

## **TITLE THIRTEEN: - STORMWATER MANAGEMENT**

### *CHAPTER 1301: - GENERAL PROVISIONS*

#### *§ 1301.01 - SHORT TITLE.*

This Title shall be known and may be cited as the "City of Pittsburgh Stormwater Management Ordinance."

(Ord. No. 12-2019, art. I, § 13101, eff. 3-20-19)

#### *§ 1301.02 - STATEMENT OF FINDINGS.*

The governing body of the City finds that:

- a. Inadequate management of accelerated **Runoff** of stormwater resulting from **Development** throughout a watershed increases **Runoff** volumes, flows and velocities, contributes to **Erosion** and **Sedimentation**, overtakes the carrying capacity of **Streams**, **Combined Sewers**, and **Storm Sewers**, greatly increases the cost of public facilities to carry and control stormwater, undermines **Floodplain** management and flood control efforts in downstream communities, reduces **Groundwater** recharge, contributes to and increases basement sewage backups and surface flooding, threatens public health and safety, and increases nonpoint source pollution of water resources.
- b. A comprehensive program of stormwater management (SWM), including regulation of **Development** and activities causing accelerated **Runoff**, is fundamental to the public health, safety, and welfare and the protection of people of the Commonwealth, their resources, and the environment.
- c. Stormwater is an important water resource that provides **Groundwater** recharge for water supplies and supports the base flow of streams.
- d. The use of **Green Infrastructure** (GI) and **Low Impact Development** (LID) are intended to address the root cause of water quality impairment by using systems and practices which use or mimic natural processes to:
  - 1) infiltrate and recharge,
  - 2) evapotranspire, and/or
  - 3) harvest and use precipitation near where it falls to earth. Green infrastructure practices and LID contribute to the restoration or maintenance of pre-**Development** hydrology.
- e. Federal and state regulations require certain municipalities to implement a program of stormwater controls. These municipalities are required to obtain a permit for stormwater **Discharges** from their separate **Storm Sewer** systems and **Combined Sewer** systems under the National Pollutant Discharge Elimination System (NPDES) program, **Combined Sewer Overflow (CSO)** Control Policy, and Clean Water Act.
- f. Local combined sewer systems can convey **Stormwater** so long as the **Peak Flows** are stored and released to the combined sewers over a period of time. This approach

optimizes the treatment of urban **Stormwater** by the **Allegheny County Sanitary Authority** (ALCOSAN) treatment works.

(Ord. No. 12-2019, art. I, § 13102, eff. 3-20-19)

§ 1301.03 - *PURPOSE.*

The purpose of this Title is to promote health, safety, and welfare within the City and its watersheds by minimizing the harms and maximizing the benefits described in **Section 1301.02** of this Title, through provisions designed to:

- a. Meet legal water quality requirements under state law, including regulations in **25 PA. Code 93 PA-Code Title 25** to protect, maintain, reclaim, and restore the existing and designated uses of the waters of this Commonwealth.
- b. Preserve natural drainage systems.
- c. Manage **Stormwater Runoff** close to the source, reduce **Runoff** volumes, and mimic pre-**Development** hydrology.
- d. Provide procedures and **Performance Standards** for **Stormwater** planning and management.
- e. Maintain **Groundwater** recharge to prevent degradation of surface and **Groundwater** quality and to otherwise protect water resources.
- f. Prevent scour and **Erosion** of **Stream** banks and streambeds.
- g. Reduce basement sewage backups and surface flooding.
- h. Provide proper operation and maintenance of all **Stormwater Best Management Practices** (BMPs) that are implemented within the City.
- i. Provide standards to meet NPDES permit requirements.

(Ord. No. 12-2019, art. I, § 13103, eff. 3-20-19)

§ 1301.04 - *STATUTORY AUTHORITY.*

The City is empowered to regulate land use activities that affect **Runoff** by the authority of the Act of July 31, 1968, P.L. 805, No. 247, The Pennsylvania Municipalities Planning Code, as amended, and/or the Act of October 4, 1978, P.L. 864 (Act 167), 32 P.S. Section 680.1, et seq., as amended, The Stormwater Management Act.

(Ord. No. 12-2019, art. I, § 13104, eff. 3-20-19)

§ 1301.05 - *APPLICABILITY.*

All **Regulated Activities** and all activities that may affect **Stormwater Runoff**, including land **Development** and **Earth Disturbance Activity**, are subject to regulation by this Title.

(Ord. No. 12-2019, art. I, § 13105, eff. 3-20-19)

*§ 1301.06 - REPEALER.*

Any other ordinance provision(s) or regulation of the City inconsistent with any of the provisions of this Title is hereby repealed to the extent of the inconsistency only, to the extent permitted by law.

(Ord. No. 12-2019, art. I, § 13106, eff. 3-20-19)

*§ 1301.07 - SEVERABILITY.*

In the event that a court of competent jurisdiction declares any section or provision of this Title invalid, such decision shall not affect the validity of any of the remaining provisions of this Title.

(Ord. No. 12-2019, art. I, § 13107, eff. 3-20-19)

*§ 1301.08 - COMPATIBILITY WITH OTHER REQUIREMENTS.*

**a.** Approvals issued and actions taken under this Title do not relieve the **Applicant** of the responsibility to secure required permits or approvals for activities regulated by any other code, law, regulation or ordinance.

**b. All improvements required by this Title shall be designed and constructed in conformance with this Title and the code for the City of Pittsburgh and the City of Pittsburgh Stormwater Design Manual, to which standards and guidelines are incorporated herein by reference as if fully set forth. Except as specifically provided for in this chapter, nothing contained in this Title shall be construed to affect the other code of the City of Pittsburgh.**

(Ord. No. 12-2019, art. I, § 13108, eff. 3-20-19)

*§ 1301.09 - ERRONEOUS PERMIT.*

Any permit or authorization issued or approved based on false, misleading or erroneous information provided by an **Applicant** is void without the necessity of any proceedings for revocation. Any work undertaken or use established pursuant to such permit or other authorization is unlawful. No action may be taken by a board, agency or employee of the City purporting to validate such a violation.

(Ord. No. 12-2019, art. I, § 13109, eff. 3-20-19)

*§ 1301.10 - VERSION OF REGULATIONS AND STANDARDS.*

Any reference to a statute, regulation or standard, shall be interpreted to refer to the latest or most current version of that document.

(Ord. No. 12-2019, art. I, § 13110, eff. 3-20-19)

## *CHAPTER 1302: - DEFINITIONS*

### *§ 1302.01 - [GENERALLY.]*

For the purposes of this Title, certain terms and words used herein shall be interpreted as follows:

- a. Words used in the present tense include the future tense; the singular number includes the plural, and the plural number includes the singular; words of masculine gender include feminine gender; and words of feminine gender include masculine gender.
- b. The word "includes" or "including" shall not limit the term to the specific example but is intended to extend its meaning to all other instances of like kind and character.
- c. The words "shall" and "must" are mandatory; the words "may" and "should" are permissive.

These definitions do not necessarily reflect the definitions contained in pertinent regulations or statutes, and are intended for this Title only.

1. **95TH PERCENTILE RAINFALL EVENT.** The measured precipitation depth accumulated over a twenty-four-hour period for the period of record that ranks as the 95th percentile rainfall depth based on the range of all daily event occurrences during this period. **Refer to the City of Pittsburgh Stormwater Design Manual for rainfall depth for 95th Percentile Rainfall Event. As of 2018, the precipitation volume of the 95th Percentile Rainfall Event shall be one and a half (1.5) inches, based on the Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act (2009) prepared by the United States Environmental Protection Agency. Beginning on January 1, 2020 and every five (5) years thereafter, the Review Body may recalculate the volume of the 95th Percentile Rainfall Event, which must be calculated based on a minimum of thirty (30) years of precipitation data.**
2. **ACT 167.** The City is empowered to regulate land use activities that affect **Runoff** and surface and groundwater quality and quantity by the authority of the Commonwealth of Pennsylvania's Act of October 4, 1978, P.L. 864 (Act 167), 32 P.S. Section 680.1, et seq., as amended, the "Storm Water Management Act."
3. **AGRICULTURAL ACTIVITY.** Activities associated with agriculture such as agricultural cultivation, agricultural operation, and animal heavy use areas. This includes the work of producing crops including tillage, land clearing, plowing, disking, harrowing, planting, harvesting crops or pasturing and raising of livestock and installation of conservation measures. Construction of new buildings or **Impervious Area** is not considered an agricultural activity.

4. ***APPLICANT.*** A landowner, **Developer**, or other person who has filed an application to the City for approval to engage in any regulated activity at a **Project Site** in the City.
5. ***BEST MANAGEMENT PRACTICE (BMP).*** Activities, facilities, designs, measures, or procedures used to manage stormwater impacts from regulated activities, to meet **State Water Quality Requirements**, to promote groundwater recharge, and to otherwise meet the purposes of this Title. Stormwater BMPs are commonly grouped into one (1) of two (2) broad categories or measures: "structural" or "non-structural." In this Title, non-structural BMPs or measures refer to operational and/or behavior-related practices that attempt to minimize the contact of pollutants with stormwater **Runoff**, whereas structural BMPs or measures are those that consist of a physical device or practice that is installed to capture and treat stormwater **Runoff**. **Refer to the City of Pittsburgh Stormwater Design Manual for standards for stormwater BMPs. Structural BMPs include, but are not limited to, a wide variety of practices and devices, from large-scale retention ponds and constructed wetlands, to small-scale underground treatment systems, infiltration facilities, filter strips, low impact design, bioretention, wet ponds, permeable paving, grassed swales, riparian or forested buffers, sand filters, detention basins, and manufactured devices. Structural stormwater BMPs are permanent appurtenances to the project site.**
6. ***CHANNEL.*** A natural stream that conveys water; a ditch or open channel excavated for the flow of water.
7. ***CITY.*** The City of Pittsburgh, Allegheny County, Pennsylvania, and any related city agency, department, or authority.
8. ***COMBINED SEWER.*** **Portions of the Sewer System which were designed and built to carry sanitary sewage and/or industrial waste in a manner combined with stormwater Discharge.**
9. ***CONDUIT.*** **Any channel intended for the conveyance of water, whether open or closed.**
10. ***CONFLUENCE.*** **Points where watercourses join together.**
11. ***CONSERVATION DISTRICT.*** A conservation district, as defined in Section 3(c) of the Conservation District Law (3 P. S. § 851(c)) that has the authority under a delegation agreement executed with DEP to administer and enforce all or a portion of the regulations promulgated under PA Code Title 25, Chapter 102.
12. ***COUNTY.*** **The County of Allegheny, Pennsylvania.**
13. ***CULVERT.*** **A pipe, conduit or similar structure including appurtenant works which carries water under or through an embankment or fill.**
14. ***DAM.*** **Any artificial barrier, together with its appurtenant works, constructed for the purpose of impounding or storing water, or a structure for highway, railroad or other purposes which may impound water.**
15. ***DESIGN STORM.*** The magnitude and temporal distribution of precipitation from a storm event measured in probability of occurrence (e.g., a 5-year storm) and duration (e.g., twenty-four (24) hours) used in the design and evaluation of stormwater management systems. Also see Return Period.

