1.75	14.5	60	105	870
	Transfer	0.75	0.25	0	0	0.25	0	0.5	0.75	1.75	0.75	20	35	15
WQM – Minor and Non-NPDES Industrial Waste Treatment Plants	New	1.5	4	56	16	0.25	8	3	1.5	3.25	87	6	19.5	522
	Renewal	0	0	0	0	0	0	0	0	0	0	0	0	0
	Amendment	0.75	2	8	2	0.25	1	1.5	0.75	1.75	14.5	30	52.5	435
	Transfer	0.75	0.25	0	0	0.25	0	0.5	0.75	1.75	0.75	20	35	15
WQM - SRSTPs	New	1.5	1	24	8	0.25	1	2	1.5	3.25	36	5	16.25	180
	Renewal	0	0	0	0	0	0	0	0	0	0	0	0	0
	Amendment	0.75	0.5	8	2	0.25	0.25	1	0.75	1.75	11.75	2	3.5	23.5
	Transfer	0.75	0.25	0	0	0.25	0	0.5	0.75	1.75	0.75	5	8.75	3.75
WQM - Sewer Extensions	New	1.5	1	24	8	0.25	2	2	1.5	3.25	37	5	16.25	185
	Renewal	0	0	0	0	0	0	0	0	0	0	0	0	0
	Amendment	0.75	0.5	8	2	0.25	0.5	1	0.75	1.75	12	5	8.75	60
	Transfer	0.75	0.25	0	0	0.25	0	0.5	0.75	1.75	0.75	15	26.25	11.25

Fee Category	Applicat-ion Type	Task 1 Time (hrs)	Task 2 Time (hrs)	Task 3 Time (hrs)	Task 4 Time (hrs)	Task 5 Time (hrs)	Task 6 Time (hrs)	Task 7 Time (hrs)	Task 8 Time (hrs)	Total Admin Time / Applicat-ion (hrs)	Total Staff Time / Applicat-ion (hrs)	No. Expected / Year	Total Admin Hours Needed / Year	Total Staff Hours Needed / Year
WQM - Pump Stations	New	1.5	1	32	8	0.25	4	2	1.5	3.25	47	5	16.25	235
	Renewal	0	0	0	0	0	0	0	0	0	0	0	0	0
	Amendment	0.75	0.5	8	2	0.25	0.5	1	0.75	1.75	12	10	17.5	120
	Transfer	0.75	0.25	0	0	0.25	0	0.5	0.75	1.75	0.75	15	26.25	11.25
WQM - Land Application and Reuse of Sewage	New	2	4	240[c]	40	0.25	24	8	2	4.25	316	1	4.25	316
	Renewal	1.5	4	160	24	0.25	16	8	1.5	3.25	212	25	81.25	5300
	Amendment	0.75	1	8	2	0.25	8	4	0.75	1.75	23	3	5.25	69
	Transfer	0.75	0.25	0	0	0.25	0	0.5	0.75	1.75	0.75	1	1.75	0.75
WQM - Land Application and Reuse of Industrial Waste	New	2	4	240	64	0.25	32	8	2	4.25	348	1	4.25	348
	Renewal	1.5	4	160	40	0.25	24	8	1.5	3.25	236	15	48.75	3540
	Amendment	0.75	1	8	2	0.25	16	4	0.75	1.75	31	4	7	124
	Transfer	0.75	0.25	0	0	0.25	0	0.5	0.75	1.75	0.75	1	1.75	0.75
WQM - Manure Storage and Wastewater Impound-ments	New	1.5	4	40	16	0.25	8	4	1.5	3.25	72	10	32.5	720
	Renewal	0	0	0	0	0	0	0	0	0	0	0	0	0
	Amendment	0.75	2	8	2	0.25	2	2	0.75	1.75	16	1	1.75	16
	Transfer	0.75	0.25	0	0	0.25	0	0.5	0.75	1.75	0.75	1	1.75	0.75
WQG-01 for SRSTPs	New	1	1	16	4	0.25	0.5	1	1	2.25	22.5	50	112.5	1125
	Renewal	0	0	0	0	0	0	0	0	0	0	0	0	0
	Amendment	0.75	0.25	8	2	0.25	0.25	0.5	0.75	1.75	11	10	17.5	110
	Transfer	0.75	0.25	0	0	0.25	0	0.25	0.75	1.75	0.5	15	26.25	7.5
WQG-02 for Sewers/Pump Stations	New	1	1	16	4	0.25	0.5	1	1	2.25	22.5	50	112.5	1125
	Renewal	0	0	0	0	0	0	0	0	0	0	0	0	0
	Amendment	0.75	0.25	8	2	0.25	0.25	0.5	0.75	1.75	11	10	17.5	110
	Transfer	0.75	0.25	0	0	0.25	0	0.25	0.75	1.75	0.5	15	26.25	7.5
												Totals:	**1,205**	**18,482**
												FTEs:	**0.8**	**12.3**

