



Pennsylvania Department of Environmental Protection

2 East Main Street  
Norristown, PA 19401

April 20, 2006

Southeast Regional Office

Phone: 484-250-5970

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**CERTIFIED MAIL NO. 7001 2510 0005 8144 1500**

Mr. David Katz  
Deputy Water Commissioner  
City of Philadelphia  
ARAMARK Tower  
1101 Market Street, 4th Floor  
Philadelphia, PA 19107-2994

Re: NPDES MS4 Permit No. PA0054712 -  
Amendment No. 1  
City and County of Philadelphia

Dear Mr. Katz:

Your amended permit is enclosed. Amended language is shown on page 3, Part I, Section A.1.a., paragraph 2.

Any person aggrieved by this action may appeal, pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. Section 7514, and the Administrative Agency Law, 2 Pa.C.S. Chapter 5A, to the Environmental Hearing Board, Second Floor, Rachel Carson State Office Building, 400 Market Street, P.O. Box 8457, Harrisburg, PA 17105-8457, 717-787-3483. TDD users may contact the Board through the Pennsylvania Relay Service, 800-654-5984. Appeals must be filed with the Environmental Hearing Board within 30 days of receipt of written notice of this action unless the appropriate statute provides a different time period. Copies of the appeal form and the Board's rules of practice and procedure may be obtained from the Board. The appeal form and the Board's rules of practice and procedure are also available in braille or on audiotape from the Secretary to the Board at 717-787-3483. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

IF YOU WANT TO CHALLENGE THIS ACTION, YOUR APPEAL MUST REACH THE BOARD WITHIN 30 DAYS. YOU DO NOT NEED A LAWYER TO FILE AN APPEAL WITH THE BOARD.

IMPORTANT LEGAL RIGHTS ARE AT STAKE, HOWEVER, SO YOU SHOULD SHOW THIS DOCUMENT TO A LAWYER AT ONCE. IF YOU CANNOT AFFORD A LAWYER, YOU MAY QUALIFY FOR FREE PRO BONO REPRESENTATION. CALL THE SECRETARY TO THE BOARD (717-787-3483) FOR MORE INFORMATION.



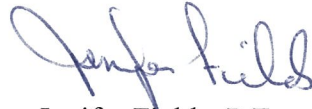
Mr. David Katz

- 2 -

April 20, 2006

If you have any questions, please call Mr. Paul Kallus at 484-250-5196.

Sincerely,

A handwritten signature in blue ink, appearing to read "Jenifer Fields".

Jenifer Fields, P.E.  
Program Manager  
Water Management

Enclosures

cc: Operations Section  
Ms. MacKnight – EPA (w/permit)  
Data Systems and Analysis  
File  
Re (GJS06WQM)52-3

**COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
BUREAU OF WATER QUALITY MANAGEMENT**

**AUTHORIZATION TO DISCHARGE UNDER THE  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)**

**MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) PERMIT  
FOR DISCHARGES OF STORM WATER FROM**

**CITY OF PHILADELPHIA**

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**NPDES PERMIT NO: PA0054712 – AMENDMENT NO. 1**

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In compliance with the provisions of the Clean Water Act (CWA), 33 U.S.C. Section 1251 et seq. (the "Act"), 25 Pa. Code Chapter 92, and Pennsylvania's Clean Streams Law, as amended, 35 P.S. Section 691.1 et seq., the Department of Environmental Protection (Department) hereby authorizes:

**City of Philadelphia  
ARAMARK Tower, 4th Floor  
1101 Market Street  
Philadelphia, PA 19107**

to discharge storm water and allowable non-stormwater (see Part I Section A.3) collected within its incorporated boundaries, from its municipal separate storm sewer system (MS4), to surface waters of the Commonwealth of Pennsylvania, subject to the terms and conditions that follow.

The authority granted by this permit is subject to the following further qualifications:

1. If there is a conflict between the application, its supporting documents and/or amendments and the terms and conditions of this permit, the terms and conditions shall apply.
2. Failure to comply with the terms and conditions of this permit is grounds for enforcement action; for permit termination, revocation and reissuance, or modifications; or for denial of a permit renewal application.
3. Complete application, in accordance with the requirements in 40 C.F.R. 122.26(d), for renewal of this permit, or notification of intent to cease discharging by the expiration date, must be submitted to the Department at least 180 days prior to the expiration date below (unless permission has been granted by the Department for submission at a later date), using the appropriate NPDES permit application form.

In the event that a timely and complete application for renewal has been submitted and the Department is unable, through no fault of the permittee, to reissue the permit before the expiration date below, the terms and conditions of this permit, including submission of the Discharge Monitoring Reports (DMRs), will be automatically continued and will remain fully effective and enforceable pending the grant or denial of the application for permit renewal.

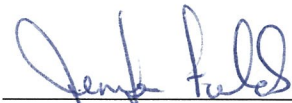
4. No condition of this permit shall release the City of Philadelphia (City) from any responsibility or requirement under other Federal or Pennsylvania environmental statutes or regulations or local ordinances.
5. The NPDES permit will expire at midnight on the expiration date.

**DATE PERMIT ISSUED**      September 30, 2005

**DATE PERMIT EXPIRES**      September 30, 2010

**DATE AMENDMENT ISSUED**      April 20, 2006

**ISSUED BY**



**TITLE**

Regional Manager  
Water Management

**Part I.**

**PERMIT CONDITIONS**

**A. APPLICABILITY AND LIMITATIONS ON COVERAGE**

1. This permit does not authorize stormwater discharges when one or more of the following conditions exist:
  - a. The discharge(s) contains hazardous pollutants, toxics or any substance which, because of its quantity, concentration or physical, chemical or infectious characteristics, may cause or contribute to an increase in mortality or morbidity in either an individual or the total population or pose a substantial present or future hazard to human health or the environment when discharged into the waters of the Commonwealth.

Should the Department or the City determine that such a discharge has occurred, or is occurring, from the City's MS4 system, such discharge shall, by the terms of this permit, constitute an unpermitted discharge, and the City shall take the steps outlined in this paragraph. The City shall conduct a study to determine the source, cause, frequency, and severity of such discharge and shall determine possible actions to address the condition. The study shall be completed, and provided to the Department, within 90 days of the Department's or the City's determination. Upon request by the City, the Department, in its discretion, may grant additional time to conduct the study. The study shall outline such steps as the City has determined are necessary to address and/or eliminate the unpermitted discharge, and the time frame for completion of the identified steps, and, upon Department approval, or within thirty days of submission of the study if no response is received from the Department, the City shall implement those steps in accordance with the schedule outlined in the study. The Department may determine that additional measures are necessary to address and/or eliminate the discharge, and shall inform the City in writing of such determination.

- b. The discharge(s) is not, or will not be, in compliance with the terms or conditions of this permit.
  - c. The applicant has failed and continues to fail to comply or has shown a lack of ability or intention to comply with a regulation, permit, schedule of compliance, or order issued by the Department.
  - d. The discharge(s) does not, or will not, result in compliance with applicable effluent limitations.
  - e. The discharge(s) is mixed with sources of non-stormwater, other than non-stormwater discharges that are:
    - i. Covered by and in compliance with a different NPDES permit.
    - ii. Identified by and in compliance with Condition I.A.3. of this permit.