16. **DESIGN STORM METHOD.** A method of calculating stormwater management needs, also known as Volume Control-Guideline 1 (CG-1) in the **PA** BMP Manual <sup>3</sup>, requiring detailed modeling based on site conditions.
17. **DESIGNATED PLAN REVIEWER.** A Qualified Professional as defined herein, that has been designated by the City to be the reviewer of SWM Site Plans for the City, and shall be understood to be the reviewer where indicated as the City within this Title.

~~**DETENTION BASIN.** An impoundment designed to collect and retard stormwater runoff by temporarily storing the runoff and releasing it at a predetermined rate. Detention basins are designed to drain completely in a designed period after a rainfall event, and to become dry until the next rainfall event.~~

18. **DETENTION VOLUME.** The volume of runoff that is captured and released into the **Waters** of the Commonwealth at a controlled rate.
19. **DEP.** The Pennsylvania Department of Environmental Protection.
20. **DEVELOPER.** Any landowner, agent of such landowner or tenant with the permission of such landowner, who seeks to make or makes or causes to be made a subdivision or land **Development** or to undertake any regulated activities at a site in the city.
21. **DEVELOPMENT.** For the purposes of this ordinance: any activity, construction, alteration, change in land use or similar action that affects stormwater runoff characteristics.
22. **DEVELOPMENT SITE (SITE).** See Project Site.
23. **DIAMETER BREAST HEIGHT (DBH).** The diameter of the trunk of a tree, measured four and one-half (4.5) feet above ground level. For trees with co-dominant (forked) stems, the trunk is measured below the fork and above the trunk flare, at the point of the smallest diameter. For multi-stemmed trees, the diameter is considered to be the sum of the diameters of all of the stems that contribute significantly to the crown.
24. **DISCHARGE.** A volume of fluid flowing from a conduit or channel, or being released from detention storage, per unit of time, commonly expressed as cubic feet per second (cfs), million gallons per day (mgd), gallons per minute (gpm), or cubic meters per second (cms).
25. **DISTURBED AREA.** An unstabilized land area where **an Earth Disturbance Activity** is occurring or has occurred.
26. **DRAINAGE.** Interception and removal of excess surface water or groundwater from land by artificial or natural means.
27. **DRAINAGE AREA.** **The contributing area to a single drainage basin, expressed in acres, square miles, or other units of area; also called a catchment area, watershed, or river basin, the area served by a drainage system or by a watercourse receiving storm and surface water.**
28. **EARTH DISTURBANCE ACTIVITY.** **A construction or other human activity which disturbs the surface of the land, including, but not limited to: clearing and grubbing; planting; grading; demolition; excavations; embankments; road construction or full depth repair; building**

**construction; and the moving, depositing, stockpiling, or storing of soil, rock, or earth materials.**

29. **ENCROACHMENT.** Any structure or activity which in any manner changes, expands or diminishes the course, current or cross section of any watercourse, floodway or body of water.
30. **EROSION.** The natural process by which the surface of the land is worn away by water, wind, or chemical action.
31. **EXISTING CONDITION.** The dominant land cover during the five-year period immediately preceding a proposed regulated activity.
32. **FEMA.** Federal Emergency Management Agency.
33. **FLOODPLAIN.** Any land area susceptible to inundation by water from any natural source or delineated by applicable FEMA maps and studies as being a special flood hazard area, as identified per the Floodplain Overlay District in Title **Nine 9**. Also includes areas that comprise Group 13 Soils, as listed in Appendix A of the Pennsylvania DEP Technical Manual for Sewage Enforcement Officers (as amended or replaced from time to time by DEP).
34. **FLOODWAY.** The channel of the watercourse and those portions of the adjoining **Floodplains** that are reasonably required to carry and **Discharge** the 100-year flood. Unless otherwise specified, as identified per the Floodplain Overlay District in Title **Nine 9**. In an area where no FEMA maps or studies have defined the boundary of the 100-year floodway, it is assumed—absent evidence to the contrary—that the floodway extends from the stream to fifty (50) feet from the top of the bank of the stream.
35. **GREEN INFRASTRUCTURE.** Systems and practices that use or mimic natural processes to infiltrate, evapotranspire, or reuse stormwater on the site where it is generated.
36. **GROUNDWATER.** Water beneath the earth's surface that supplies wells and springs and is within the saturated zone of soil and rock.
37. **GROUNDWATER RECHARGE.** The replenishment of existing natural underground water supplies from precipitation or overland flow.
38. **HYDROLOGIC SOIL GROUP (HSG).** Infiltration rates of soils vary widely and are affected by subsurface **Permeability** as well as surface intake rates. Soils are classified into four (4) HSGs (A, B, C, and D) according to their minimum infiltration rate, which is obtained for bare soil after prolonged wetting. The NRCS defines the four (4) groups and provides a list of most of the soils in the United States and their group classification. The soils in the area of the development site may be identified from a soil survey report that can be obtained from local NRCS offices or conservation district offices. Soils become less pervious as the HSG varies from A to D (NRCS 1, 2).
39. **HYDROLOGY. The science dealing with the waters of the earth and their distribution and circulation through the atmosphere. Engineering hydrology deals with the application of hydrologic concepts to the design of projects for use and control of water.**
40. **IMPERVIOUS SURFACE (IMPERVIOUS AREA).** A surface that prevents the infiltration of water into the ground. Impervious surfaces (or areas) shall include,

but not be limited to: roofs; additional indoor living spaces, patios, garages, storage sheds and similar structures; and any ~~new~~ streets or sidewalks. Decks, parking areas, and driveway areas are counted as **Impervious Areas** if they directly prevent infiltration. Gravel is considered impervious unless compaction or infiltration tests are provided **in accordance with requirements of the City of Pittsburgh Stormwater Design Manual.**

41. **IN-LIEU FEE.** Fee that Developers or property owners may pay to achieve alternative compliance if unable to comply with volume control regulations with onsite management. Fee amount is commensurate with the cost of meeting management requirements off-site.
42. ***INVASIVE SPECIES.*** Plant species that are not native to the state, grow aggressively, and spread and displace **Native Vegetation** per DCNR's most-recently published invasive species list.
43. ***INFILTRATION.*** Movement of surface water into the soil, where it is absorbed by plant roots, evaporated into the atmosphere, or percolated downward to recharge groundwater.
44. ***LAND DEVELOPMENT (DEVELOPMENT).*** Any activity, construction, alteration, change in land use or similar action that affects stormwater runoff characteristics. The definitions in the "Subdivision Regulations and Standards of the City Planning Commission," the Special Definitions for the Riverfront Overlay District of the Zoning Code, and/or the definition in Chapter 926 of the Zoning Code may apply.
45. ***LOW IMPACT DEVELOPMENT (LID).*** Site design approaches and small-scale stormwater management practices that promote the use of natural systems for infiltration, evapotranspiration, and reuse of rainwater. LID can be applied to new development, urban retrofits, and revitalization projects. LID utilizes design techniques that infiltrate, filter, evaporate, and store runoff close to its source. Rather than rely on costly large-scale conveyance and treatment systems, LID addresses stormwater through a variety of small, cost-effective landscape features located on-site.
46. ***LANDSLIDE-PRONE AREA.*** Any area delineated on the City of Pittsburgh landslide-prone overlay district map and /or which is determined by a geotechnical study to be landslide prone.
47. ***MS4.*** Municipal separate storm sewer system; a conveyance or system of conveyances that is owned by a state, city, town, village, or other public entity that discharges to waters of the Commonwealth; is designed or used to collect or convey stormwater (including storm drains, pipes, ditches, etc.); is not a combined sewer; and is not part of a publicly owned treatment works (sewage treatment plant).
48. ***NATIVE VEGETATION.*** Plant species that have historically grown in Pennsylvania and are not invasive species as defined herein.
49. ***NRCS.*** USDA Natural Resources Conservation Service (previously Soil Conservation Service).



50. **OUTFALL.** Points or areas at which stormwater runoff leaves a site, which may include streams, storm sewers, swales or other well defined natural or artificial drainage features, as well as areas of dispersed overland flows.
51. **OUTLET STRUCTURE.** A structure designed to control the volume of stormwater runoff that passes through it during a specific length of time.
52. **PA BMP MANUAL.** The Pennsylvania Department of Environmental Protection's Stormwater Best Management Practices Manual, most recent version.
53. ***PEAK DISCHARGE/FLOW/RATE OF RUNOFF.*** The maximum rate of flow of water at a given point and time resulting from a specific storm event.
54. **PERFORMANCE STANDARD.** A standard which establishes an end result or outcome which is to be achieved but does not prescribe specific means for achieving it.
55. **PERMEABILITY.** The rate at which water will move through a saturated soil.
56. ***PERVIOUS AREA.*** Any area not defined as impervious.
57. **POINT OF INTEREST.** A point of hydrological and hydraulic importance used for analysis.
58. **PREFERRED STORMWATER MANAGEMENT TECHNOLOGIES.** Stormwater management practices that can provide additional co-benefits, increased reliability, or better performance than other technologies. Preferred Stormwater Management Technologies must be in accordance with the City of Pittsburgh Stormwater Design Manual.
59. ***PROJECT SITE.*** The specific area of land where any regulated activities in the City are planned, conducted, or maintained.
60. ***QUALIFIED PROFESSIONAL.*** Any person licensed by the Pennsylvania Department of State or otherwise qualified under Pennsylvania law to perform the work required by this Title.
61. ***REGULATED ACTIVITIES.*** Any earth disturbance activities or any activities that involve the alteration or development of land in a manner that may affect stormwater runoff.
62. ***REGULATED EARTH DISTURBANCE ACTIVITY.*** Activity involving earth disturbance subject to regulation under PA Code Title 25, Chapters 92 and 102, or the Clean Streams Law.
63. ***RELEASE RATE.*** The percentage of **Existing Conditions** peak rate of runoff from a site or **Subarea** to which the proposed conditions peak rate of runoff must be reduced to protect downstream areas.
64. ***RELEASE RATE DISTRICT.*** A watershed or portion of a watershed for which a release rate has been established by an adopted Act 167 Stormwater Management Plan.
65. **RESERVOIR.** Any basin, either natural or artificial, which contains or will contain the water impounded by a Dam.
66. ***RETENTION VOLUME/REMOVED RUNOFF.*** The volume of runoff that is captured and not released directly into the surface waters of this Commonwealth during or after a storm event.