Task Descriptions:
Task 1 – Administrative (Admin) Up-front Processing
Task 2 – Permits Staff (Staff) Completeness Review Time
Task 3 – Staff Technical Review
Task 4 – Staff Preparation of Internal Review and Recommendations

Task 5 – Admin Preparation of Public Notice(s)
Task 6 – Staff Meetings and Client Communications
Task 7 – Staff Preparation of Final Permit Documents
Task 8 – Admin Back-end Processing

Note:

1 The Department has SOPs for each type of WQM permit application it receives, detailing the step by step procedures for processing and reviews. The tasks in this table were derived from the significant procedures within the SOPs. The amount of time necessary to complete each task was based on the experience of the Department staff who developed the SOPs and have implemented the tasks, and considered the complexity of the task. The following examples illustrate how the time estimates were derived based on this consideration (superscripts identified after task hours in the examples correspond to hours listed in the table above):

- Joint Pesticides Permit, Application Type = New, Task 3 (Technical Review) Time = **2 hours[a]** (average).
  - Time to review the proposed location (surface water) and timing of the pesticide application and applicable water quality standards and restrictions or limitations = 1 hour.
    - **NOTE** – The Department considers issues such as the location of any downstream water supplies and the stocking schedules for the PA Fish and Boat Commission.
  - Time to review the maximum dosage rates proposed by the applicant in comparison to the product label – 1 hour.
- Major Industrial Waste Treatment Facility Individual WQM Permit, Application Type = New, Task 3 (Technical Review) Time = **80 hours[b]** (average).
  - Time to review the configuration of proposed treatment units and processes to verify conformance to published design standards and guidance = 40 hours.
  - Time to conduct research, review the chemical reactions and pollutant removal capabilities, and evaluate the potential for the proposed facility to meet effluent limits established in a draft NPDES permit = 40 hours.
- Land Application of Sewage Individual WQM Permit, Application Type = New, Task 3 (Technical Review) Time = **240 hours[c]** (average).
  - Time to review the configuration of proposed treatment units and processes to verify conformance to published design standards and guidance = 40 hours.
    - **NOTE** – New proposals for land application of treated sewage would also include the treatment facility.
  - Time to evaluate the potential for the proposed facility to meet effluent limits that would be established in a WQM permit = 40 hours.
  - Time to inspect the proposed land application site and conduct independent review and testing = 80 hours.
    - **NOTE** – The Department engineers and soils scientists will review physical characteristics of proposed land application sites including but not limited to soils, slopes, distance from surface waters, etc. Test pits may be dug and/or soils may be tested for cation exchange capacity and other parameters to confirm suitability for pollutant remediation.
  - Time to evaluate pollutant loading rates to the land surface and groundwater mounding below the land surface = 80 hours.
    - **NOTE** – The Department soils scientists and hydrogeologists will evaluate the capability of the crop(s) to be grown at the site to remove pollutants such as nitrogen, and the potential for nitrogen to adversely impact groundwater as a source of drinking water. These professionals will also consider subsurface conditions that would reduce the effectiveness of the soil profile to treat pollutants and maintain a hydrological balance.