- f. The discharge(s) direct, indirect, interrelated, interconnected or interdependent impacts would jeopardize a listed endangered or threatened species, or adversely modify designated critical habitat.
2. This permit does not authorize the permittee to discharge into its MS4 system any toxic or hazardous substance (including oil).
3. Except as provided in paragraph (a) below, all discharges covered under this permit shall be composed entirely of storm water, or be in compliance with an NPDES Permit (other than this permit) issued for the discharge.
  - a. The following non-storm water discharges may be authorized by this permit:
    - Discharges from fire fighting activities.
    - Dechlorinated potable water sources, including waterline and fire hydrant flushings.
    - Lawn watering and irrigation drainage.
    - Water from residential car washing.
    - Dechlorinated swimming pool discharge.
    - Water from crawl space sumps.
    - Pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents have not been used.
    - Springs and uncontaminated groundwater.
    - Air conditioner condensate where chemical additives have not been used.
    - Discharges from utility manhole work locations if covered by a discharge permit from PWD.

## B. LEGAL AUTHORITY

1. The City of Philadelphia (City) shall maintain adequate legal authority in accordance with the NPDES regulations, 40 Code of Federal Regulation (C.F.R.) 122.26(d)(1)(ii) or 122.26(d)(2)(i), throughout the term of this permit. A certification of legal authority has been submitted by the City. It has been reviewed by the Department and has been accepted as adequate. In the event that any provision of its legal authority is found to be invalid, the City shall make the necessary changes to maintain adequate legal authority.
2. The City shall control through ordinance, order, or other similar means, the contribution of pollutants and the quality of storm water discharged into its storm water system.
3. The City shall require, mandate, and enforce compliance with conditions in ordinances, contracts, and orders.
4. The City shall prohibit through ordinance, order or similar means, illicit discharges to its storm sewer system.
5. The City shall carry out all inspections, surveillance, and monitoring procedures necessary to determine compliance with permit conditions ordinances, contracts, and orders.

C. EFFLUENT LIMITATIONS

1. This permit establishes effluent limitations, in the form of Best Management Practices (BMPs), Storm Water Management Practices, and Erosion and Sedimentation (E&S) Plans.
2. For all storm water discharges covered under this permit, a water quality based effluent limitation may be required under applicable state and federal law, when necessary, to ensure that water quality standards and designated use(s) of the receiving water are attained.

D. SEDIMENT TOTAL MAXIMUM DAILY LOAD (TMDL) FOR WISSAHICKON CREEK

In conjunction with Condition F.2 below, and to initialize efforts towards complying with the Wissahickon Creek Sediment TMDL and towards the on-going goal of reducing sediment load and flow variability into the Wissahickon Creek from MS4 Outfalls and tributaries within City boundaries draining into the Wissahickon Creek, and notwithstanding up-stream municipalities contribution of sediment loads and flow rates, the City shall take the following actions:

- i. Within the first year of this permit, the City shall conduct a feasibility study to determine MS4 outfalls and tributaries to the Wissahickon Creek (within its boundaries) that cause an adverse impact to in-stream habitats as a result of transport of sediment and/or stream-bank erosion. The study shall include an evaluation of the outfalls and tributaries that have the greatest potential for improvement through implementation of BMPs and/or other methods. The study shall list all MS4 outfalls and tributaries to the Wissahickon Creek that have been evaluated and/or chosen for further study, rational for selection, and modeling results. The study shall be submitted as part of the annual report.
- ii. The City shall implement a monitoring plan based on the results of the feasibility study and include an outline of the plan in the annual report. At a minimum, the plan shall include modeling results and monitoring for Total Suspended Solids (TSS) and flow at selected MS4 outfalls and at the confluence of selected tributaries to the Wissahickon Creek during various flow events (low flow, normal flow, and storm flow).

The first goal of the sediment TMDL effort shall be to establish baseline data on the City's contribution of sediment loading and flow variations. The second goal shall be to evaluate and implement BMPs. Once BMPs have been constructed/implemented, post-BMP monitoring shall be performed during similar flow events as noted above. The third goal shall be to evaluate and document whether or not reductions have occurred and that waste load allocations (WLA) found in the Wissahickon Creek Sediment TMDL have been met with further evaluation of future plans and actions to take if WLAs were not met. All plans, actions, results, and recommendations performed each year shall be outlined in the annual report. These goals shall be accomplished within the term of this permit.

At the City's discretion, additional monitoring efforts may be conducted that document upstream municipalities contribution of sediment loading and flow variation. The City may also conduct monitoring in accordance with the Statewide Surface Water Assessment Program (SSWAP).

E. POLLUTANT MINIMIZATION PLAN (PMP) FOR POLYCHLORINATED BIPHENYLS (PCBS) IN THE CITY'S MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4).

The City shall submit a PMP for addressing PCBs that may be conveyed through its MS4 within twelve months of issuance of this permit for Department approval. The PMP shall contain the following elements:

1. Name and contact information for an individual who will serve as the City's contact for information concerning the PCB PMP.
2. Description and map of the City's separate storm sewer service area, including the location of all outfalls.
3. Description of all known materials, equipment, processes, soil areas or facilities within the MS4 service area from which PCBs are known to be released, directly or indirectly, into the City's MS4, including a description of the pathways if known. Pollutant concentrations shall also be reported if known.
4. Description of all known material, equipment, processes, soil area, or facilities within the MS4 service area that is known to contain PCBs, but it is not known to be releasing PCBs into the City's MS4.
5. During the permit term, the City shall collect and analyze twelve (12) in-stream samples for PCBs. The PMP shall include the planned locations of monitoring.
6. The City shall develop a report of all known PCB sources within its MS4 system that the City believes requires some control measure to reduce its discharge of PCBs. The City shall then work with the Department, and other appropriate agencies, to develop a plan of action to control the discharge of PCBs from these sources.
7. The Delaware River Basin Commission (DRBC), in cooperation with stakeholders throughout the Delaware Estuary, is analyzing the need for guidance for MS4 systems to develop PCB PMPs. This may lead to DRBC creating a template which could be used for Phase I MS4 systems within the Delaware River Basin to develop PCB PMPs. The City will work with DRBC and other stakeholders in developing these templates for MS4 systems.
8. The City shall demonstrate its compliance with the PMP by reporting the number of known sites, the number of sites referred for joint inter agency action, the results of its in-stream sampling activity and any other actions taken in furtherance of the PMP. Reporting shall occur annually as part of the City's Annual Storm Water Report.

F. STORM WATER MANAGEMENT PROGRAM

The City shall maintain a Storm Water Management Program in accordance with 40 C.F.R. 122.26(d)(2)(iv) which is acceptable to the Department. Details of the Storm Water Management Program, including results and recommendations, shall be included in the Annual Report.