67. **RETURN PERIOD.** The average interval, in years, within which a storm event of a given magnitude can be expected to occur one time. For example, the 25-year return period rainfall would be expected to occur on average once every 25 years; or stated in another way, the probability of a 25-year storm occurring in any one (1) year is 0.04 (i.e., a four-percent chance).
68. **RIPARIAN BUFFER.** A permanent vegetated area of trees and shrubs located adjacent to streams, lakes, ponds and wetlands.
69. **RUNOFF.** Any part of precipitation that flows over the land.
70. **RUNOFF CHARACTERISTICS. The surface components of any watershed which affect the rate, amount, and direction of stormwater runoff. These may include but are not limited to: vegetation, soils, slopes, and man-made landscape alterations.**
71. **SANITARY SEWER: Portions of the Sewer System which were designed and built to carry sanitary sewage and/or industrial waste separately from storm water Discharge, or portions of the Sewer System so designated as a Sanitary Sewer by resolution of PWSA.**
72. **SCS. Soil Conservation Service, U.S. Department of Agriculture.**
73. **SEDIMENT.** Soils or other materials transported by surface water as a product of **Erosion**.
74. **SEDIMENTATION. The process by which mineral or organic matter is accumulated or deposited by moving wind, water, or gravity.**
75. **SIMPLIFIED METHOD.** A method of calculating stormwater management needs, also known as Volume Control-Guideline 2 (CG-2) in the **PA** BMP Manual <sup>3</sup>, which is independent of site conditions.
76. **STATE WATER QUALITY REQUIREMENTS.** The regulatory requirements to protect, maintain, reclaim, and restore water quality under PA Code Title 25 and the Clean Streams Law.
77. **STORM SEWER. A sewer that carries intercepted surface runoff, street water, and other washwaters, or drainage, but excludes sewage and industrial wastes.**
78. **STORM SEWER DISCHARGE. Flow from a storm sewer that is discharged into a receiving stream.**
79. **STORMWATER.** Drainage runoff from the surface of the land resulting from precipitation or snow or ice melt.
80. **STORMWATER COLLECTION SYSTEM.** Natural or engineered structures which collect and transport stormwater through or from a drainage area to the point of final outlet, including but not limited to, any of the following: conduits and appurtenant features, canals, channels, ditches, streams, culverts, streets and pumping stations.
- ~~STORMWATER MANAGEMENT FACILITY. Any structure, natural or manmade, that, due to its condition, design, or construction, conveys, stores, or otherwise affects stormwater runoff. Typical stormwater management facilities include, but are not limited to: detention and retention basins; open channels; storm sewers; pipes; rain gardens, bio-retention planters and swales, and other infiltration facilities.~~**

81. ***STORMWATER MANAGEMENT(SWM) SITE PLAN.*** The plan prepared by the **Developer** or the **Developer's** representative indicating how stormwater runoff will be managed at the development site in accordance with this Title. Stormwater Management Site Plan will be designated as SWM Site Plan throughout this Title.
82. ***STREAM.*** A channel or conveyance of surface water having a defined bed and banks, whether natural or artificial, with perennial or intermittent flow.
83. ***STREAMBANK, TOP OF.*** The first substantial break in slope between the edge of the bed of the stream and the surrounding terrain.
84. ***SUBAREA. A portion of the watershed that has similar hydrological characteristics and drains to a common point.***
85. ***TIME OF CONCENTRATION. The time period necessary for surface runoff to reach the outlet of a Subarea from the hydraulically most remote point in the tributary drainage area.***
86. ***UNDERMINED AREA.*** Area where coal or other minerals have been mined, removing the lateral support and leaving underground voids where the accumulation of water can occur and/or can increase acid mine drainage.
87. ***USDA.*** United States Department of Agriculture
88. ***VOLUME OF STORMWATER RUNOFF. Quantity of water normally measured in inches, cubic feet, or acre-feet, measured or determined analytically from (1) runoff coefficients; (2) rainfall/runoff ratios; and (3) areas underneath hydrographs.***
89. ***WATERS OF THIS COMMONWEALTH.*** Any and all rivers, streams, creeks, rivulets, impoundments, ditches, watercourses, storm sewers, lakes, dammed water, wetlands, ponds, springs, and all other bodies or channels of conveyance of surface and underground water, or parts thereof, whether natural or artificial, within or on the boundaries of this Commonwealth.
90. ***WATERCOURSE.*** See Stream.
91. ***WATERSHED.*** Region or land area drained by a river, watercourse, or other surface water of this Commonwealth to a downstream point.
92. ***WATERSHED STORM WATER MANAGEMENT PLAN (OR WATERSHED PLAN).*** **The plan for management of stormwater runoff throughout a designated watershed as required by the Pennsylvania Storm Water Management Act.**
93. ***WETLAND.*** Areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, including swamps, marshes, bogs, and similar areas.

CHAPTER 1303: - STORMWATER MANAGEMENT STANDARDS

§ 1303.01 - GENERAL REQUIREMENTS.

a. For all **Regulated Activities** that result in cumulative **Earth Disturbances** equal to or greater than ten thousand (10,000) square feet, or the addition of five thousand (5,000) square feet of **Impervious Area**, or lower thresholds as defined in the Zoning Ordinance, unless preparation of an SWM **Site Plan** is specifically exempted in **Section 1303.02**:

1. Preparation and implementation of an approved SWM **Site Plan** is required.

2. No **Regulated Activities** shall commence until the City issues written approval of an SWM **Site Plan**, which demonstrates compliance with the requirements of this Title.

b. SWM **Site Plans** approved by the City, in accordance with **Section 1304.06**, shall be on site throughout the duration of the regulated activity.

c. These standards apply to the landowner and any person engaged in **Regulated Activities**.

d. **Riparian Buffer** requirements per **Section 1303.05** are applicable regardless of whether or not the disturbance thresholds triggering SWM **Site Plan** review are met.

e. For all **Regulated Earth Disturbance Activities**, **Erosion** and sediment control BMPs shall be designed, implemented, operated, and maintained during the **Regulated Earth Disturbance Activities** (e.g., during construction) to meet the purposes and requirements of this Title and to meet all requirements under PA Code Title 25 and the Clean Streams Law. Various BMPs and their design standards are listed in the Erosion and Sediment Pollution Control Program Manual (E&S Manual4), No. 363-2134-008, as amended and updated.

f. Impervious areas **from a Project Site**:

1. The measurement of **Impervious Areas** shall include all of the **Impervious Areas** in the **Project Site** ~~total proposed development~~ even if **Development** is to take place in stages.

2. For **Development** taking place in stages, the entire **Development** plan must be used in determining conformance with this Title.

3. For projects that add **Impervious Areas** to a site, the total **Impervious Areas** is subject to the requirements of this Title and of Title Nine, the Zoning Code. **The total Impervious Areas calculation shall include the sum of the remaining pre-Development Impervious Areas plus any newly created post-Development Impervious Areas, if applicable.**

g. Stormwater flows onto adjacent or downstream property shall not be created, increased, decreased, relocated, impeded, or otherwise altered without written permission of the affected property owner(s). Notification shall include a description of the proposed **Development** and the stormwater flows that are being created, increased, decreased, relocated, impeded, or otherwise altered. Adjacent property shall at a minimum include any property having a shared boundary with the subject property of the SWM **Site Plan**, however, if in the judgement of the Designated Plan Reviewer additional properties are being affected, additional notifications may be required. Proof of notification (signed postal receipt for example) shall be included as part of the SWM plan submission to the City. Such stormwater flows shall be subject to the requirements of this Title.

h. All **Regulated Activities** shall include such measures as necessary to:

1. Protect health, safety, and property.

2. Meet the water quality goals of this Title by implementing measures to:

A. Minimize disturbance to **Floodplains**, wetlands, natural slopes over twenty-five (25) percent, existing **Native Vegetation**, trees and wooded areas.

B. Maintain or extend **Riparian Buffers**.

C. Minimize soil disturbance and soil compaction.

D. Avoid erosive flow conditions in natural flow pathways.

E. Minimize thermal impacts to waters of this Commonwealth.

F. Disconnect **Impervious Surfaces** by directing **Runoff** to **Pervious Areas**, wherever possible.

3. Incorporate **Green Infrastructure** methods described in the **City of Pittsburgh Stormwater Design Manual** ~~DEP Stormwater Best Management Practices Manual (BMP Manual<sup>3</sup>)~~. **In cases where Green Infrastructure is infeasible, as determined within the City of Pittsburgh Stormwater Design Manual, the SWM Site Plan shall meet the requirements in** Section 1303.033. ~~If methods other than green infrastructure and LID methods are proposed to achieve the volume and rate controls required under this Title, the SWM site PLAN must include a detailed justification, acceptable to the Designated Plan Reviewer, demonstrating that the use of LID and green infrastructure is not practicable. See Section 1303.033.~~

i. Infiltration BMPs should be dispersed throughout the **Project Site** at strategic locations, made as shallow as practicable, and located to maximize use of natural on-site **Infiltration** features provided that the geological and soil conditions are conducive to **Infiltration**. **Locations where Infiltration** is prohibited **within the City are defined within the City of Pittsburgh Stormwater Design Manual**. ~~**Infiltration is prohibited in the Landslide-Prone Overlay District.**~~

j. **All Infiltration BMPs** should completely drain both the volume control and rate control capacities over a period of time not less than twenty-four (24) and not more than seventy-two (72) hours from the end of the **Design Storm**.

k. The **Design Storm** precipitation depths to be used in the analysis of **volume control and Peak Rates** of **Discharge** shall be as obtained in **the City of Pittsburgh Stormwater Design Manual in PennDOT's Drainage Manual, Publication 584, Appendix 7A; or obtained from the latest version of the Precipitation-Frequency Atlas of the United States, National Oceanic and Atmospheric Administration (NOAA), National Weather Service, Hydrometeorological Design Studies Center.**

l. For all **Regulated Activities**, SWM BMPs shall be designed, implemented, operated, and maintained to meet the purposes and requirements of this Title and to meet all requirements under PA Code Title 25, the Clean Streams Law, and the Storm Water Management Act.

m. Regulated activities shall incorporate BMPs and their design standards as listed in the **City of Pittsburgh Stormwater Design Manual BMP Manual**<sup>3</sup> ~~**when feasible or required.**~~

n. The City may, after consultation with DEP, approve measures for meeting the **State Water Quality Requirements** other than those in this Title, provided that they meet the minimum requirements of, and do not conflict with, state law including, but not limited to, the Clean Streams Law.