ATTACHMENT B-3: WORKLOAD ANALYSIS FOR MONITORING AND COMPLIANCE (INSPECTION) ACTIVITIES

Facility/Activity Type	Number of Facilities (By Department Office and Totals)							Required Inspection Frequency	Avg No. Inspections / Year	Avg Hours / Inspection [1]
	SERO	NERO	SCRO	NCRO	SWRO	NWRO	Totals			
Major Sewage & IW Facilities, Individual Permits	59	48	84	43	110	53	397	CEI 1 / 2 FFY unless violations then 1 every FFY	230	24
Minor Sewage & IW Facilities, Individual Permits (Except SRSTPs/SFTFs)	221	358	588	268	599	395	2429	CEI 1 / 5 FFY (and 5% per year)	500	8
SRSTPs/SFTFs, Individual Permits	61	31	151	80	127	333	783	CEI 1 / 5 FFY (and 5% per year)	160	6
Minor Sewage & IW Facilities, General Permits	206	37	279	442	317	1335	2616	CEI, RTPT or ADMIN 1 / 5 FFY	550	4
CAFOs	13	14	317	72	7	3	426	CEI 1 / 5 FFY	125	8
Major CSOs	6	16	8	9	23	9	71	CSO 1 / 3 FFY	25	24
Minor CSOs	1	5	2	1	41	2	52	CSO 1 / 5 FFY	15	16
MS4s	204	150	207	19	256	30	866	CEI, DAI 1 / 5 FFY	180	16
IW Stormwater, Individual Permits	70	99	48	23	63	13	316	1 / 5 FFY (and 10% per year)	70	8
IW Stormwater, General Permits	277	199	438	214	419	247	1794	CEI, ADMIN 1 / 5 FFY	375	6
WQM Sewage & IW Reuse / Land Application	133	43	56	18	4	4	258	1/year	258	8
Complaints / Pollution Incidents (at Permitted and Non-Permitted Facilities)									1000 [2]	4

CEI = Comprehensive Evaluation Inspection
RTPT = Routine Partial Inspection (on-site inspection without completing CEI)
CSO = Combined Sewer Overflow (Inspection)
DAI = Data Audit Inspection
ADMIN = Administrative Inspection

Facility/Activity Type	Other Compliance Monitoring Activities										Total Admin Hours Needed / Year [7]	Total Staff Hours Needed / Year
	No. DMRs [3]	DMR Review (hrs)	No. Annual Reports	Annual Report Review (hrs)	No. Referrals [4]	Referrals (hrs)	No. Meetings [5]	Meetings (hrs)	No. Permits Reviewed [6]	Permits Reviewed (hrs)		
Major Sewage & IW Facilities, Individual Permits	5000	1	300	4	40	4	8	4	80	8	1080	12552
Minor Sewage & IW Facilities, Individual Permits (Except SRSTPs/SFTFs)	24300	0.75	1000	2	243	4	49	4	490	4	500	27353
SRSTPs/SFTFs, Individual Permits	2200	0.5	600	1	78	4	16	4	160	4	150	3676
Minor Sewage & IW Facilities, General Permits	800	0.5	2500	1	262	4	26	4	0	0	500	6252
CAFOs	0	0	426	4	43	4	5	4	20	6	80	3016
Major CSOs	0	0	71	4	7	4	2	4	0	0	15	920
Minor CSOs	0	0	52	2	5	4	1	4	0	0	10	368
MS4s	0	0	866	4	87	4	10	4	50	4	170	6932
IW Stormwater, Individual Permits	2900	0.75	316	2	32	4	6	4	65	4	70	3779
IW Stormwater, General Permits	3600	0.5	1794	2	180	4	18	4	0	0	360	8430
WQM Sewage & IW Reuse / Land Application	3100	0.75	258	4	26	4	5	4	0	0	50	5545
Complaints / Pollution Incidents												4000
										Total:	**2,985**	**82,823**
										Inspector FTEs:	**2**	**55.2**

NOTES:

1 The average number of hours per inspection includes preparation time, travel time, sample collection and data management activities, as applicable.

2 It is estimated from eFACTS/CTS that on average the Department receives 1,000 calls/year relating to water pollution; some of these calls are referred to other parties but the majority are investigated.

3 The number of DMRs per year per facility depends on facility type; some submit 12, others submit 1. An average number of DMRs per facility type was used.

4 Assumes that each year 10% of facilities are in non-compliance; an enforcement referral involves preparing documentation for compliance specialists. Inspectors may also prepare enforcement documents.

5 The Department estimates that meetings relating to compliance or enforcement, outside of inspections, occur at a rate of 2% per year for permittees with individual permits and 1% per year for permittees with general permits.

6 Inspectors review and comment on draft individual permits. Time reviewing final individual and general permits is considered as part of inspection preparation and is not considered here. New permits are not considered.