The major parts of the Storm Water Management Plan shall be as follows:

1. SOURCE IDENTIFICATION

In the first annual report and thereafter upon the Department's request, the City shall submit to the Department the most current source information in GIS data layers, including the identification and mapping of storm sewer system outfalls including areas drained, land use activities, population estimates, runoff coefficients, publicly owned lands, bioassessment areas, location of retention/detention basins, and infiltration devices. Additionally, the City shall include industries, organized by watershed and Significant Industrial User [per 40 C.F.R. Section 403.3(t)], with facility name, address, NPDES permit number (if applicable), and description (which best reflects the principal products or services provided by each facility), that may discharge to the City's MS4 system. The City shall include any new sources, changes, municipal waste sites, and landfills in each subsequent annual report.

2. DISCHARGE MANAGEMENT, CHARACTERIZATION, AND WATERSHED-BASED ASSESSMENT AND MANAGEMENT PROGRAM

*will take 2 permit cycles*

The City shall develop and implement a watershed-based assessment and management program for the Pennypack, Poquessing, and Wissahickon Creek watersheds. In meeting this goal, the City shall collect information that currently exists on the nature and causes of water quality impairments and sources of pollution and develop and update monitoring plans to characterize the present state of the physical, chemical, and biological quality of each watershed. Based upon this preliminary assessment, the City shall develop a watershed-based monitoring approach suitable for supporting the evaluation of appropriate remedial measures as outlined in the watershed planning approach below.

The City shall conduct alternative analyses such that feasible and effective strategies, plans, and designs can be developed to implement restoration strategies that mitigate the impacts of discharges from municipal separate storm sewer systems in each watershed.

The watershed and discharge monitoring, management, and characterization program to be developed and implemented for each watershed shall include three major components that are outlined below.

Step 1 - Preliminary Reconnaissance: Permit issuance through end of year 2.

a. Land use and resource mapping

The City shall conduct mapping of information relevant to storm water management planning. The City shall make available upon request, and include in each annual report, GIS data layers, including the identification and mapping of storm sewer system outfall locations, contributing drainage area delineations, land uses and population estimates as defined by the Delaware Valley Regional Planning Commission (DVRPC), estimates of runoff coefficients, monitoring locations, and locations of existing BMPs, including BMPs constructed during the permit cycle.

b. Preliminary physical, chemical, and biological quality assessment

A monitoring plan describing the monitoring locations, parameters, and spatial and temporal factors shall be maintained by the City and updated as needed. The City shall document the findings of the physical, chemical, and biological assessment in a report that characterizes historical water quality information and submit the report on an annual basis as needed.

c. Inventory of point and non-point sources

The City shall generate and update a list of municipal and industrial point source discharges in the basin. The Department's e-FACTS/e-NOTICE and records management system (RMS) can be used as a source for discharges. Initial annual and seasonal estimates of non-point source pollution will be generated from available land use information and inventoried by sub-watershed, municipality, and county.

d. Preliminary problem assessment

Based upon the monitoring and assessment data, the City shall produce a preliminary problem assessment for the watershed that describes the nature and causes of impairments observed through the review of historical records and monitoring data.

Step 2 - Watershed Plan Development: Permit issuance through end of year 4.

a. Monitoring and Sampling

Based upon historical water quality issues, and additional issues identified in the preliminary problem assessment, the City shall collect monitoring data to characterize more fully the extent of physical, chemical, and biological impairments in the watersheds. The City shall maintain and update periodically, as needed, a monitoring plan that includes provisions and protocols for implementing in-stream monitoring. The monitoring may include, but is not limited to, the following:

- Discrete chemical monitoring via grab samples
- Continuous probe-based monitoring
- Wet weather monitoring using automated sampling or grab sampling
- Physical assessment of stream habitat
- Sewer assessment techniques

In each annual report, the monitoring program for the proceeding year shall be outlined. Additionally, the report will list the anticipated monitoring plan for the following year. The City shall work with other municipalities and counties that share each watershed to integrate monitoring information into a comprehensive assessment of the basin.

b. Quality Assurance/Quality Control (QA/QC) and data evaluation

The City shall develop QA/QC procedures for attaining the data quality objectives listed in the sampling protocol documentation provided in the monitoring plan.

c. Watershed Modeling

The City shall develop and implement an approach to estimate pollutant loadings from point and non-point sources in the watersheds. The approach will allow for assessment of effectiveness and costs of management alternatives in reducing pollutant loads.

d. Estimate of Loadings from the City's MS4 System

The City shall estimate annual and seasonal pollutant loads for all storm water outfalls in the watersheds. Estimates of pollutant concentrations shall be based on the nationally derived storm water event mean concentrations (EMCs) developed pursuant to the National Urban Runoff Program (NURP) database or any other database the City and the Department deem to be as reliable. Parameters shall include, but are not limited to: Total Suspended Solids (TSS), Biochemical Oxygen Demand (BOD<sub>5</sub>), Chemical Oxygen Demand (COD), total nitrogen, total phosphorus, fecal coliform, copper, lead, zinc, cadmium, and dissolved iron.

Stormwater runoff rates shall be estimated by the City's application of the USEPA's Stormwater Management Model (SWMM) model or any other model the City deems to be as reliable as the SWMM model. These loading estimates shall be included in the City's annual report.

e. Water Body Modeling

The City shall make recommendations in each annual report for the development of a technical approach for resolving the impacts of storm water discharges on in-stream quality.

f. Problem Definition and Water Quality Goal Setting

The City shall work with the Department, DCNR, and stakeholders to review the monitoring and characterization information and to define watershed protection and restoration planning goals.

g. Technology Evaluation

The City shall evaluate the effectiveness of a range of storm water management options in responding to the problems identified in the Step 1 assessment. The list of options to be evaluated may include some or all of the following:

- Requiring better Site Design
- Household hazardous waste collection
- Use review and attainability analysis
- Reducing effective impervious cover through better site design
- Porous pavement and subsurface storage
- Green rooftops
- Capturing roof runoff in rain barrels or cisterns
- Increasing size of sewer pipes
- Replacement/Rehabilitation of leaking/defective sewers
- Structural CSO storage facilities
- Maintaining/retrofitting existing storm water structures
- Modifying catch basins to delay storm water inflow
- Retrofitting existing sewer inlets with dry wells
- Installation and maintenance of drain guards/filters
- Residential dry wells and seepage trenches
- Infiltration basins
- Install and maintain storm sewer sediment and oil collectors
- Vegetated swales and open channels
- Bio-retention basins and porous media filtration
- Treatment wetlands: onsite and regional
- Dry retention basins
- Wet retention basins
- Increased frequency of street and inlet cleaning
- Other miscellaneous structural storm water treatment BMPs

h. Economic Assessment and Funding Requirements

The City shall complete an economic assessment of the implementation plan. The assessment will analyze the economic viability and affordability of the plan.

i. Public involvement

The City shall schedule stakeholder meetings to define watershed planning requirements, identify candidates to lead and/or convene the stakeholder groups, and schedule further activities.

Step 3 - Watershed Plan Implementation and Performance Monitoring: Permit issuance through expiration.

