

Municipality/Organization:	Pittsfield, Massachusetts
EPA NPDES Permit Number:	MA041018
MassDEP Transmittal Number:	W-035321-CY2017
Annual Report Number & Reporting Period:	Year 14 April 1, 2016 – March 31, 2017

NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2017)

Part I. General Information

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Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature:	<i>David Turocy</i>
Printed Name:	David Turocy
Title:	Commissioner
Date:	March 2 nd , 2018

Part II. Self-Assessment

The City would like to thank Berkshire Regional Planning Commission (BRPC; BerkshirePlanning.org), and Berkshire Environmental Action Team (BEAT; TheBeatNews.org), for their ongoing Pittsfield-community stormwater educational outreach.

As part of new EPA.gov “NPDES” stormwater compliance rules, that become effective July 1st 2018, we are working this year and next, with BRPC and BEAT, to create and disseminate educational stormwater inserts & digital content, for websites, social media and email campaigns. We are also working to develop a stormwater educational curriculum, for City of Pittsfield public & private K-12 schools.

The City of Pittsfield has completed the required self-assessment and has determined that our municipality is in compliance with all permit conditions with the exception of the following:

Part I. D. 4 -To our knowledge the state has not yet drafted TMDLs for waters within the boundaries of the City of Pittsfield. The City will consider measures to address pollutants of concern for impaired waters in subsequent permit periods.

Part III. Summary of Minimum Control Measures

1. Public Education and Outreach

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14 (Reliance on non-municipal partners indicated, if any)	Planned Activities
PEO1	Delineate critical habitats and ecosystems in the community.	Engineering / Lawrence Kelley	Expand on GIS technology to create additional data layer mapping.	Critical habitat layer is now part of our GIS database content.	Further develop our ArcGIS database, and continually add more granularity, based on new field survey data, sourced from local City staff, interns, volunteers and environmental advocacy groups.
Revised					
PEO2	Disseminate storm water educational brochures at household hazardous waste collection days.	CET & DPU-DPS / David Turocy	Collaborate with CET and HVA to make storm water related educational materials available to hand out beginning with the household hazardous waste collection days scheduled for April and May 2003. Thereafter at each proposed household hazardous waste and computer & monitor collection event through 2008.	Event was held October 7, 2017.	Educational materials will be made available at future electronic and household hazardous waste collection events.
Revised					

PEO3	Utility bill inserts	CET & DPU-DPS / David Turocy	Collaborate with CET and HVA to create and disseminate educational brochures with utility bills twice per year beginning April 2003 and continuing until April 2008. The brochures will address different subjects such as the basics of hydrology; what a storm drain is; danger of and alternatives to pesticides, fertilizers, insecticides and herbicides; hotline phone number to report suspected illegal dumping or illicit discharge; date, time, location and materials that will be accepted at household hazardous waste collection events. Budget \$3500 per year for educational materials beginning fiscal year 2004, through fiscal year 2008.	No activity this reporting period.	Currently collaborating with HVA to create and disseminate educational utility bill inserts.
Revised					

PEO4	Media	Engineering / Lawrence Kelley	Schedule roundtable with CET and HVA on the Mayor's radio and television programs within the next six months; investigate the possibility of securing a periodic time slot dedicated to environmental awareness and storm water topics.	No activity this reporting period.	Meet with CET and HVA to brainstorm other possible media outreach.
Revised					
PEO5	Walk-in / website outreach	Engineering / Lawrence Kelley	Continue to make educational materials available to the public in this office, and at other offices in City Hall. Add information and links to the City's website in the next six months.	Various environmental education materials are posted and available in brochure format at City Hall.	Continue same.
Revised					