ATTACHMENT B-4: WORKLOAD ANALYSIS FOR ENFORCEMENT-RELATED ACTIVITIES

Effluent Violations

Region	No. Facilities Submitting DMRs	No. Effluent Violations Expected / Year [1]	Avg Compliance Specialist Time / Violation (hrs) [2]	Total Staff Hours Needed / Year
SERO	1000	900	1	900
NERO	800	360	1	360
SCRO	1500	920	1	920
NCRO	1000	390	1	390
SWRO	1400	1520	1	1520
NWRO	700	1250	1	1250
			Subtotal:	**5,340**

Late/Expired Permit Renewal Applications

Region	Avg No. Late Applications / Year [3]	Avg Compliance Specialist Time / Violation	Avg No. Expired Permits with No Application / Year [4]	Avg Compliance Specialist Time / Violation	Total Staff Hours Needed / Year
SERO	271	4	4	16	1,100
NERO	358	4	16	16	1,496
SCRO	348	4	25	16	1,492
NCRO	118	4	0	16	472
SWRO	264	4	35	16	1,196
NWRO	127	4	1	16	512
				Subtotal:	**6,268**

Violations Determined Through Inspection

Region	Avg No. Inspection Violations / Year [5]	Avg Compliance Specialist Time / Violation [6]	Total Staff Hours Needed / Year
SERO	493	4	1,972
NERO	243	4	972
SCRO	407	4	1,628
NCRO	213	4	852
SWRO	348	4	1,392
NWRO	133	4	532
		Subtotal:	**7,348**
		Total:	**18,956**
		Compliance Specialist FTEs:	**13**

NOTES:

1 Effluent violations as reported through the Department's eDMR system were evaluated over the past two calendar years (2016-2017). The number of facilities reporting violations was adjusted based on the ratio of total facilities required to submit DMRs to the actual number of facilities using eDMR (eventually all facilities will use eDMR but not everyone has been registered to date). The expected number of facilities that would be reporting violations electronically (based on the ratio previously described) was multiplied by the average annual violations reported to provide an estimate of the total violations that would be reported if all facilities were using eDMR. This is likely commensurate with the total number of violations being reported currently, both electronically and on paper, and varies by region.

2 This value represents the time it takes a compliance specialist to review each violation, document it in an enforcement action document, and correspond or meet with the violator to resolve the violation.

3 These figures represent the number of late applications submitted by the regulated community during 2017, as well as the number of facilities who failed to submit a renewal application. Both events require compliance actions, including but not limited to issuance of violation notices, correspondence with the permittee, and possibly civil penalties. An average of 4 hours per incident is estimated to be needed for compliance specialists to take these actions.

4 The average number of expired permits without receipt of renewal applications is shown for 2017. These events require research, correspondence and where necessary enforcement including civil penalties when it is determined that a discharge is occurring without a permit.

5 These figures represent the average annual number of violations (not related to effluent or permit applications) determined through inspections over the period 2013-2017.

6 The average amount of time spent on non-effluent and non-application violations is estimated as 4 hrs/violation. These violations require additional time to resolve as compared to effluent violations.

ATTACHMENT B-5: WORKLOAD ANALYSIS FOR SUPPORTING ACTIVITIES RELATED TO FUNCTIONS OF SOILS SCIENTISTS AND HYDROGEOLOGISTS

Soils Scientists

Permitting Support

Category	Application Type	No. Expected / Year	Soils Scientist Review Time (hrs)	Total Staff Hours Needed / Year
WQM - Land Application and Reuse of Sewage	New	1	80	80
	Renewal	25	40	1000
	Amendment	3	16	48
	Transfer	1	0	0
WQM - Land Application and Reuse of Industrial Waste	New	1	80	80
	Renewal	15	40	600
	Amendment	4	24	96
	Transfer	1	0	0
			Subtotal:	**1,904**

Inspection Support

Facility/Activity Type	No. Inspections / Year	Soils Scientist Inspection Time (hrs)	Total Staff Hours Needed / Year
WQM Sewage & IW Reuse / Land Application	258	8	2,064
		Subtotal:	**2,064**
		Total:	**3,968**
		Soils Scientist FTEs:	**3**

Hydrogeologists

Permitting Support

Category	Application Type	No. Expected / Year	Hydro Review Time (hrs)	Total Staff Hours Needed / Year
WQM - Land Application and Reuse of Sewage	New	1	80	80
	Renewal	25	40	1000
	Amendment	3	16	48
	Transfer	1	0	0
WQM - Land Application and Reuse of Industrial Waste	New	1	80	80
	Renewal	15	40	600
	Amendment	4	24	96
	Transfer	1	0	0
PAG-05 Groundwater Remediation - General Permit	New	3	24	72
	Renewal	0	8	0
	Amendment	0	8	0
	Transfer	1	0	0
			Subtotal:	**1,976**