As part of the implementation for each watershed plan, the City shall develop a plan for monitoring the effectiveness of implemented storm water management measures. The City shall work with other municipalities, counties, and other watershed stakeholders to assess the benefits of management alternatives and develop an implementation plan that is responsive to the following goals:

a. Dry Weather Water Quality and Aesthetics

The first goal is to meet water quality standards in the stream during dry weather flows by focusing on the elimination of sources of sewage discharge during dry weather and renewing the focus on trash removal and litter prevention. The City shall contribute towards this goal by taking the following actions:

- i. The City shall continue to operate the Defective Lateral Program. The City shall continue to perform screening, property testing, and abatement of cross connections to the MS4 system, as described in the “Framework for Screening, Finding, and Abating Stormwater Pollution” document.
- ii. The City shall institute and task a maintenance crew to remove debris from waterways impacted by storm water discharges.
- iii. The City shall complete the relining of the 3,100-foot stretch of sewer along Lincoln Drive starting approximately at storm water Outfall W-068-05 and proceeding upstream to approximately Arbutus Street.
- iv. During this permit cycle, the City shall revisit each of the City’s 434 permitted stormwater outfalls and inspect them for dry weather flow. If flow is observed, the outfall shall be sampled in accordance with sampling plan. Based on sampling results, the City may amend its list of priority outfalls. Results of all samples will be reported to the Department on a quarterly basis and summarized in the annual report.
- v. The City shall sample the dry weather flow at outfalls designated as priority outfalls for the Defective Lateral Program on a quarterly basis to assess program effectiveness. Results will be reported to the Department on a quarterly basis and summarized in the annual report.

- vi. The City shall perform Priority Outfall Closure Testing as described in the “Framework for Screening, Finding, and Abating Stormwater Pollution” document and submit the results to the Department for consultation before removing an outfall from the priority area designation.

b. Healthy Living Resources

The second goal is to improve the number, health, and diversity of the benthic community invertebrate and fish species in the watersheds impacted by stormwater. This will require investment in habitat improvement and measures to provide the opportunity for organisms to avoid washout or burial during storms. Improving the ability of an urban stream to support viable habitat and fish populations must focus primarily on the elimination or remediation of the more obvious impacts of urbanization on the stream. These include loss of riparian habitat, eroding and undercut banks, scoured streambed or excessive silt deposits, channelized and armored stream sections, and invasive species. The City shall continue towards this second goal by taking the following actions:

- i. The City shall continue to work with adjacent counties and municipalities to develop integrated storm water management plans as part of the watershed planning process.
- ii. The City shall assess the benefits of implementing a Natural Stream Channel Design (NSCD). The NSCD approach restores a stream by using different approaches: reconstructing stream with natural geometry that is better adapted to present day flows; reestablishing the stream bank to allow for improved access to the flood plain; installing in-stream energy dissipating devices (rock weirs, j-vanes, etc.); create low velocity nulls, by using vernal pools to achieve flood flow attenuation and treatment. Subject to the approval of the community, approval by affected landowners and any legislative or regulatory approvals, during the permit cycle, the City shall design and implement an NSCD approach for the improvement of a stream segment and shall determine the effectiveness of NSCD restoration principles.
- iii. The City shall develop and implement a monitoring program to assess the effectiveness of the NSCD restoration approach in restoring stream water quality and biological communities.

c. Wet Weather Water Quality and Quantity

The third goal is to improve in-stream water quality by reducing the impact of wet-weather events. Improving water quality and flow conditions during and immediately following storms is the most difficult goal to meet in the urban environment. The current approach to achieve this goal shall include implementation of interim goals for reducing wet-weather pollutant loads and storm water flows, along with monitoring

for the efficacy of control measures. The watershed plan developed for each watershed shall provide initial load reduction targets for parameters that impact the water quality goals. The City shall contribute towards this third goal by taking the following actions:

- i. The City shall implement various types of storm water BMP projects within the permit cycle. One type of BMP is the NSCD, which will be implemented pursuant to Section b(ii) above. Other BMPs may include, but are not limited to, stormwater wetlands, infiltration projects, riparian buffers, NSCD, porous pavements, low impact development (LID), and green roofs. The City shall monitor the efficacy of at least three types of demonstration projects with the permit term. The goal of the monitoring will be to demonstrate what improvements to water quality and water quantity the projects are providing to receiving streams. Monitoring shall be done during both dry and wet-weather periods to capture their efficacy during varying hydrologic conditions.

The goals outlined above are recognized as watershed goals. One of the final goals is for the stormwater management plan to meet the Wissahickon Creek Sediment TMDL WLAs. If not met, the stormwater management plan shall be revised to require use of expanded or better-tailored BMPs when monitoring demonstrates they are necessary to implement the WLAs and protect water quality.

While the City can contribute to these goals by taking actions specified in this permit, ultimate achievement may require that entities outside the City, along with the City, take necessary steps to manage stormwater on a watershed basis. The City shall continue to partner with these entities towards the advancement of the goals set forth.

3. DETECTION, INVESTIGATION, AND ABATEMENT OF ILLICIT CONNECTIONS AND IMPROPER DISPOSAL

The City shall maintain a program to detect and impose appropriate abatement requirements for illicit discharges and improper disposal to the municipal separate storm sewer system. The program shall include the following elements:

- a. Prevention of Illicit Discharges
  - i. Sewer and Lateral Inspections

The City shall require strict compliance with the City's "Plumbing," "Construction of Sanitary Lines," "Storm Water Management," and "Use of Sanitary & Storm Systems" Codes, requiring permits for connections to the sewer and storm sewers, and ensuring that sanitary waste shall not be drained into storm sewers. Where permits have been issued, City inspectors shall verify that proper connections to sanitary and storm sewers have been made. The City shall require a certification of proper connections by the contractor, with a copy of the certification given to the homeowner.

b. Investigation of Illicit Discharge Sources

- i. The City shall continue to maintain a system to use analytical data and observations to rank the MS4 outfalls according to their priority for corrective actions. The outfalls will be ranked according to factors that are identified with the presence of illicit discharges in the sewershed, and according to the potential for the site to be a health risk or a nuisance to the community. Ongoing water sampling and observations at the outfalls shall be used to update the priorities list periodically. The City shall promote the public reporting of water pollution in City streams, and shall use the information from such public complaints to update the effort to rank the priority of MS4 outfalls for corrective action.

Notwithstanding the need to periodically update the priorities list discussed above, the sewersheds which have been previously identified as priorities, and where a substantial amount of investigation and abatement has been done, should be carried through the entire process through closure, instead of being re-ranked when the contamination levels show a reduction.

- ii. The City shall continue to investigate dry weather flow and evidence of sanitary sewage contamination within impacted watersheds in an effort to identify residential Cross Connections, Internal Cross Connections, and other sewer lateral defects. The method of investigation will conform to the document entitled "Framework for Screening, Finding, and Abating Stormwater Pollution." This Procedure may be modified by the Department's approval of a written proposal submitted by the City.

Investigation will continue within each particular outfall area (sewershed) until the City believes that the outfall area may be closed. Closure of the defective laterals effort in a certain outfall area shall be as provided in the "Framework for Screening, Finding, and Abating Stormwater Pollution."

The City shall carry out investigations at a level of activity that is sufficient to maintain a significant rate of progress. Significant progress shall be defined as being a rate sufficient to show that the total number of proper connections confirmed each year shall be at least 2,500. (This number may include connections that have been abated after being identified as defective.) The numbers of tests completed will be included within the required Quarterly Report and Annual Report (see Condition F.1.e. *Illicit Connection Status Reporting* below).