**o. For Regulated Activities discharging stormwater to surface Waters of the Commonwealth via privately and/or publicly owned separate Storm Sewers, BMPs shall meet or exceed pollutant filtration requirements within the City of Pittsburgh Stormwater Design Manual.**

**p. For Regulated Activities within high pollutant loading hotspot areas, all BMPs used to meet the volume and/or rate control requirements shall incorporate pretreatment to prevent BMP performance decline due to pollutants. Guidelines for pollutant loading hotspot areas and pretreatment design methods shall meet requirements within the City of Pittsburgh Stormwater Design Manual.**

**q. The order of preference for all stormwater Discharge connections, regardless if subject to stormwater regulations, shall be 1.) the surface Waters of the Commonwealth, 2.) a public separate Storm Sewer, and 3.) a public combined sewer. All stormwater connections and the minimum distance threshold for mandatory connection shall meet requirements within Title Four: Public Spaces Chapter 433: Illegal Surface Stormwater Connections, the PWSA Developers Manual, and the City of Pittsburgh Stormwater Design Manual.**

**r. Surface stormwater Discharges from a Project Site to the public right-of-way are prohibited and all stormwater Discharges must connect as per the connection requirements in 1303.01.q In the event that surface Discharges to the right-of-way are unavoidable per an alternatives analysis submitted to the City demonstrating that the connection options in 1303.01.q are not feasible, a “no-harm” downstream hydraulic analysis is required at the discretion of the City to ensure that sufficient conveyance capacity exists to convey the Discharge without risk to public safety. “No-harm” downstream hydraulic analysis shall meet the requirements within the City of Pittsburgh Stormwater Design Manual.**

**s. All stormwater Runoff and Groundwater originating from a Project Site are the sole responsibility of the property owner to provide for, and maintain, private stormwater management infrastructure that safely conveys all Discharge flows. No Discharges shall result in a public safety and/or nuisance risk to adjacent public and private property. In the event of insufficient capacity to meet this requirement, the Developer must construct new or existing infrastructure upgrades, either on adjacent private property or to the public right-of-way infrastructure. Cost for upgrades shall be provided at Developer’s expense. Depending on the type of the upgrade, the City at its discretion may require regular maintenance, at the Developer’s expense, to ensure long-term functionality.**

**(Ord. No. 12-2019, art. III, § 13301, eff. 3-20-19)**

***§ 1303.02 - EXEMPTIONS.***

a. Agricultural Activity is exempt from the SWM **Site Plan** preparation requirements of this Title provided the activities are performed according to the requirements of PA Code Title 25, Chapter 102.

b. Roadway resurfacing and maintenance projects, which do not increase **Impervious Area**, and underground infrastructure projects are exempt from the provisions of this Title, provided the activities meet the requirements of all other municipal, state and federal requirements.

c. Demolition of a residential structure by the City or other governmental body.

d. Exemptions from any provisions of this Title shall not relieve the Applicant from the requirements in Section 1303.01.~~eE~~ through ~~kK~~, which require all disturbance and Development activities, regardless of SWM Site Plan review requirements, to comply with other relevant state and local codes.

e. The City may deny or revoke any exemption pursuant to this Section at any time for any project that the City believes may pose a threat to public health and safety or the environment.

f. If conditions exist that prevent the reasonable implementation of water quality and/or quantity control practices on site, upon written request by the Applicant, the City Department may at its sole discretion accept off-site stormwater management practices, retrofitting, Stream restorations, or other practices that provide water quality and/or quantity control equal or greater than onsite practices for the volume which the Applicant has demonstrated to be infeasible to manage and treat on site.

(Ord. No. 12-2019, art. III, § 13302, eff. 3-20-19)

*§ 1303.03 - VOLUME CONTROLS.*

Preferred and approved stormwater BMPs, as identified ~~The green infrastructure and low impact development practices provided~~ in the City of Pittsburgh Stormwater Design Manual BMP Manual, shall be used ~~utilized~~ for meeting the regulatory requirements for all Regulated Activities ~~wherever possible~~. Water volume controls shall be implemented using the Design Storm Method in subsection A or the Simplified Method in subsection B below ~~or alternative design criteria as allowed by PA Code Title 25, Chapter 102.~~

a. The Design Storm Method (CG-1 in the PA BMP Manual) is applicable as a method to any size of regulated activity. This method requires detailed modeling based on site conditions. The following shall be incorporated into the Design Storm Method:

1. Do not increase the post-Development total Runoff volume for all storms equal to or less than the two-year, twenty-four-hour duration precipitation.

2. Runoff from at least the annual 95th Percentile Rainfall Event using future climate change rainfall projections within the City of Pittsburgh Stormwater Design Manual shall be permanently removed from the Runoff flow, i.e., it shall not be released into the sewer system or surface waters of this Commonwealth. ~~For privately-funded projects: At least the first one (1) inch of runoff from impervious surfaces shall be permanently~~



~~removed from the runoff flow, i.e., it shall not be released into the surface waters of this Commonwealth.~~

3. Removal options include reuse, evaporation, transpiration, and Infiltration. Demonstration of technical infeasibility for the removal of Runoff shall meet infeasibility criteria thresholds established within the City of Pittsburgh Stormwater Design Manual. If removal of the Runoff is deemed infeasible, and the Designated Plan Reviewer agrees, Runoff shall be detained and meet water quality Release Rate requirements as stipulated within the City of Pittsburgh Stormwater Design Manual. Fee-in lieu payments for not meeting the volume requirement within this Chapter are provided in Section 1303.03.F. For publicly-funded projects: Runoff from at least the 95th percentile storm event shall be permanently  
~~removed from the runoff flow, i.e., it shall not be released into the surface waters of this Commonwealth.~~

~~4. For both privately and publicly-funded projects: Removal options include reuse, evaporation, transpiration, and, except in the Landslide-Prone Overlay District, infiltration. If the developer provides justification that the listed removal options are not feasible, and the Designated Plan Reviewer agrees, runoff shall be detained in a facility designed for a twenty-four-hour dewatering time if in an area with a dedicated stormwater system (not contributory to a combined sewer system), or shall be detained in a facility designed for a seventy-two-hour dewatering time if in an area contributory to a combined sewer system, before discharge to the environment or local stormwater systems.~~

4. 5. For modeling purposes:

A. Existing (pre-Development) non-forested Pervious Areas shall be calculated using Permeability coefficients for meadow in good condition, in efforts to be as conservative as possible in Existing Conditions modeling.

B. Twenty (20) percent of existing Impervious Area, when present, shall be calculated using Permeability coefficients for meadow in good condition in the model for existing conditions. The intent of this is to start calculations from a baseline that is closer to naturally-occurring, pre-urbanization conditions, realizing that Impervious cover has detrimental hydrologic impacts.

b. The Simplified Method (CG-2 in the PA BMP Manual) provided below is independent of site conditions and should be used if the Design Storm Method is not followed. This method is not applicable to Regulated Activities greater than one (1)

acre or for projects that require design of stormwater storage facilities. For **Impervious Surfaces**:

1. Stormwater facilities shall capture at least the first two (2) inches of **Runoff** from **Impervious Surface**.

2. **Runoff from at least the 95th Percentile Rainfall Event using future climate change rainfall projections within the City of Pittsburgh Stormwater Design Manual shall be permanently removed from the Runoff flow, i.e., it shall not be released into the sewer system or surface waters of this Commonwealth. For privately-funded projects: At least the first one (1) inch of runoff from impervious surfaces shall be permanently removed from the runoff flow, i.e., it shall not be released into the surface waters of this Commonwealth.**

3. **Removal options include reuse, evaporation, transpiration, and Infiltration. Demonstration of technical infeasibility for the removal of Runoff shall meet infeasibility criteria established within the City of Pittsburgh Stormwater Design Manual. If removal of Runoff is deemed infeasible, and the Designated Plan Reviewer agrees, Runoff shall be detained and meet design requirement for non-infiltrating BMPs as stipulated within the City of Pittsburgh Stormwater Design Manual. For publicly-funded projects: Runoff from at least the 95th percentile storm event shall be permanently removed from the runoff flow, i.e., it shall not be released into the surface waters of this Commonwealth.**

4. **For both privately- and publicly-funded projects: Removal options include reuse, evaporation, transpiration, and, except in the Landslide-Prone Overlay District, infiltration. If the developer provides justification that the listed removal options are not feasible, and the Designated Plan Reviewer agrees, runoff shall be detained in a facility designed for a twenty-four-hour dewatering time if in an area with a dedicated stormwater system (not contributory to a combined sewer system), or shall be detained in a facility designed for a seventy-two-hour dewatering time if in an area contributory to a combined sewer system, before discharge to the environment or local stormwater systems.**

#### **c. Volume Control Incentives and Offsets**

1. **Applicants that manage additional volume in excess of the requirements of this title may be eligible for a volume control incentive grant payment per additional cubic foot of storage volume provided up to 2.5 inches of precipitation over Impervious Surfaces either within the proposed Development or within lands outside of the proposed Development but**

owned by the Applicant. Volume control incentive grant payment rates shall be as stipulated in the City of Pittsburgh Stormwater Design Manual and are subject to the availability of funds.

2. Applicants meeting the volume control requirement using a combination of preferred BMPs, water reuse, and active controls as defined in the City of Pittsburgh Stormwater Design Manual, will be eligible for a 5-business day SWM Site Plan review.

3. Subject to requirements outlined in the City of Pittsburgh Stormwater Design Manual, Applicants may offset the volume control requirement by managing an equivalent area of Impervious Surface outside of the Project Site but within lands owned by the Applicant.

4. Subject to requirements outlined in the City of Pittsburgh Stormwater Design Manual, Applicants may implement volume control projects on lands owned by the Applicant to offset volume requirements for future Development projects. Should volume control requirements change between the time when the offsetting project is implemented and when the future Development project occurs, the volume control offset will be prorated accordingly. Volume offsets shall be transferable in the event that the property is sold or otherwise transferred to a different owner than the Applicant.