Inspection Support

Facility/Activity Type	No. Reports / Year	Hydro Review Time (hrs)	Total Staff Hours Needed / Year
PAG-05 Annual Report Reviews	70	8	560
		Subtotal:	**560**
		Total:	**2,464**
		Hydrogeologist FTEs:	**2**

ATTACHMENT B-6: WORKLOAD ANALYSIS FOR SURFACE WATER ASSESSMENT ACTIVITIES

Task	Annual Hours per Task by Region						
	SERO	NERO	SCRO	NCRO	SWRO	NWRO	Totals
Aquatic Life Use Monitoring & Assessments[1]	1,863	2,051	3,200	2,635	2,643	2,485	14,877
Lake Trophic State Index (TSI)-Lake Assessments[1]	450	867	230	850	83	570	3,050
Recreational Use Monitoring & Assessment*	150	175	163	167	263	175	1,092
303(d) revisioning & TMDL incremental improvement	38	245	165	38	90	38	613
Fish Tissue Sampling	236	300	210	728	300	438	2,212
NPDES permit reviews including 316 a/b and Site-Specific Criteria/Chemical Additives	100	450	700	264	700	225	2,439
401 Certification & Dredging Permits	38	38	250	38	250	38	650
Pesticide Permits - Individual and Joint	300	456	451	38	83	50	1,377
Water Quality Network - Stream & Lake	216	339	99	270	45	288	1,257
Whole Effluent Toxicity Testing and Reviews	35	90	20	20	24	20	209
Continuous Instream Monitoring (CIM)	1,724	75	495	100	295	100	2,789
Point of First Use Surveys	250	345	341	38	325	38	1,336
Compliance Cause & Effect Surveys	400	400	193	227	400	667	2,287
Stream Surveys - Fish, Mussels, etc.	100	200	128	300	1,050	675	2,453
Misc. Program Support	150	150	150	150	150	150	900
Litigation Support	50	50	50	50	50	50	300
Supervisory Administrative	100	100	100	100	100	100	600
Totals:	**6,199**	**6,331**	**6,943**	**6,011**	**6,849**	**6,105**	**38,437**
Biologist FTEs[2]:	**4**	**4**	**5**	**4**	**5**	**4**	**26**

NOTES:

1 Regional workload for stream monitoring and assessment varies by region due to uneven distribution of stream miles, significant lakes and lake acres. Other work tasks vary considerably by region. For example, mussel surveys are necessary in the SWRO and NWRO for permit issuance but rarely occur in other regions.

2 Includes one supervisory biologist per region.

ATTACHMENT B-7: NEW POSITIONS REQUIRED FOR CLEAN WATER PROGRAM AND JUSTIFICATION

As a result of the workload analysis documented in Attachments B-1 through B-6, the Department determined that 38 new positions are required for its regional offices to carry out all required responsibilities under Chapters 91 and 92a. The following table presents the current and proposed staffing levels for the Clean Water Program in the Department's six regional offices. Where the term, "NPDES/WQM Current" is used, it means the current position's focus is on implementation of the NPDES and/or WQM programs under Chapters 91 and 92a. The regional offices also implement activities in other areas, including but not limited to sewage planning, vector management, and project finance management. This analysis did not consider these existing positions, but for the purpose of showing a comprehensive view of staffing levels, these positions are reflected by the statement, "Other Current." Highlighted rows reflect the number of staff the Department determined are necessary to carry out its responsibilities under Chapters 91 and 92a, by region (considering the volume of work that must be done by region). The column for "New – 91/92a Fees" reflects the number of positions, by job classification, that the Department would seek to create as a result of the revised fee regulations. For example, the Department currently has 47 engineer positions across Pennsylvania that focus on the review of NPDES and WQM permit applications, and the Department determined that it requires two additional positions to fulfill all of its permitting responsibilities in an effective manner.