- iii. The City shall ensure that the Standard Operating Procedure/Methods (SOP) for illicit connections detection and identification is updated as necessary. The City shall ensure that all field crews who conduct dye testing have been trained and supplied with the updated SOP and field inspection forms. The dye testing SOP and inspection forms shall be made available to the Department upon request.



c. Definitions used in this section

- “Cross Connection” is a lateral connection in which a Dye Test shows that flow in the sanitary lateral discharges to the storm sewer.
- “Dry Weather Flow” is defined as a flow that is detected after an elapse of 72 hours of a continuous dry spell from the previous rainfall event.
- “Fresh Air Inlet” (also “FAI”) is the vent on a sewer lateral pipe that lies outside the building and upstream of the pipe’s connection to the City sewer. Typically both the sanitary and storm laterals each have a FAI.
- “Internal Cross Connection” is a situation where the main lateral connections are proper (sanitary lateral to sanitary sewer, and storm lateral to storm sewer), but where one or more plumbing fixtures within the property is (are) found to be connected to the storm lateral.
- “Interconnection” is a situation where the FAIs are found to properly plumbed to the City sewers, but there is a defect in the lateral between the FAI and the property.

d. Abatelements

For the term of this permit, the City shall operate a Cross Connection Abatement Program that shall have the following elements:

- i. Cross Connections and other sewer lateral defects that are identified by the investigation program described above shall result in a written notice from the City to the property owner, describing the nature of the defect and advising the property owner of the actions that will be necessary to abate the problem. Such Notices of Defect shall be provided to the property owner within 30 days of the City making a determination about the nature of the condition.
- ii. At residential properties, all Cross Connections shall be abated by the City, using the funding and implementation process that has been created for that purpose. Internal Cross Connections and Interconnections shall be abated as provided in the City’s Plumbing and Construction of Sanitary Lines Codes.
- iii. The City shall require that sewer lateral defects (including Cross Connections, Internal Cross Connections, or Interconnections) at commercial and industrial properties be promptly corrected by the property owner.

- iv. Starting on July 1, 2005, for residential defective laterals, the City shall have the defect corrected within 120 days of the date of the Notice of Defect; or, if the defect is not abated within that time frame due to lack of homeowner/occupant cooperation, then the City shall institute administrative or legal proceedings against the homeowner, seeking the immediate abatement of the defect. Defects identified prior to July 1, 2005, shall either be abated, or an action instituted, prior to November 1, 2005. The goal of these actions shall be to abate the defective lateral as soon as reasonably possible.
  - v. The City shall perform confirmation testing after each abatement has been completed to assure that the property is properly connected.
- e. Defective Connection Program Reporting
- i. Four times each year, the City shall compile and submit to the Department a quarterly report, which shall provide an update on its illicit connection program. The Quarterly Reports shall cover the periods July through September, October through December, January through March, and April through June. The Reports shall be due no later than 45 days from the end of each reporting period.
  - ii. The following information shall be included in the quarterly report:
    - 1. Details of significant work performed during the previous quarter on all MS4 outfalls, including the following:
      - Summary information about source investigation efforts through dye testing, inspections, field screening, etc. This should include a numerical summary of properties determined to be properly connected, and properties with defects, as determined during the reporting period. The outfall areas in which work was conducted during the reporting period should be identified.
      - Summary information, including a numerical summary of source corrections (abatelements) achieved through homeowner notification, enforcement, or City sponsored construction.
      - For those outfalls (sewersheds) that have been identified as “priority” outfalls, include a progress assessment and other comments as appropriate.
      - Results of all outfall sampling and inspections performed during the reporting period.

- A summary of all sewer chokes, or other problems not related to defective laterals, that resulted in the discharge of sanitary sewage directly or indirectly to a stream.
- A discussion of the City's goals for the upcoming quarter.

#### 4. MONITOR AND CONTROL POLLUTANTS FROM INDUSTRIAL SOURCES

##### a. Applications/Permits

The City and the Department will coordinate their efforts to control storm water from industrial activities, which is discharged to the municipal separate storm sewer system. Industries will apply to the Department for NPDES permits for the discharge of storm water runoff from industrial activities. The permit applications will be reviewed and processed by the Department. The Department will issue either a General or Individual permit for the discharge if all permitting requirements are met, and send a copy of the permittee's transmittal letter to the City. Copies of permits are available through the Department's records management program.

##### b. Inspections

- i. The City shall conduct inspections at industries that are Superfund Amendments and Reauthorization Act (SARA) Title III facilities, facilities with an individual NPDES permit for discharges to the MS4, and additional facilities that could provide additional information to the City about the impact of industrial discharges on municipal separate storm sewer system discharges. Inspections will be carried out by City personnel on at least an annual basis. Inspections will include an on-site visual inspection, verification of the PPC Plan kept on site, verification of permit requirements, proper operation and maintenance of BMPs, and a review of DMRs for compliance with the terms and conditions of the NPDES storm water permit.
- ii. The City shall update their industrial waste inspection forms to include NPDES storm water permit requirements within six months of the effective date of this permit.

##### c. Monitoring/Enforcement

- i. Industries will monitor their discharges in accordance with their NPDES permit requirements and submit DMRs to the Department. These DMRs are available at the facility and at the Department for inspection. The City may request the Department to require the permittees to take additional samples to monitor the storm water effluent, as necessary, to ensure compliance with NPDES effluent limitations.

- ii. Enforcement of the NPDES permits will be initiated by the Department. The City shall report observed violations of NPDES permit terms and conditions to the Department for further investigation. The City shall initiate enforcement of violations of City storm water ordinances and regulations.

5. MONITOR AND CONTROL STORM WATER FROM CONSTRUCTION ACTIVITIES

a. Construction Site Runoff Control

The City shall implement and enforce a program to reduce pollution in any stormwater runoff to the MS4 system from construction activities that result in a land disturbance of greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale that equals one acre or more. The City shall, at a minimum, as part of this program:

- Enact an ordinance to require erosion and sediment controls, as well as sanctions to ensure compliance.
- Require construction site operators to implement appropriate erosion and sediment control BMPs.
- Require construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality.
- Implement procedures for site plan reviews which incorporate consideration of potential water quality impacts.
- Implement procedures for receipt and consideration of information submitted by the public.
- Implement procedures for site inspection and enforcement of control measures.

b. Post-Construction Stormwater Management in New Development and Redevelopment

The City shall implement and enforce a program to reduce pollution in any stormwater runoff to the MS4 from new development and redevelopment projects that result in a land disturbance of greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale that equals one acre or more. The City shall, at a minimum, as part of this program:

- Implement strategies which include a combination of structural and/or non-structural BMPs appropriate to the local community.