5. Volume control offset projects must fully meet the requirements of this Title.

6. Approval of volume control offsets under this Title does not necessarily authorize this approach for meeting NPDES permit requirements.

d. In cases where the Applicant believes that meeting the volume control requirement is technically infeasible using preferred or approved BMPs, the Applicant must either submit an innovation approval request per § 1303.03 (e) and/or submit a technical infeasibility determination as part of the SWM Site Plan to determine if volume control requirements can be met in whole or in part using an In-lieu Fee payment as described in § 1303.03 (f). The technical infeasibility determination report shall at least include, but is not limited to, engineering calculations, geologic reports, results of geotechnical investigations and Infiltration testing, hydrologic analyses, and site maps, as defined in the City of Pittsburgh Stormwater Design Manual. Within the technical infeasibility determination report, Applicants must demonstrate the technical infeasibility of each approved BMP for each Drainage Area within the proposed Project Site according to BMP-specific technical infeasibility criteria defined in the City of Pittsburgh Stormwater Design Manual.

e. Applicants wishing to meet volume control requirements using innovative BMPs not listed as preferred or approved BMPs may submit an innovation approval request to the City authorizing the use of innovative technologies on a case-by-case basis. The innovation approval request must include 1) evidence that the BMP is approved by a recognized third party certification program listed in the City of Pittsburgh Stormwater Design Manual, or 2) performance data collected in accordance with data collection protocols listed in the City of Pittsburgh Stormwater Design Manual, or 3) a study plan for a pilot project in accordance with pilot project study plan requirements provided in the City of Pittsburgh Stormwater Design Manual and for which the pilot project proposes to provide management for no more than 10% of the total regulated Drainage Area of the Project Site.

f. Applicants must pay, as a pre-requisite of City issuance of SWM Site Plan approval, a one time fee in-lieu payment for each Drainage Area for which the volume control requirement cannot be met using preferred or approved BMPs, and for which the City has determined that the technical infeasibility determination is justified, less any areas for which the volume control requirement is being met using offsets or via an innovation approval request. The one time fee in-lieu payment shall be \$600,000 per acre-inch of the required volume for each Drainage Area to meet the volume control requirement per Section 1303.03. The fee in-lieu payment amount may be adjusted annually after January 1, 2022 based on the percentage change in the United States Bureau of Labor Statistics Consumer Price Index for All Urban Consumers for all items for the Pittsburgh area. Fee in-lieu payments are not available as a compliance alternative to meet rate control requirements.

g. Determination of technical infeasibility by the City for purposes of issuing SWM Site Plan approval shall not imply that technical infeasibility has been established for purposes relating to obtaining NPDES permit authorization.

(Ord. No. 12-2019, art. III, § 13303, eff. 3-20-19)

#### *§ 1303.04 - RATE CONTROLS.*

Rate control requirements are regulated based on the Project Site location and its respective watershed. Special rate control watersheds include: Allegheny County Act 167 watersheds (Section 1303.04.a) and Public Health and Safety watersheds (Section 1303.04.b). For Project Sites that overlap both Allegheny County Act 167 watersheds and Public Health and Safety watersheds, rate control calculations for both provisions shall be performed and the more stringent Release Rate shall govern. For areas not covered by either Allegheny County Act 167 watersheds or the Public Health and Safety watersheds, rate control requirements are regulated to the requirements in Section 1303.04.c.

a. For areas ~~not~~ covered by ~~the a-~~maximum-allowable Release Rate map from ~~the an~~ approved Allegheny County Act 167 Stormwater Management Plan:

For the 1-, 2-, 5-, 10-, 25-, 50-, and 100-year, twenty-four-hour rainfall storm events, the post-Development Peak Discharge rates will follow the applicable approved Release Rate maps and procedures incorporating the use of future climate rainfall projections provided in the City of Pittsburgh Stormwater Design Manual contained in Appendix A (New and Existing Release Rate Management Districts). ~~This pre-development to post-development control is not to be misconstrued as the same as the "Conditional Direct Discharge" areas on the release rate maps. If it is shown that the peak rates of discharge indicated by the post-development analysis are less than or equal to the peak rates of discharge indicated by the pre-development analysis for 1-, 2-, 5-, 10-, 25-, 50-, and 100-year, twenty-four-hour storms, then the requirements of this section have been met.~~<sup>22</sup> ~~Peak flows should be computed using the methods included in the Chapter titled "Stormwater Calculations and Methodology" of the BMP Manual~~<sup>3</sup>.

b. For areas covered by the City Public Health and Safety Release Rate map:

The City has identified watersheds with infrastructure that are subject to capacity restrictions and therefore pose a risk to public health and safety associated with basement sewage backups and surface flooding. The Public Health and Safety Release Rate requirement minimizes the impact of Runoff from Development within the identified watersheds. For watersheds identified on the Public Health and Safety Release Rate maps, post-Development Discharge rates shall not exceed the pre-Development Discharge rates for the 1-, 2-, 5-, 10-, 25-, 50-, and 100-year, 24-hour rainfall events using the rainfall estimates and procedures incorporating the use of future climate change rainfall projections provided within the City of Pittsburgh Stormwater Design Manual. Post-Development Discharge rates also shall meet the Public Health and Safety Release Rate requirements using future climate change rainfall projections within the City of Pittsburgh Stormwater Design Manual.

~~For areas covered by a maximum-allowable release rate map from an approved Act 167 Stormwater Management Plan:~~

~~For the 1-, 2-, 5-, 10-, 25-, 50-, and 100-year, twenty-four-hour storm events, the post-development peak discharge rates will follow the applicable approved release rate maps. These maps are contained in Appendix A (New and Existing Release Rate Management Districts. Peak flows should be computed using the methods included in Chapter 8 of the BMP Manual~~<sup>3</sup>.

**c. For areas not covered by the maximum-allowable Release Rate map from the approved Allegheny County Act 167 Stormwater Management Plan (Refer to 1303.04.a), or by the City Public Health and Safety Release Rate map (Refer to 1303.04.b):**

**Post-Development Discharge rates shall not exceed the pre-Development Discharge rates for the 1-, 2-, 5-, 10-, 25-, 50-, and 100-year, 24-hour rainfall events using the rainfall estimates and procedures incorporating the use of future climate change rainfall projections provided within the City of Pittsburgh Stormwater Design Manual.**

**d. ~~e~~-For modeling purposes, whether or not the area is covered by a City Public Health and Safety and/or an Allegheny County Act 167 maximum-allowable Release Rate map:**

1. Existing (pre-**Development**) non-forested **Pervious Areas** shall be calculated using **Permeability** coefficients for meadow in good condition.
2. Twenty (20) percent of existing **Impervious Area**, when present, shall be calculated using **Permeability** coefficients for meadow in good condition in the model for **Existing Conditions**. The intent of this is to start calculations from a baseline that is closer to naturally-occurring, pre-urbanization conditions, realizing that **Impervious** cover has detrimental hydrologic impacts.

**e. Rate Control Incentives and Points of Interest**

**1. Applicants that provide rate control in excess of the requirements of this chapter may be eligible for a rate control incentive grant payment per additional acre-inch of storage volume provided. Rate control incentive payment rates shall be as stipulated in the City of Pittsburgh Stormwater Design Manual and are subject to the availability of funds.**

**2. Rate control and volume control incentive grant payments are not additive.**

**3. Subject to requirements outlined in the City of Pittsburgh Stormwater Design Manual, Applicants may meet rate control requirements at a downstream Point of Interest that includes lands owned by the Applicant but outside of the Project Site, so long as the Point of Interest is located upslope of the Discharge to the public sewer system.**

**(Ord. No. 12-2019, art. III, § 13304, eff. 3-20-19)**

§ 1303.05 - RIPARIAN BUFFERS.

a. In order to protect and improve water quality, a **Riparian Buffer** easement shall be created and recorded as part of any subdivision or land **Development** that encompasses a **Riparian Buffer**, regardless of whether other requirements from this Title apply. The intent of this Title in establishing a **Riparian Buffer** is to protect and improve **Stream** water quality. The **Riparian Buffer** is intended to slow overland flow to the **Stream** through the presence of native grasses, trees and shrubs, allowing **Infiltration/Groundwater** recharge; causing deposition of sediment, nutrients, pesticides, and other pollutants in the buffer rather than in the **Stream**; and reducing **Erosion** by providing **Stream** bank stabilization. The trees provide shade for **Streams**; keeping waters cooler and reducing evaporation.

b. Except as required by PA Code Title 25 Chapter 102, the **Riparian Buffer** easement shall be required for all **Streams** with a contributing watershed area of greater than ten (10) acres. The **Riparian Buffer** easement shall be measured to be a minimum of thirty-five (35) feet from the **Top of the Streambank** (on each side).

c. Minimum management requirements for **Riparian Buffers**:

1. No use or construction within the **Riparian Buffer** shall be permitted that is inconsistent with the intent of the **Riparian Buffer** as described in Section 1303.05.A.
2. Existing **Native Vegetation** shall be protected and maintained within the **Riparian Buffer** easement.
3. Whenever practicable, invasive vegetation shall be actively removed and the **Riparian Buffer** easement shall be planted with native trees, shrubs and other vegetation to create a diverse native plant community appropriate to the intended ecological context of the site.

d. The **Riparian Buffer** easement shall be enforceable by the City and shall be recorded in the appropriate County Recorder of Deeds Office, so that it shall run with the land and shall limit the use of the property located therein. The easement shall allow for the continued private ownership and shall count toward the minimum lot area required by zoning, unless otherwise specified in the Zoning Ordinance.

e. Any permitted use within the **Riparian Buffer** easement shall be conducted in a manner that will maintain the extent of the existing 100-year **Floodplain**, improve or maintain the **Stream** stability, and preserve and protect the ecological function of the **Floodplain**.

f. Stormwater drainage pipes shall be permitted within the **Riparian Buffer** easement, but they shall cross the easement in the shortest practical distance. Other structural stormwater management facilities are not permitted within the **Riparian Buffer** easement.

g. The following conditions shall apply when public and/or private recreation trails are permitted by the City within **Riparian Buffers**:

1. It is preferred that trails be designed to be permeable and for non-motorized use only; however, impermeable trails are permitted provided they have adequate drainage.
2. Trails shall be designed to have the least impact on native plant species and other sensitive environmental features.

h. Septic drainfields and sewage disposal systems shall not be permitted within the **Riparian Buffer** easement and shall comply with setback requirements established under PA Code Title 25, Chapter 73.

i. Underground utilities shall be permitted within the **Riparian Buffer** easement; however, work shall be performed to minimize disturbance area and removal of trees. Restoration within the **Riparian Buffer** easement shall be with native species of trees, grasses, and other plantings.

1. Where tree removal is necessary, an existing tree survey, tree replacements, and landscape restoration plan shall be designed by a Registered Professional with the requisite experience. Tree replacements shall follow the tree replacement requirements of the Zoning Ordinance for trees greater than twelve (12) inches DBH (diameter at breast height), or a one-to-one replacement rate for trees lesser than twelve (12) inches DBH.

2. Aboveground utilities shall only be permitted to cross the easement perpendicular to the easement or in the shortest practical distance. Existing utilities may remain and be maintained as required.