Position	No. of Staff by Region						Totals	New - 91/92a Fees
	SERO	NERO	SCRO	NCRO	SWRO	NWRO		
Engineers - NPDES/WQM Current	8	6	11	5	13	4	47	
Engineers - Other Current	1	3	1	0	1	1	7	
Engineers - NPDES/WQM Required	8	7	12	5	13	4	49	2
WQ Specialists - NPDES/WQM Current	7	6	10	5	8	5	41	
WQ Specialists - NPDES/WQM Required	8	7	15	6	11	8	55	14
Sewage Planning Specialists - Total Current	5	4	7	3	5	4	28	
Sewage Planning Supervisors - Total Current	1	1	0	0	1	1	4	
Soil Scientists - NPDES/WQM Current	0	0	0	0	0	0	0	
Soil Scientists - Other Current	1	2	2	2	1	0	8	
Soil Scientists - NPDES/WQM Required	1	1	1	0	0	0	3	3
Biologists - NPDES/WQM Current	2	2	2	2	1	1	10	
Biologists - Other Current	2	0	1	0	0	0	3	
Biologists - NPDES/WQM Required	3	3	4	3	4	3	20	10
Biologist Supervisors - Total Current	1	1	1	0	1	1	5	
Biologist Supervisors - Total Required	1	1	1	1	1	1	6	1
Compliance Specialists - Total Current	3	0	2	0	1	0	6	
Compliance Specialists - Total Required	3	2	3	1	3	1	13	7
Hydrogeologists - NPDES/WQM Current	0	0	1	0	0	0	1	
Hydrogeologists - Other Current	1	1	2	1	0	0	5	

Position	No. of Staff by Region						Totals	New - 91/92a Fees
	SERO	NERO	SCRO	NCRO	SWRO	NWRO		
Hydrogeologists - NPDES/WQM Required	0	0	1	0	1	0	2	1
EG/EE Managers - Total Current	3	3	4	3	3	3	19	
EG/EE Managers - Total Required	3	3	4	3	3	3	19	0
EP Managers - Total Current	1	1	1	1	1	1	6	
EP Managers - Total Required	1	1	1	1	1	1	6	0
Program Totals - Current:	**36**	**30**	**45**	**22**	**36**	**21**	**190**	**38**
Program Totals - Required:	**39**	**36**	**55**	**26**	**45**	**27**	**228**	
NPDES/WQM Staff Totals - Current:	**21**	**15**	**27**	**12**	**24**	**11**	**110**	
NPDES/WQM Staff Totals - Required:	**24**	**21**	**37**	**16**	**33**	**17**	**148**	

The Department also determined that additional positions are necessary in the Bureau of Clean Water to improve the administration of the Clean Water Program. A workload analysis similar to Attachments B-1 through B-6 cannot be performed for these positions because the Bureau of Clean Water does not generally issue permits and conduct inspections. The Bureau of Clean Water positions, instead, guide and direct the activities of the Department's regional offices. The Bureau of Clean Water evaluated all of its responsibilities to determine where it currently lacks resources to effectively guide regional activities, respond to questions and concerns posed by the public and regulated community, develop policies, guidance, and regulations, provide adequate training, and interface with federal and state agencies. The table below summarizes the new positions in the Bureau of Clean Water that would be funded by the revised regulations.

Position	Division / Section	Description of Duties
1. Sr. Civil Engineer General	NPDES Permitting / Stormwater Construction	Provide training and guidance to delegated county conservation districts on implementation of the Chapter 102 NPDES program.
2. Sr. Civil Engineer General	NPDES Permitting / Stormwater Construction	Review the latest erosion and sediment control and post-construction stormwater management technologies and maintain Department guidance documents to include these technologies. This position would also serve as a liaison with other programs such as Oil & Gas and Mining.
3. Environmental Engineer	NPDES Permitting / MS4	Develop technical guidance and training materials related to IDD&E requirements of MS4 permits and provide technical assistance to the division and regional offices for determining pollutant loads and load reductions. This position would also serve as an in-house expert on land-based pollutant loading models.
4. Water Program Specialist	NPDES Permitting / MS4	Assume lead role in reconstituting an Act 167 statewide program, including development of policies, guidance and training materials for municipalities, counties and Department staff in order to implement the requirements of Act 167.
5. Water Program Specialist	NPDES Permitting / MS4	Develop technical guidance and training materials related to MS4 public involvement, housekeeping, and ordinances. This position would also recommend MS4 and Act 167 policies that better align with Chapter 102 implementation.