- Require volume control, including infiltration BMPs where practicable. The inability to provide infiltration BMPs should be justified through appropriate site testing (i.e., soils, geology, limiting zones, existing contamination, etc.).
- Use an ordinance to address post-construction runoff from new development and redevelopment projects.
- Ensure adequate long-term operations and maintenance of BMPs.

c. Applications/Permits

Since the City and the County of Philadelphia do not have a Conservation District, the Department will serve as the Conservation District for the City of Philadelphia and will review and process all permits and approvals pursuant to the NPDES Construction Permitting Requirements and Chapter 102 Regulations, relating to Erosion Control. The City will continue to be notified through Act 14, Municipal Notification, by any applicants applying for a permit to discharge storm water from construction activities. The City, or any other entity, can sign up for e-NOTICE to receive information on permits.

d. Inspections

Copies of Department construction site inspections will be available through the Records Management Program at the Department's Norristown Office. On a case-by-case basis, the Department may forward copies of inspections to the City using the following address:

Manager, Stormwater Program  
Philadelphia Water Department  
ARAMARK Tower Building, 4th Floor  
1101 Market Street  
Philadelphia, PA 19107

e. Monitoring/Enforcement

Enforcement will be initiated by the Department for non-compliance with permit conditions. The City will be copied on all correspondence regarding non-compliance cases.

f. NPDES Permit Requests

The City may request from the Department a separate General or Individual NPDES permit to be issued for any facility that discharges storm water associated with industrial or construction activity into the City's MS4 system.

g. The City Planning Commission, Licensing & Inspection (L&I), and/or the Water Department will distribute a Storm Water BMP handbook and Construction Site BMP Sediment & Erosion Control Checklist to developers and other parties as needed.

6. WATERSHED, COMBINED SEWER OVERFLOW (CSO), AND SOURCE WATER PROTECTION PROGRAMS

The City shall share Storm Water, CSOs, and Source Water Program resources to support initiatives to control point and non-point source discharges, to implement BMPs to prevent and reduce contaminated runoff and to enhance the health of the region's waterways.

7. MISCELLANEOUS PROGRAMS AND ACTIVITIES

a. Pollutant Migration/Infiltration to the MS4 System

A summary of detected pollutant migration/infiltration to the MS4 system and steps to abate the cause shall be included in the Annual Report.

b. Public Education and Awareness

- i. The City shall emphasize its legal responsibilities to comply with the CWA and Clean Streams Law in its public education literature. The City shall educate the public regarding the impacts of storm water in the receiving streams and aquatic life.

c. Pesticides, Herbicides, and Fertilizer Controls

- i. The application of pesticides by the City shall be in accordance with the City's Integrated Pest Management protocol. Employee training will be conducted annually on the protocol.
- ii. The City shall provide education materials to private pesticide users through its Department of Health inspectors. Any specific inquiries for information regarding proper application of pesticides will be referred to the State Department of Agriculture.

d. Snow Management Plan

The City shall provide the Department with a copy of the snow removal and disposal plan. The plan must indicate where the City disposes of snow removed from city properties and streets.

e. Municipal/hazardous Waste, Storage, Treatment, and Processing Facilities

The City shall identify priorities and procedures for inspections/monitoring stormwater runoff from waste treatment, storage, and processing facilities.

8. BEST MANAGEMENT PRACTICES (BMPs)

As a minimum, the City shall implement the BMPs outlined in this permit. This list is subject to change following review of the Annual Report by the Department and discussion with the City regarding the effectiveness of the BMPs, and subject to formal modification by permit amendment.

- a. Storm Sewer Discharge Ordinance
  - i. Within 90 days of the effective date of this permit, the City shall submit the latest storm sewer discharge ordinance to the Department and a description of how it maintains compliance with the ordinance.
- b. Commercial and Residential Source Controls
  - i. The City shall maintain the Mingo Creek Surge Basin and report any new control structures to the Department.
  - ii. The City shall identify, characterize, and require maintenance of existing privately owned structural controls to the extent that existing development agreements have provided for maintenance and enforcement by the City or where structures are in violation of the City's Storm Sewer Discharge Ordinance. The City will require developers proposing new structural control systems that discharge to the municipal storm sewer system to provide maintenance schedules for the proposed systems as part of the subdivision review process.
  - iii. During the term of this permit, the City shall assess the impact of structural controls on a watershed basis.
- c. The City Planning Commission and Water Department shall provide a review of the drainage plans for new development, which addresses both flood control and potential storm water pollutants. The City shall require the use of BMPs in new development and redevelopment consistent with city, state, and federal storm water management laws and requirements.
- d. The City shall operate and maintain public roadways using the following BMPs to reduce the impact on receiving waters of discharges from the municipal separate storm sewer system:
  - i. Deicing Practices and Salt Storage

The City will work to reduce the amount of salt used for deicing practices, consistent with its comprehensive snow emergency management procedures. The City will maintain covered structures over salt piles.

- ii. Street and Inlet Cleaning Practices
  - o The City will maintain its street cleaning program goal of weekly cleaning of commercial areas and annual cleaning of residential areas.
  - o The City will promote, develop, and implement programs to increase public awareness of the importance of keeping streets and inlets free from litter and hazardous materials.
- iii. The City will maintain all city-owned storm sewer inlets. Routine maintenance will include scheduled cleaning of trapped inlet catch basins. The City will respond to complaints expeditiously and clean clogged inlets.
- e. Animal Waste and Code Enforcement
  - i. The City will distribute educational material regarding control of animal waste and regulate animal waste disposal, including the enforcement of cleanup of pet waste, leash laws, and inspection of livestock and rendering facilities with emphasis on manure and waste processing. The quantity of materials and methods of distribution shall be reported in the annual report.
- f. Flood Management and Flood Control Devices
  - i. The City shall continue to review any proposals for land development in accordance with City Code 14-1606, to ensure structures built within the floodplain are located a minimum of one-foot above the 100-year flood elevation.
  - ii. The City shall evaluate new and existing structural drainage controls for both flood management and pollution control considerations. The City shall evaluate whether it is feasible to retrofit existing devices to provide additional pollutant removal from storm water.
  - iii. The City shall work to reduce stream bank erosion and investigate alternative approaches to stream bank restoration. The City will undertake efforts to enhance wetlands in parks and other areas as a means of mitigating the effects of stormwater runoff.
- g. Sanitary Infiltration Controls
  - i. The City will limit infiltration of seepage from municipal sanitary sewers to municipal separate storm sewers. The City will conduct maintenance activities to prevent and abate infiltration. Where chronic sanitary infiltration has been identified, the City will conduct detailed investigations and take appropriate corrective action to abate the problem(s). A record will be kept by location of the investigation and correction action.



- ii. The City will inspect and require remediation of on-lot septic/disposal systems on a complaint driven basis.
  - iii. The City will maintain procedures to investigate, remediate, and report sanitary infiltration by incident location, date identified, date corrected, and method of discharge.
- h. Spill Prevention and Response

The City will contain and respond to spills that may discharge to the municipal separate sewer system in accordance with guidelines developed by the Philadelphia Local Emergency Planning Committee. The updated Spill Response Plan shall be submitted to the Department with the next Annual Report.
- i. Public Reporting of Illicit Discharges, Improper Disposal

The City shall promote, publicize, and facilitate public reporting of the presence of illicit discharges or water quality impacts associated with discharges from municipal separate storm sewer systems through the use of hotline numbers for illicit connections and improper disposal, and public education programs.
- j. Used Oil and Toxic Material Disposal

The City shall facilitate the proper disposal of used oil and toxic materials through the distribution of educational material and information from the City's Recycling Office on at least a quarterly basis. Public announcements, educational brochures, recycling stations, and hotline numbers will be available.
- k. Storm Water Inlet Labeling/Stenciling

The City shall continue to label/mark stormwater inlets with an identification that clearly states that it is for storm water only and a warning that dumping down the inlet is strictly prohibited.