(Ord. No. 12-2019, art. III, § 13305, eff. 3-20-19)

***~~§ 1303.06 – STANDARDS FOR GREEN INFRASTRUCTURE AND LOW-IMPACT DEVELOPMENT.~~***

***~~a. If methods other than green infrastructure and low-impact development methods are proposed to achieve the volume and rate controls required under this Ordinance, the applicant shall demonstrate technical infeasibility in the SWM site plan sealed by a qualified professional.~~***

***~~b. Demonstration of technical infeasibility. For projects where technical infeasibility exists, the developer shall document and quantify that, due to the site conditions enumerated below, it is technically infeasible to manage the total~~***



~~amount of the precipitation from rainfall events less than or equal to the 95th percentile rainfall event by infiltrating, evapotranspiring and harvesting and reusing the precipitation using green infrastructure and low impact development practices. Documentation of technical infeasibility shall at least include, but is not limited to, engineering calculations, geologic reports, hydrologic analyses, and site maps. The stormwater management plan reviewer may consider the following site conditions that may prevent the utilization of green infrastructure and low impact development technologies and stormwater strategies, such as infiltration, evapotranspiration, and harvesting and reuse:~~

- ~~1. The conditions on the site preclude the use of infiltration practices due to the presence of shallow bedrock, contaminated soils, landslide prone areas, near surface ground water or other factors such as underground facilities or utilities;~~
- ~~2. The design of the site precludes the use of soil amendments, plantings of vegetation or other designs that can be used to infiltrate and evapotranspirate runoff;~~
- ~~3. Water harvesting and use are not practical or possible because the volume of water used for irrigation, toilet flushing, industrial make-up water, wash waters, or other is not significant enough to warrant the design and use of water harvesting and use systems;~~
- ~~4. Modifications to an existing building to manage stormwater are not feasible due to structural or plumbing constraints or other factors as identified by the facility owner/operator;~~
- ~~5. Small project sites where the lot is too small to accommodate infiltration practices adequately sized to infiltrate the volume of runoff from impervious surfaces;~~
- ~~6. Soils that cannot be sufficiently amended to provide for the requisite infiltration rates;~~
- ~~7. Situations where site use is inconsistent with the capture and use of stormwater or other physical conditions on site that preclude the use of plants for evapotranspiration or bioinfiltration;~~
- ~~8. Retention and/or use of stormwater onsite or discharge of stormwater onsite via infiltration has a significant adverse effect on the site or the down gradient water balance of surface waters, ground waters or receiving watershed ecological processes, including areas that may exacerbate acid mine drainage or subsidence;~~

~~9. State and local requirements or permit requirements that prohibit water collection or make it technically infeasible to use certain green infrastructure and low impact development techniques;~~

~~10. Compliance with the requirements of this Chapter would result in the retention and/or use of stormwater on the site such that an adverse water balance impact may occur to the receiving surface waterbody or groundwater.~~

~~e. If, due to the existence of site conditions described above, a developer successfully demonstrates to the stormwater management plan reviewer that it is technically infeasible to manage the total amount of the precipitation from rainfall events less than or equal to the 95th percentile rainfall event by infiltrating, evapotranspiring and harvesting and reusing the precipitation using green infrastructure and low impact development practices, the remaining percentage of precipitation may be managed using conventional technologies so long as they adhere to all detention and release rate requirements in this Title.~~

~~(Ord. No. 12-2019, art. III, § 13306, eff. 3-20-19)~~

#### *CHAPTER 1304: - STORMWATER MANAGEMENT SITE PLAN REQUIREMENTS*

##### *§ 1304.01 - GENERAL REQUIREMENTS ~~PLAN REQUIREMENTS~~.*

a. For any activities regulated by this Title, no Earth Disturbance may commence and no building permit may be issued until the City has approved a SWM Site Plan.

b. SWM Site Plan review and approval is a two-step process consisting of:

1. City review and approval of a Conceptual SWM Plan in accordance with the requirements of Section 1304.02.

2. City review and approval of a SWM Site Plan in accordance with the requirements Section 1304.03.

c. The Applicant must receive Conceptual SWM Plan approval from the City prior to submission of a SWM Site Plan.

d. The City shall not approve any SWM Site Plan that is deficient in meeting the requirements of this Title. At its sole discretion and in accordance with this Title, when a SWM Site Plan is found to be deficient, the City may either disapprove the submission and require a resubmission, or in the case of minor deficiencies, the Designated Plan Reviewer may accept submission of modifications.

~~The City shall not approve any SWM site plan that is deficient in meeting the requirements of this Title. At its sole discretion and in accordance with this Article, when a SWM site plan is found to be deficient, the City may either disapprove the submission and require a resubmission, or in the case of minor~~

deficiencies, the Designated Plan Reviewer may accept submission of modifications.

The following items shall be included in the SWM site plan:

a. Provisions for permanent access or maintenance easements for all physical SWM BMPs, such as ponds and infiltration structures, as necessary to implement the operation and maintenance (O&M) plan discussed in subsection b.9. below.

b. The SWM site plan shall provide the following information:

1. The overall stormwater management concept for the project.

2. A determination of site conditions in accordance with the BMP Manual<sup>3</sup>. A detailed site evaluation shall be completed for projects proposed in environmentally sensitive areas, such as but not limited to brownfields and areas with steep slopes.

3. Stormwater runoff design computations and documentation as specified in this Title, or as otherwise necessary to demonstrate that the maximum practicable measures have been taken to meet the requirements of this Title, including the recommendations and general requirements in Section 1303.1.

4. Expected project schedule.

5. A soil Erosion and sediment control plan, where applicable, as prepared for and submitted to the approval authority.

6. The effect of the project (in terms of runoff volumes, water quality, and peak flows) on surrounding properties and aquatic features and on any existing stormwater conveyance system that may be affected by the project.

7. Plan and profile drawings of all SWM BMPs, including drainage structures, pipes, open channels, and swales.

8. SWM site plan shall show the locations of existing and proposed on-lot wastewater facilities and water supply wells, property boundaries, existing and proposed topography, point(s) of interest, utilities, and potential utility conflicts.

9. The SWM site plan shall include an O&M plan for all existing and proposed physical stormwater management facilities. This plan shall address long-term ownership and responsibilities for O&M including type and schedule/frequency of maintenance activities, personnel and equipment requirements, estimated annual maintenance costs, and method of financing continuing O&M.

10. A justification, acceptable to the Designated Plan Reviewer, must be included in the SWM site plan if BMPs other than green infrastructure methods and LID practices are proposed to achieve the volume, rate and water quality controls under this Title. See Section 1303.06.

~~A. Documentation and quantification of why, due to the applicable site conditions, it is technically infeasible to manage the total amount of the precipitation from rainfall events less than or equal to the 95th percentile rainfall event by infiltrating, evapotranspiring and harvesting and reusing the precipitation using green infrastructure and low impact development practices;~~

~~B. If conventional technology will be used to manage any volume, a list and description of conventional technologies the developer plans to utilize and how much precipitation volume those conventional technologies will manage.~~

(Ord. No. 12-2019, art. IV, § 13401, eff. 3-20-19)

§ 1304.02 ~~CONCEPTUAL STORMWATER MANAGEMENT PLAN~~ PLAN SUBMISSION.

The following items shall be included in the Conceptual SWM Plan submission:

a. Conceptual SWM Plan review application in accordance with requirements outlined in the City of Pittsburgh Stormwater Design Manual.

b. Conceptual SWM Plan in accordance with requirements outlined in the City of Pittsburgh Stormwater Design Manual and containing the following information:

1. Applicant and project location information.

2. Preliminary base plans depicting Existing Conditions and lot lines.

3. Limits of Earth Disturbance.

4. Identification of proposed site improvements consistent with improvement shown on Zoning Site Plan submission, if applicable.

5. Identification of areas for proposed stormwater management BMPs, including locations, extent, and types of BMPs depicting conceptual footprints and volumes, Discharge locations and safe overflow connections; and

6. Post-construction stormwater management BMP Drainage Areas delineating pervious and impervious cover.

7. Plan call outs and tabular information designating proposed stormwater volume control offsets, rate control points of interest, additional or enlarged BMPs qualifying for stormwater management volume or rate incentives, proposed BMPs targeted for innovation track approval, and accounting of points if preferred technology incentives are being requested.

8. Preliminary technical feasibility determination reports for any Drainage Areas for which the Applicant intends to pursue In-lieu Fee compliance.

c. Documentation of proposed Rainwater Bonus Goals and Points in accordance with Title Nine: Zoning, Chapter 915: Environmental Performance Standards, Section 915.07.D.5, if applicable.

~~Plans shall be submitted in a format acceptable to the Designated Plan Reviewers.~~

(Ord. No. 12-2019, art. IV, § 13402, eff. 3-20-19)

§ 1304.03 – STORMWATER-MANAGEMENT SITE PLAN ~~Plan Review~~

**The following items shall be included in the SWM Site Plan Submission:**

a. Provisions for permanent access or maintenance easements for all physical SWM BMPs, such as ponds and **Infiltration** structures, as necessary to implement the operation and maintenance (O&M) plan discussed in subsection b.9. below.

**b. SWM Site Plan in accordance with requirements outlined in the City of Pittsburgh Stormwater Design Manual and containing the following information:**

**1. The overall stormwater management concept for the project.**

**2. A determination of site conditions in accordance with the City of Pittsburgh Stormwater Design Manual and DEP PA BMP Manual <sup>3</sup>. A detailed site evaluation shall be completed for projects proposed in environmentally sensitive areas, such as but not limited to brownfields and areas with steep slopes.**

**3. Stormwater Runoff design computations and documentation as specified in this Title and the City of Pittsburgh Stormwater Design Manual, or as otherwise necessary to demonstrate that the maximum practicable measures have been taken to meet the requirements of this Title, including the recommendations and general requirements in Section 1303.01.**

**4. Expected project schedule.**

**5. A soil Erosion and sediment control plan, where applicable, as prepared for and submitted to the approval authority.**

**6. The effect of the project (in terms of Runoff volumes, water quality, and Peak Flows) on surrounding properties and aquatic features and on any existing stormwater conveyance system that may be affected by the project.**

**7. Plan and profile drawings of all SWM BMPs, including drainage structures, pipes, open Channels, and swales.**

**8. SWM Site Plan shall show the locations of existing and proposed on-lot wastewater facilities and water supply wells, property boundaries, existing and proposed topography, point(s) of interest, utilities, and potential utility conflicts.**

**9. The SWM Site Plan shall include an O&M plan in accordance with the City of Pittsburgh Stormwater Design Manual for all existing and proposed physical stormwater management facilities. This plan shall address long-term ownership and responsibilities for O&M including type and schedule/frequency of maintenance activities, personnel and equipment requirements, estimated annual maintenance costs, and method of financing continuing O&M.**

**10. A justification in accordance with the City of Pittsburgh Stormwater Design Manual requirements, acceptable to the Designated Plan Reviewer, must be included in the SWM Site Plan if BMPs other than**

preferred or approved BMPs are proposed to achieve the volume, rate and water quality controls under this Title. See Chapter 1303 and the City of Pittsburgh Stormwater Design Manual.

11. Plan call outs and tabular information designating proposed stormwater volume control offsets, rate control points of interest, additional or enlarged BMPs qualifying for stormwater management volume or rate incentives, proposed BMPs targeted for innovation track approval, and accounting of points if preferred technology incentives are being requested.