Position	Division / Section	Description of Duties
6. Environmental Engineer Manager	NPDES Permitting / NPDES	Oversee work conducted by the NPDES Section and supervise its staff.
7. Environmental Engineer	NPDES Permitting / NPDES	Develop and update internal, procedural guidance for the Clean Water Program, including Standard Operating Procedures (SOPs). This position would also serve as an in-house expert on administrative functions and tasks, including data management and federal regulations.
8. Environmental Engineer	NPDES Permitting / NPDES	Develop guidance, policies, and general permits with an emphasis on the use of pesticides, discharges from fish hatcheries and agriculture.
9. Environmental Engineer	NPDES Permitting / NPDES	Develop guidance, policies, and general permits with an emphasis on sewage treatment facilities and industrial waste.
10. Water Program Specialist	Municipal Facilities / Planning	Develop guidance and improve capabilities for public access to information concerning sewage plans for municipalities.
11. Environmental Engineer	Municipal Facilities / Planning	Develop guidance relating to implementation of Chapters 71, 72, and 73 to support the sewage planning process which is a prerequisite for NPDES permits.
12. Environmental Engineer	Municipal Facilities / Facilities Permits	Develop guidance relating to Water Quality Management (WQM) permitting.
13. Environmental Engineer	Municipal Facilities / Facilities Permits	Develop guidance to support the wasteload management program under Chapter 94, which protects waters of the Commonwealth from inadequately treated wastewater discharges.
14. Civil Engineer Consultant	Municipal Facilities	Develop guidance related to design standards for sewage and industrial wastewater treatment facilities, reuse of wastewater, and land application of wastewater.
15. Water Program Specialist	Operations / Data Systems	Develops guidance for and implements procedures relating to management of the Department's electronic Discharge Monitoring Report (eDMR) system and fee collection program.
16. Water Program Specialist	Operations / Wastewater Operations	Coordinates and provides support for technical and instructional activities for the Wastewater Outreach Assistance Provider Program, which is an important program for assisting wastewater treatment facilities.
17. Water Program Specialist	Operations / Wastewater Operations	Develops guidance for the MS4 inspection program.
18. Environmental Program Manager	Water Quality	Oversees the activities of four sections that administer Department programs relating to water quality standards, water quality assessments, surface water monitoring, and TMDL development.
19. Water Program Specialist	Water Quality / TMDL	Develop and implement TMDLs and Alternative Restoration Plans (ARPs). The position would evaluate data and coordinate with regional offices, federal agencies, local government and others to set priorities for the development of new TMDLs and the implementation of existing TMDLs via NPDES permits and nonpoint source (NPS) grant programs.
20. Biologist	Water Quality / Water Quality Standards	Assists in the development of surface water triennial review packages for water quality standards and stream designations.
21. Water Program Specialist	Water Quality / Water Quality Standards	Develop guidance for and assist regional offices with the review of Clean Water Act Section 316(a) thermal variances and Section 316(b) cooling water intake structure proposals.
22. Water Program Specialist	Program Support / Training	Plans, coordinates and implements statewide training to improve the regulated community's understanding of NPDES permits and compliance with the permits.

Position	Division / Section	Description of Duties
23. Water Program Specialist	Program Support / GIS Support	Provides geographic information system (GIS) and data management capabilities to the Bureau of Clean Water to improve the public's understanding of the Department's water quality standards and TMDLs.
24. Water Program Specialist	Program Support / GIS Support	Provides geographic information system (GIS) and data management capabilities to the Bureau of Clean Water to improve the public's understanding of the Department's NPDES permitting processes and implementation of water quality standards.
25. Water Program Specialist	Program Support / GIS Support	Provides geographic information system (GIS) and data management capabilities to the Bureau of Clean Water to improve the public's understanding of the Department's stormwater management programs.

In summary, the Department determined that the statewide Clean Water Program requires a total of 63 additional positions (38 at regional offices and 25 in the Bureau of Clean Water) to adequately fulfill its responsibilities to the public, regulated community, and federal agencies. The Department would need to increase fees by approximately $8 million per year compared to existing fee revenues to generate sufficient revenue to accommodate 63 additional positions. The amount of $8 million was determined by adding the costs of each new position, using the salary, benefits, and indirect costs associated with the appropriate pay grade for the position, and assuming that each position would be at a step 10 level (i.e., mid-range of the Commonwealth's pay scale).