G. ASSESSMENT OF CONTROLS

The City shall estimate loadings of pollutants and flows from the MS4 system and sewer sheds, and estimate reductions of the same as a result of implementing components of the stormwater management plan and include the data in the annual reports.

H. FISCAL RESOURCES

1. The City shall maintain adequate program funding to comply with all conditions of this permit as estimated.
2. The City shall, for each fiscal year covered by the permit, submit a fiscal analysis of the necessary capital and operation and maintenance expenditures necessary to accomplish the activities of the SWMM. The analysis shall include a description of funds that are proposed to meet the necessary expenditures, including legal restrictions on the use of such funds. This information shall be included each year in the Annual Report.

I. ANNUAL REPORT

1. The City shall submit an Annual Report as required under 40 C.F.R. 122.42(c) which will document progress and facilitate long-term assessment of the City's storm water program. The Annual Report shall be submitted to the Department by the anniversary date of permit issuance for each year of the permit term.
2. The Annual Report shall include, but not be limited to:
  - a. The status of implementing components of the storm water management plan that are required in this permit, including any proposed changes.
  - b. Summary of activities, including monitoring data that are accumulated throughout the reporting year.
  - c. Best Management Practices incorporated/implemented during reporting term.
  - d. A financial summary, including annual expenditures and budget for the year following each annual report.
  - e. A summary describing the number and nature of enforcement actions, inspections, and public education programs (including quantity of materials distributed).
  - f. Identification of water quality improvements or degradation both within the City's incorporated boundary and downstream.
  - g. Estimated reductions in loadings of pollutants and flows from the MS4 system as a result of implemented plans in the previous year.
  - h. Any other information specified in the permit as required for inclusion in the Annual Report.
3. The Annual Report shall be submitted to:

Water Management Program    and    EPA, Region III Southeast Regional Office        Water Protection Division 2 East Main Street                PA/DE/WV Branch (3WP11) Norristown, PA 19401              1650 Arch Street Philadelphia, PA 19103
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4. The Department will review the Annual Report in a timely manner making every effort to respond within 60 days, and approve or disapprove any deletions and/or additions to the Storm Water Management Program.

## **Part II. STANDARD PERMIT CONDITIONS**

### **1. MANAGEMENT REQUIREMENTS**

#### **a. Permit Modification, Termination, or Revocation and Reissuance**

- i. This permit may be modified, suspended, or revoked in whole or in part during its term for causes including, but not limited to, any of the causes specified in 25 Pa. Code, Chapter 92 and 40 C.F.R. 122.41(f).
- ii. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination; or a notification of planned changes or anticipated non-compliance, does not stay any permit condition.

#### **b. Duty to Provide Information**

- i. The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit; or to determine compliance with this permit.
- ii. The permittee shall furnish to the Department, upon request, copies of records required to be kept by this permit.
- iii. The permittee shall notify the Department promptly if it becomes aware that it failed to submit relevant facts or submitted incorrect information in the original MS4 application.

#### **c. Signatory Requirements**

All reports, certifications, or information either submitted to the Department or the operator of a large or medium municipal separate storm sewer system shall be signed.

- i. For a municipality, state, federal, or other public agency, documents must be signed by either a principal executive officer or ranking elected official or a duly authorized representative of that person.
- ii. A person is a duly authorized representative only if:
  - a. The authorization is made in writing by a person described above and submitted to the Department with the reports.
  - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of manager, operator, superintendent, or position of equivalent responsibility or an individual or position having overall responsibility for environmental matters for the company (A duly authorized representative may thus be either a named individual or any individual occupying a named position).

iii. Changes in Authorization

If an authorization is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part B.1.c must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.

d. Transfer of Ownership or Control

- i. This permit is not transferable to any person except after notice to the Department.

In the event of any pending change in control or ownership of facilities from which the authorized discharges emanate, the permittee shall notify the Department by letter of such pending change at least 30 days prior to the change in ownership or control.

e. Removed Substances

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters or drinking water shall be managed and disposed of in accordance with the requirements of the Solid Waste Management Act, 35 P.S. Section 6018.101, et seq., and in a manner such as to prevent any pollutant from such materials from adversely affecting the environment.

f. Facilities Construction, Operation, and Maintenance

The permittee shall design and build and, at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances), including BMPs such as PPC Plans, E&S Plans, and any storm water pollution prevention or management plans, which are installed or used by the permittee to achieve compliance with the conditions of this permit. BMPs shall be designed, implemented, and maintained to minimize or eliminate storm water runoff to the maximum extent practicable. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems, installed by a permittee only when necessary to achieve compliance with the conditions of the permit.

g. Adverse Impact

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit, which has a reasonable likelihood of adversely affecting human health or the environment.

## 2. RESPONSIBILITIES

### a. Duty to Comply

The permittee must comply with all terms and conditions of this permit. Any permit non-compliance constitutes a violation of the Pennsylvania Clean Streams Law and the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit or permit renewal.

### b. Penalties for Violations of Permit Conditions

#### 1. Criminal

- a. Negligent Violations. The CWA provides that any person who negligently violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment for not more than one-year, or both. In addition, Section 602 of the Clean Streams Law provides criminal penalties for violations of permit conditions.
- b. Knowing Violations. The CWA provides that any person who knowingly violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a fine of not less than \$5,000 nor more than \$50,000 per day of violation, or by imprisonment for not more than three years, or both. In addition, Section 602 of the Clean Streams Law provides criminal penalties for violations of permit conditions.
- c. Knowing Endangerment. The CWA provides that any person who knowingly violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act and who knows at that time that he is placing another person in imminent danger of death or serious bodily injury is subject to a fine of not more than \$250,000, or by imprisonment for not more than 15 years, or both. In addition, Section 602 of the Clean Streams Law provides criminal penalties for violations of permit conditions.
- d. False Statement. The Clean Water Act provides that any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other documents filed or required to be maintained under the Act or who knowingly falsifies, tampers with, or renders inaccurate, any monitoring device or method required to be maintained under the Act, shall upon conviction, be punished by a fine of not more than \$10,000 or by imprisonment for not more than two years, or by both. If a conviction is for a violation committed after a first conviction of such person under this paragraph, punishment shall be by a fine of not more than \$20,000 per day of

violation, or by imprisonment of not more than four years, or by both (see Section 309(c)(4) of the CWA). In addition, the provisions of the Pennsylvania Crimes Code relating to False Swearing and Unsworn Falsification provide criminal sanctions for such actions. See 18 Pa. C.S. Sections 4903-4904.

2. **Civil Penalties.** The CWA provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a civil penalty not to exceed \$25,000 per day for each violation. In addition, Section 605 of the Pennsylvania Clean Streams Law provides for penalties up to \$10,000 a day for violations of permit conditions, for each separate offense.
3. **Administrative Penalties.** The CWA provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to an administrative penalty, as follows:

- a. **Class I penalty.** Not to exceed \$10,000 per violation nor shall the maximum amount exceed \$25,000.
- b. **Class II penalty.** Not to exceed \$10,000 per day for each day during which the violation continues nor shall the maximum amount exceed \$125,000.