12. Technical feasibility determination reports for any Drainage Areas for which the Applicant intends to pursue In-lieu Fee compliance.

c. Infiltration testing and geotechnical testing investigation report in accordance with the City of Pittsburgh Stormwater Design Manual.

d. For any activities that require state or federal permits, proof of application or approval of those permit(s).

e. Proof of submission of a soil Erosion and sediment control plan to the Allegheny County Conservation District and approval of Non-Permitted Plan, per 25 PA Code 102.4(b)(2)(i), or approval of General (PAG-02) or Individual NPDES Permit for Stormwater Discharges Associated with Construction Activities, or Erosion and Sediment Permit (ESCP) as applicable.

~~The City has designated the Department of City Planning and the Pittsburgh Water and Sewer Authority as the Designated Plan Reviewers of SWM site plans for the City, and shall be understood to be the reviewer where indicated as the City within this Title.~~

(Ord. No. 12-2019, art. IV, § 13403, eff. 3-20-19)

§ 1304.04 – ~~PLAN-SUBMISSION. MODIFICATION OF PLANS.~~

Plans shall be submitted in a format acceptable to the Designated Plan Reviewers.

~~A modification to an approved SWM site plan that involves a change in SWM BMPs or techniques, or that involves the relocation or redesign of SWM BMPs, or that is necessary because soil or other conditions are not as stated on the approved SWM site plan, as determined by the Designated Plan Reviewer, shall require a resubmission of the modified SWM site plan in accordance with this Article.~~

(Ord. No. 12-2019, art. IV, § 13404, eff. 3-20-19)

§ 1304.05 – ~~PLAN-REVIEW. RESUBMISSION OF DISAPPROVED SWM SITE PLANS.~~

- a. Conceptual SWM Plans and SWM Site Plans shall be submitted to and approved by the City for consistency with the provisions

of this Title and the City of Pittsburgh Stormwater Design Manual.

- b. The City has designated the Department of City Planning and the Pittsburgh Water and Sewer Authority as the Designated Plan Reviewers of SWM Site Plans for the City, and shall be understood to be the reviewer where indicated as the City within this Title.
- c. The City shall notify the Applicant in writing within fifteen (15) business days whether the Conceptual SWM Site Plan is approved or disapproved or requires additional documentation. If a longer notification period is provided by other statute, regulation, or ordinance, the Applicant will be so notified by the City.
- d. Conceptual SWM Site Plan approval will expire after one (1) year from the date of issuance. The Applicant may request to renew the application for one (1) additional year provided the request is submitted prior to the expiration of the approval. A lapsed approval shall not be renewed more than once. Renewal shall be made by written statement without requiring the filing of a new application. Renewal shall have the same effect as the original approval. If no renewal is granted with the one-year period allowed for renewals, the original approval shall be void and have no further effect.
- e. The City shall notify the Applicant in writing within forty-five (45) days whether the SWM Site Plan is approved or disapproved or requires additional documentation. If a longer notification period is provided by other statute, regulation, or ordinance, the Applicant will be so notified by the City.
- f. For any SWM Site Plan that proposes to use any BMPs other than Green Infrastructure and LID practices to achieve the volume and rate controls required under this Title, the City will not approve the SWM Site Plan unless it determines that Green Infrastructure and LID practices are infeasible in accordance with of the City of Pittsburgh Stormwater Design Manual.
- g. If the City disapproves the SWM Site Plan, the City will state the reasons for the disapproval in writing. Revisions to a SWM Site Plan can be approved if requirements of the code are met.
- h. No person in the employ of the City or acting on behalf of the City shall approve any SWM Site Plan, make any final determination on maintenance responsibilities or accept dedication of facilities where the SWM Site Plan or the SWM BMPs do not meet the design standards and criteria of this Title or the City of Pittsburgh Stormwater Design Manual.

Any approval based upon a false statement of fact that is material to the grant of such approval shall be void.

~~A disapproved SWM site plan may be resubmitted, with the revisions addressing the City's concerns, to the City in accordance with this Article. The applicable review fee, in accord with Article VI, must accompany a resubmission of a disapproved SWM site plan.~~

(Ord. No. 12-2019, art. IV, § 13405, eff. 3-20-19)

§ 1304.06 - MODIFICATION OF PLANS ~~AUTHORIZATION TO CONSTRUCT AND TERM OF VALIDITY.~~

A modification to an approved SWM Site Plan that involves a change in SWM BMPs or techniques, or that involves the relocation or redesign of SWM BMPs, or that is necessary because soil or other conditions are not as stated on the approved SWM Site Plan, as determined by the Designated Plan Reviewer, shall require a resubmission of the modified SWM Site Plan in accordance with this Title.

~~The City's issuance of a stormwater management approval letter authorizes the regulated activities contained in the SWM site plan for a maximum term of validity of five (5) years following the date of approval. The City may specify a term of validity shorter than five (5) years in the approval for any specific SWM site plan. Terms of validity shall commence on the date the City signs the approval for an SWM site plan. If an approved SWM site plan is not completed according to Section 1304.07 within the term of validity, then the City may consider the SWM site plan disapproved and may revoke any and all permits. SWM site plans that are considered disapproved by the City shall be resubmitted in accordance with Section 1304.05 of this Title.~~

(Ord. No. 12-2019, art. IV, § 13406, eff. 3-20-19)

§ 1304.07 - RESUBMISSION OF DISAPPROVED SWM SITE PLANS. RECORD DRAWINGS, COMPLETION CERTIFICATE, AND FINAL INSPECTION.

A disapproved SWM Site Plan may be resubmitted, with the revisions addressing the City's concerns, to the City in accordance with this Article. The applicable review fee, in accord with Chapter 1306, must accompany a resubmission of a disapproved SWM Site Plan.

~~a. The Design Engineer must be given a minimum of one (1) week notice prior to the SWM BMPs installation. The Design Engineer must be present during the installation of all layers of the SWM BMPs.~~

~~b. The developer shall be responsible for providing record drawings of all SWM BMPs included in the approved SWM site plan. The record drawings and an explanation of any discrepancies with the construction plans shall be submitted to the City.~~



~~e. The record drawing submission shall include a certification of completion signed by the BMP Design Engineer, or the Design Engineer's representative for the project, verifying that all permanent SWM BMPs have been constructed according to the approved plans and specifications. The latitude and longitude coordinates for all permanent SWM BMPs must also be submitted, at the central location of the BMPs. If any licensed qualified professionals contributed to the construction plans, then a licensed qualified professional must sign the completion certificate.~~

~~d. The City or its designated representative may conduct inspections during construction as it deems appropriate. If inspections performed by the City reveal deficiencies from the submitted and approved SWM site plan, the City may request corrective actions. Any corrective action shall be at the cost of the stormwater facility owner.~~

~~e. After receipt of the completion certification by the City, the City will conduct a final inspection, and may conduct inspections thereafter to ensure proper functioning and compliance with approved plans.~~

(Ord. No. 12-2019, art. IV, § 13407, eff. 3-20-19)

**§ 1304.08 - AUTHORIZATION TO CONSTRUCT AND TERM OF VALIDITY.**

The City's issuance of a stormwater management approval letter authorizes the Regulated Activities contained in the SWM Site Plan for a maximum term of validity of five (5) years following the date of approval. The City may specify a term of validity shorter than five (5) years in the approval for any specific SWM Site Plan. Terms of validity shall commence on the date the City signs the approval for an SWM Site Plan. If an approved SWM Site Plan is not completed according to Section 1304.09 within the term of validity, then the City may consider the SWM Site Plan disapproved and may revoke any and all permits. SWM Site Plans that are considered disapproved by the City shall be resubmitted in accordance with Section 1304.077 of this Title.

(Ord. No. 12-2019, art. IV, § 13406, eff. 3-20-19)

**§ 1304.09 - RECORD DRAWINGS, COMPLETION CERTIFICATE, AND FINAL INSPECTION.**

- a. The Qualified Professional must be given a minimum of one (1) week notice prior to the SWM BMPs installation. The Qualified Professional must be present during the installation of all layers of the SWM BMPs.
- b. The Developer shall be responsible for providing record drawings of all SWM BMPs included in the approved SWM Site Plan and in accordance

with the City of Pittsburgh Stormwater Design Manual. The record drawings and an explanation of any discrepancies with the construction plans shall be submitted to the City.

- c. The record drawing submission shall include a certification of completion signed by the BMP Design Engineer, or the Design Engineer's representative for the project, verifying that all permanent SWM BMPs have been constructed according to the approved plans and specifications. The latitude and longitude coordinates for all permanent SWM BMPs must also be submitted, at the central location of the BMPs. If any licensed Qualified Professionals contributed to the construction plans, then a licensed Qualified Professional must sign the completion certificate.
- d. The City or its designated representative may conduct inspections during construction as it deems appropriate. If inspections performed by the City reveal deficiencies from the submitted and approved SWM Site Plan, the City may request corrective actions. Any corrective action shall be at the cost of the stormwater facility owner.
- e. After receipt of the completion certification by the City, the City will conduct a final inspection, and may conduct inspections thereafter to ensure proper functioning and compliance with approved plans.

(Ord. No. 12-2019, art. IV, § 13407, eff. 3-20-19)

#### *CHAPTER 1305: - OPERATION AND MAINTENANCE*

##### *§ 1305.01 - RESPONSIBILITIES OF DEVELOPERS AND LANDOWNERS.*

- a. The owner will be responsible for all operation and maintenance (O&M) responsibilities associated with privately owned stormwater BMPs unless otherwise agreed upon by the City and PWSA in writing. The Designated Plan Reviewers shall make the final determination on the continuing maintenance responsibilities prior to final approval of the SWM site plan but it is assumed that the owner will be responsible for all operation and maintenance responsibilities unless otherwise agreed upon by the City and PWSA in writing.
- b. Facilities, areas, or structures used as SWM BMPs shall be enumerated as permanent real estate appurtenances and recorded as deed restrictions or conservation easements that run with the land, including an operations and maintenance agreement as described in § 1305.02 (a). The preparation of deed restrictions or conservation easements shall conform to requirements set forth in the City of Pittsburgh Stormwater Design Manual.
- c. The O&M plan shall be recorded as a restrictive deed covenant that runs with the land.

d. PWSA, in coordination with the City, may take enforcement actions against an owner for any failure to satisfy the provisions of this Article.

(Ord. No. 12-2019, art. V, § 13501, eff. 3-20-19)

*§ 1305.02 - OPERATION AND MAINTENANCE AGREEMENTS.*

a. Prior to final approval of the SWM **Site Plan**, the property owner shall sign and record an O&M agreement, as approved by the Designated Plan Reviewers, covering all stormwater control facilities which are to be privately owned. **The O&M Agreement shall incorporate the O&M Plan developed under Chapter 1304.03.**

1. The owner, successor and assigns shall maintain all facilities in accordance with the approved maintenance schedule in the O&M agreement.

2. The owner shall maintain the stormwater control facilities to ensure that the post-construction stormwater **Runoff Performance Standards** are being met.

3. The owner shall convey to the City conservation easements to assure access for periodic inspections by the **City or its designee PWSA** as necessary.

4. The owner shall keep on file with the City the name, address, and contact information of the person or company responsible for maintenance activities; in the event of a change, new information shall be submitted by the owner to the City within ten (10) working days of the change.

b. The owner is responsible for O&M of the SWM BMPs. If the owner fails to adhere to the O&M agreement, the City/PWSA may perform the services required at the owner's expense and charge the owner appropriate fees. Nonpayment of fees may result in a lien against the property.

(Ord. No. 12-2019, art. V, § 13502, eff. 3-20-19)

*§ 1305.03 - OPERATOR INSPECTIONS.*

The landowner or the owner's designee (including the City for dedicated and owned facilities) shall inspect SWM BMPs, facilities and/or structures installed under this Ordinance according to the following frequencies, at a minimum, to ensure the BMPs, facilities and/or structures continue to function as intended:

a. Annually for the first five (5) years.

b. Once every three (3) years thereafter.

c. During or immediately after the cessation of a ten-year or greater storm.

A written inspection report shall be created to document each inspection. The inspection report shall contain the date and time of the inspection, the individual(s) who completed the inspection, the location of the BMP, facility or structure inspected, observations on performance, and recommendations for improving performance, if applicable. Any repairs or corrective maintenance work recommended within the inspection report must be implemented in a timely manner and similarly documented. Inspection reports shall be kept onsite and furnished to City/PWSA inspectors upon request.

(Ord. No. 12-2019, art. V, § 13503(1), eff. 3-20-19)

*§ 1305.04 - PERFORMANCE GUARANTEE.*

**The City may, at its discretion, require the submittal of a performance security or bond prior to issuance of a permit in order to insure that the stormwater practices are installed by the permit holder as required by the approved SWM Site Plan. The amount of the installation performance security shall be the total estimated construction cost of the stormwater management practices, plus 25%. The performance security shall contain forfeiture provisions for failure to complete work specified in the SWM Site Plan. The installation performance security shall be released in full only after receipt of the completion certification by the City and after a final inspection by the City in accordance with Section 1304.09. Provisions for a partial pro-rata release of the performance security based on the completion of various Development stages can be done at the discretion of the City.**

~~For SWM site plans that involve subdivision and land development, the applicant shall provide a financial guarantee to the City for the timely installation and proper construction of all stormwater management controls as required by the approved SWM site plan and this Title in a format acceptable to the City.~~

(Ord. No. 12-2019, art. V, § 13503(2), eff. 3-20-19)

*CHAPTER 1306: - FEES AND EXPENSES*

*§ 1306.01 - GENERAL.*

The City may include all costs incurred into the review fee charged to an **Applicant**. The review fee may include, but not be limited to, costs for the following:

- a. Administrative/clerical processing.
- b. Review of the SWM **Site Plan**.
- c. Review of a SWM **Site Plan** resubmission.
- d. Attendance at meetings.
- e. Inspections.

*CHAPTER 1307: - PROHIBITIONS*

*§ 1307.01 - PROHIBITED DISCHARGES AND CONNECTIONS.*

**Stormwater Discharges and connections shall be subject to the provisions within Title Four: Public Spaces Chapter 433: Illegal Surface Stormwater Connections, City of Pittsburgh Stormwater Design Manual, and the PWSA Developer's Manual.**

**~~a. Any drain or conveyance, whether on the surface or subsurface, that allows any non-stormwater discharge including sewage, process wastewater, and wash water to enter a regulated MS4 or to enter the surface waters of this Commonwealth is prohibited.~~**

**~~b. No person shall allow, or cause to allow, discharges into a regulated MS4, or discharges into waters of this Commonwealth, which are not composed entirely of stormwater, except (1) as provided in paragraph c. below and (2) discharges authorized under a state or federal permit.~~**

**~~c. The following discharges are authorized unless they are determined to be significant contributors to pollution of a regulated MS4 or to the waters of this Commonwealth:~~**

**~~1. Discharges or flows from firefighting activities.~~**

**~~2. Discharges from potable water sources including water line flushing and fire hydrant flushing, if such discharges do not contain detectable concentrations of total residual chlorine (TRC).~~**

**~~3. Non-contaminated irrigation water, water from lawn maintenance, landscape drainage and flows from riparian habitats and wetlands.~~**

**~~4. Diverted stream flows and springs.~~**

**~~5. Non-contaminated pumped groundwater and water from foundation and footing drains and crawl space pumps.~~**

**~~6. Non-contaminated HVAC condensation and water from geothermal systems.~~**

**~~7. Residential (i.e., not commercial) vehicle wash water where cleaning agents are not utilized.~~**

**~~8. Non-contaminated hydrostatic test water discharges, if such discharges do not contain detectable concentrations of TRC.~~**

**~~9. Dechlorinated swimming pool and hot tub discharges, as long as the DEP guidelines for swimming pool water discharge are followed.~~**

**~~d. In the event that the City or DEP determines that any of the discharges identified in subsection c. significantly contribute pollutants to a regulated MS4 or to the waters of this Commonwealth, the City or DEP will notify the responsible person(s) to cease the discharge.~~**

(Ord. No. 12-2019, art. VII, § 13701, eff. 3-20-19)

*§ 1307.02 - ROOF DRAINS AND SUMP PUMPS.*

**Stormwater Discharge from roof drains and sump pumps shall be in conformance with the provisions within Title Four: Public Spaces Chapter 433: Illegal Surface Stormwater Connections, City of Pittsburgh Stormwater Design Manual, and the PWSA Developer's Manual. Roof drains and sump pumps shall discharge to infiltration or vegetative BMPs wherever feasible.**

(Ord. No. 12-2019, art. VII, § 13702, eff. 3-20-19)

*§ 1307.03 - ALTERATION OF SWM BMPs.*

No person shall modify, remove, fill, landscape, or alter any SWM BMPs, facilities, areas, drainage easements, or structures that were installed as a requirement of this Title without the written approval of the City.

(Ord. No. 12-2019, art. VII, § 13703, eff. 3-20-19)

*CHAPTER 1308: - ENFORCEMENT AND PENALTIES*

*§ 1308.01 - RIGHT OF ENTRY.*

Upon presentation of proper credentials, the City or its designated agent may enter at reasonable times upon any property within the City to inspect the condition of the stormwater structures and facilities in regard to any aspect regulated by this Title.

(Ord. No. 12-2019, art. VIII, § 13801, eff. 3-20-19)

*§ 1308.02 - ENFORCEMENT.*

- a. It shall be unlawful for a person to undertake any regulated activity except as provided in an approved SWM **Site Plan** ~~site plan~~, unless specifically exempted in Section 1303.02.
- b. It shall be unlawful to violate Section 1307.03 of this Title.
- c. Inspections regarding compliance with the SWM **Site Plan** ~~site plan~~ are a responsibility of the City. Inspections for operations and maintenance are the responsibility of the landowner or the owner's designee.

(Ord. No. 12-2019, art. VIII, § 13802, eff. 3-20-19)

*§ 1308.03 - SUSPENSION AND REVOCATION.*

a. Any approval or permit issued by the City pursuant to this Title may be suspended or revoked **by the City for conditions or violations as defined in Title Nine: Zoning, Chapter 924: Enforcement and Penalties.**

~~1. Non-compliance with or failure to implement any provision of the approved SWM site plan or O&M agreement.~~

~~2. A violation of any provision of this Title or any other applicable law, ordinance, rule, or regulation relating to the regulated activity.~~

~~3. The creation of any condition or the commission of any act during the regulated activity which constitutes or creates a hazard, nuisance, pollution, or endangers the life or property of others.~~

b. A suspended approval may be reinstated by the City when:

1. The City has inspected and approved the corrections to the violations that caused the suspension.

2. The City is satisfied that the violation has been corrected.

c. An approval that has been revoked by the City cannot be reinstated. The **Applicant** may apply for a new approval under the provisions of this Title.

d. If a violation causes no immediate danger to life, public health, or property, at its sole discretion, the City may provide a limited time period for the owner to correct the violation. In these cases, the City will provide the owner, or the owner's designee, with a written notice of the violation and the time period allowed for the owner to correct the violation. If the owner does not correct the violation within the allowed time period, the City may revoke or suspend any, or all, applicable approvals and permits pertaining to any provision of this Title.

(Ord. No. 12-2019, art. VIII, § 13803, eff. 3-20-19)

*§ 1308.04 - PENALTIES.*

a. Anyone violating the provisions of this Title shall be guilty of a summary offense, and upon conviction, shall be subject to a fine consistent with current City fee and penalty schedules for each violation, recoverable with costs. Each day that the violation continues shall be a separate offense and penalties shall be cumulative.

b. In addition, the City may institute injunctive, mandamus, or any other appropriate action or proceeding at law or in equity for the enforcement of this Title. Any court of competent jurisdiction shall have the right to issue restraining orders, temporary or permanent injunctions, mandamus, or other appropriate forms of remedy or relief. (Ord. No. 12-2019, art. VIII, § 13804, eff. 3-20-19)

*§ 1308.05 - APPEALS.*

a. Any person aggrieved by any action of the City or its designee, relevant to the provisions of this Title, may appeal to the City within thirty (30) days of that action.

b. Any person aggrieved by any decision of the City, relevant to the provisions of this Title, may appeal to the Allegheny County Court of Common Pleas within thirty (30) days of the City's decision.

(Ord. No. 12-2019, art. VIII, § 13805, eff. 3-20-19)

*CHAPTER 1309: - REFERENCES*

*§ 1309.01 - [GENERALLY.]*

a. U.S. Department of Agriculture, National Resources Conservation Service (NRCS). National Engineering Handbook. Part 630: Hydrology, 1969-2001. Originally published as the National Engineering Handbook, Section 4: Hydrology. Available from the NRCS online at: <http://www.nrcs.usda.gov/>.

b. U.S. Department of Agriculture, Natural Resources Conservation Service. 1986. Technical Release 55: Urban Hydrology for Small Watersheds, 2nd Edition. Washington, D.C.

c. Pennsylvania Department of Environmental Protection. No. 363-0300-002 (December 2006), as amended and updated. Pennsylvania Stormwater Best Management Practices Manual. Harrisburg, PA.

d. Pennsylvania Department of Environmental Protection. No. 363-2134-008 (March 31, 2012), as amended and updated. Erosion and Sediment Pollution Control Program Manual. Harrisburg, PA.

e. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Weather Service, Hydrometeorological Design Studies Center. 2004-2006. Precipitation-Frequency Atlas of the United States, Atlas 14,



Volume 2, Version 3.0, Silver Spring, Maryland. Internet address:  
<http://hdsc.nws.noaa.gov/hdsc/pfds/>.

(Ord. No. 12-2019, art. IX, eff. 3-20-19)

*APPENDICES*

See City website.

(Ord. No. 12-2019, art. IX, eff. 3-20-19)