- c. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

- d. Penalties and Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the CWA (33 U.S.C. Section 1321) or Section 106 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

- e. Property Rights

The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

f. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

g. Other Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by Section 510 of the CWA.

h. Right of Entry

Pursuant to Sections 5(b) and 305 of the Pennsylvania Clean Streams Law (35 P.S. Sections 691.1(b) and 691.305) and 25 Pa. Code Chapter 92, and Section 1917-A of the Administrative Code, the permittee shall allow the head of the Department, the EPA Regional Administrator, and/or an authorized representative of EPA, the Department, or in the case of a facility which discharges to a municipal separate storm sewer, an authorized representative of the municipal operator or the separate storm sewer receiving the discharge, upon the presentation of credentials and other documents, as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit.
2. Have access to and copy at reasonable times, any records that must be kept under the terms and conditions of this permit.
3. Inspect any facilities or equipment (including monitoring and control equipment).
4. Sample any discharge of storm water.

i. Penalties for Falsification of Reports

Section 309(c)(4) of the CWA provides that any person who knowingly makes any false material statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 or by imprisonment for not more than two years, or by both. In addition, criminal sanctions are set forth for false swearing and unsworn falsification at 18 Pa. C.S. Sections 4903-4904.

j. Penalties for Falsification of Monitoring Systems

The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by fines and imprisonment described in Section 309 of the CWA. In addition, criminal sanctions are set forth for false swearing and unsworn falsification at 18 Pa. C.S. Sections 4903-4904.

k. Monitoring and Records

Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

3. DEFINITIONS

“Best Management Practices (BMPs)”

Schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce pollution to the waters of the Commonwealth. BMPs include PPC Plans, E&S Control Plans, Storm Water Management Act Plans, and other treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

“Cross Connection”

A connection in which a Dye Test has demonstrated that flow in the sanitary lateral discharges to the MS4.

“Department”

The Department of Environmental Protection of the Commonwealth.

“Director”

The Secretary of the Department of Environmental Protection, or any authorized employee thereof.

“Dry Weather Flow”

A flow that is detected after an elapse of 72 hours of a continuous dry spell from the previous rainfall event.

“Dual Connection to Sanitary”

A connection in which a Dye test has demonstrated that flow from both the sanitary lateral and the storm lateral discharges to the separate sanitary sewer.



“Dual Connection to Storm”

A connection in which a Dye test has demonstrated that flow from the sanitary lateral and the storm lateral discharges to the MS4.

“Dye Test”

A test whereby dye is poured down a drain and is tracked by use of cameras or visual inspection. The City shall employ either “Dye Tests from FAI’s Camera-Aided Method” or “Dye Tests from FAI’s Manual Method.” See 1998 Consent Order and Agreement.

“Flow-Weighted Composite Sample”

A composite sample consisting of a mixture of aliquots collected at a constant time interval, where the volume of each aliquot is proportional to the flow rate of the discharge.

“Grab Sample”

A single “dip and take” sample collected at a representative point in the discharge stream.

“Illicit Connection”

Any connection which is a cross connection.

“Landfill”

An area of land or an excavation in which wastes are placed for permanent disposal, and which is not a land application unit, surface impoundment, injection well, or waste pile.

“Land Application Unit”

An area where wastes are applied onto or incorporated into the soil surface (excluding manure spreading operations) for treatment or disposal.

“Large and Medium Municipal Separate Storm Sewer System”

All municipal separate storm sewers that are either:

- a. Located in an incorporated place with a population of 100,000 or more as determined by the latest Decennial Census by the Bureau of Census.
- b. Located in the counties with unincorporated urbanized populations of 100,000 or more, except municipal separate storm sewers that are located in the incorporated places, townships, or towns within such counties.

- c. Owned and operated by a municipality other than those described in paragraph (a) or (b) and that are designated by the Department as part of the large or medium municipal separate storm sewer system.

“Municipality”

Any county, city, borough, town, township, school district, institution, or any other body created by or pursuant to state law and having jurisdiction over disposal of sewage, industrial wastes, or other wastes, or a designated and approved management agency under Section 1288 of the Clean Water Act.

“Outfall” or “Point Source”

Point source as defined by 25 Pa. Code Section 92.1 which is any discernible, confined, and discrete conveyance including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, vessel, or other floating craft from which pollutants are or may be discharged.

“Person”

Any natural person, partnership, association, corporation, business organization, or any agency, instrumentality or entity of federal or state government. Whenever used in any clause prescribing and imposing a penalty, or imposing a fine or imprisonment or both, the term “person” shall not exclude the members of an association and the directors, officers, or agents of a corporation.

“Proper Connection”

A connection in which the sanitary sewer lateral is connected to the sanitary sewer only, and the storm water lateral is connected to the storm sewer only.

“SARA Title III, Section 313 Facility”

A facility that manufactures, imports, processes, or otherwise uses toxic chemicals listed under 42 U.S.C. Section 11023(c) and who, pursuant to Section 313 of Title III of SARA, are required to report annually their releases of those chemicals to any environmental media. Facilities that meet all of the following criteria for a calendar year are subject to Title III reporting requirements for that calendar year:

1. The facility has 10 or more full-time employees.
2. The facility is in a SIC Code of 20 through 39.
3. The facility manufactured (including imported), processed, or otherwise used a toxic chemical in excess of an applicable threshold quantity of that chemical set forth in 40 C.F.R. 372.25.

### “Section 313 Water Priority Chemical”

A chemical or chemical categories which:

1. Are listed at 40 C.F.R. Section 372.65 pursuant to Section 313 of Title III of the SARA of 1986, also titled the “Emergency Planning and Community Right-to-Know Act of 1986.”
2. Are present at or more threshold levels at a facility subject to SARA Title III, Section 313 reporting requirements.
3. Meet at least one of the following criteria:
  - a. Are listed in Appendix D of 40 C.F.R. Part 122 on either Table II (organic priority pollutants), Table III (certain metals, cyanides, and phenols), or Table V (certain toxic pollutants and hazardous substances).
  - b. Are listed as a hazardous substance pursuant to Section 311(b)(2)(A) of the CWA and 40 C.F.R. Section 116.4.
  - c. Are pollutants for which EPA has published acute or chronic water quality criteria.

### “Sewershed”

An area drained by a single separate storm sewer outfall.

### “Significant Materials”

Includes, but is not limited to, raw materials; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under Section 101(14) of CERCLA; any chemical the facility is required to report pursuant to Section 313 of Title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with storm water discharges.

### “Significant Spills”

Includes, but is not limited to, releases, oil, or hazardous substances in excess of reportable quantities under Section 311 of the CWA (see 40 C.F.R. Section 110.10 and 40 C.F.R. Section 117.21) or Section 102 of CERCLA (see 40 C.F.R. Section 302.4).

### “Storm Water”

Runoff from precipitation, snow melt runoff and surface runoff and drainage.

“Storm Water Associated with Industrial Activity”

The discharge from any conveyance which is used for collecting and conveying storm water and which is directly related to manufacturing, processing, or raw materials storage areas at an industrial plant into surface waters of the Commonwealth.

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