PEO6	Classroom and hands on storm water education for school children. HVA has an excellent program in place that combines a classroom presentation including an environmental model and a subsequent field day when students label catch basins with an important message.	HVA	Partner with HVA in supporting their educational programs to afford every public and private student the opportunity to participate and learn. We see this as an ongoing BMP that can be modified and adapted to reach other groups and focus on additional field parameters. From the HVA website: “ Community Education. HVA can provide speakers for community events, annual meetings, educational forums and other adult activities. HVA can also provide displays on the Housatonic River for your event. We sponsor and conduct educational seminars for land use officials and others on topics of interest. Check with us for details.”	HVA continued their stormwater educational programs. City wrote letters in support of HVA grant applications.	Continue same. Partner with HVA on new / different outreach efforts.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14 (Reliance on non-municipal partners indicated, if any)	Planned Activities
PEO7	Toxics use reduction	CET	Partner with CET to reduce the use of toxic products on lawns and gardens through education and outreach.	CET continues their toxics use reduction outreach and education.	Continue to support CET's efforts throughout the community. Write letters of support for CET's grant applications.
Revised					
PEO8	Responsible recreational vehicle use	Engineering / Lawrence Kelley	Collaborate with HVA, CET, Massachusetts Environmental Police and/or others to educate and survey recreational vehicle retailers and consumers, urging care and proper procedure when fueling and servicing their boats, jet skis, wave runners, snowmobiles, motorcycles, four wheelers, etc.	No activity this reporting period.	Meet with local environmental groups to discuss and implement effective means of educating the target audience; i.e. point of sale and point of use outreach, manufacturer's literature, etc.
Revised					

1a. Additions

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14 (Reliance on non-municipal partners indicated, if any)	Planned Activities
PIP1	Revised: Public review of Notice of Intent and annual reports.	Engineering / Lawrence Kelley	Solicit review and commentary from the citizens of Pittsfield, CET, HVA and BRPC within the next six months. Incorporate such feedback into the City's storm water management plan, as warranted.	Activity completed in prior reporting periods.	Continue to make program information available.
Revised					
PIP2	Illicit discharge / illegal dumping hotline	CET and DPU-S / David Turocy	Revise City code to establish severe penalties and punishment for illegal dumping. Assess the willingness and ability of City, County and State law enforcement officials to impose penalties and punishment for illegal dumping. Establish and advertise a hotline number within the next two years.	No activity this reporting period.	None.
Revised					

PIP3	Volunteer monitoring	HVA	Conduct annual survey to determine the number of new volunteers that join HVA's existing program as a result of public education and outreach.	No activity this reporting period.	None.
Revised					
Revised					
Revised					
Revised					

2a. Additions

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14 (Reliance on non-municipal partners indicated, if any)	Planned Activities
IDDE1	Identifying illicit connections	DPU-S / David Turocy	Continue working with the Housatonic Valley Association (HVA) to resolve illicit discharge problems. HVA conducts water quality testing near our storm drain outfalls and contacts us when an illicit discharge is detected. The Water Division then investigates the storm drain at points of access, working up gradient from the outfall until the problem is isolated. This partnership has already yielded corrective results thanks to the devotion of the HVA volunteer monitors and the hard work of the Water Division. Generate plan for dry weather inspection, camera survey, smoke testing, and/or dye testing of storm drains.	The HVA “Stream Team” is now active.	Continue to implement report recommendations. Continue working with HVA, monitoring & assisting them, to ensure they can maintain funding to sustain the Stream Team monitoring program.
Revised					

IDDE2	Illicit discharge / illegal dumping hotline	DPU-S / David Turocy	Revise City code to establish severe penalties and punishment for illegal dumping. Assess the willingness and ability of City, County and State law enforcement officials to impose penalties and punishment for illegal dumping. Establish and advertise a hotline number within the next two years.	No activity this reporting period.	None.
Revised					
IDDE3	Illegal Dumping	DPU-S/ David Turocy	Revise City code to establish severe penalties and punishment for illegal dumping. Assess the willingness and ability of City, County and State law enforcement officials to impose penalties and punishment for illegal dumping.	No activity this reporting period.	None.
Revised					
IDDE4	Storm drain Mapping	Engineering / Lawrence Kelley	Verify current accuracy of scanned, legacy storm drain drawings, and modify drawings as necessary. Integrate changes to GIS database, over a five year timeline.	The entire municipal storm drain system is now mapped on the city's GIS system, but requires ongoing refinement.	GIS mapping is revised / updated to reflect the ever evolving "dynamic data", of new construction, field survey data, land topology changes, additions, etc. through our full time GIS coordinator / database-manager.

Revised					
Revised					
Revised					

3a. Additions

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14 (Reliance on non-municipal partners indicated, if any)	Planned Activities
C1	Require erosion & sediment control plan for all construction sites disturbing less than one acre, which are not in wetland areas.	Engineering / Lawrence Kelley	Collaborate with the Conservation Commission over the next year(s) to establish requirements and review process.	Covered in city ordinance.	None.
Revised					
C2	Require site plan and signed covenant for waste management and vehicle maintenance, for all construction sites disturbing less than one acre which are not in wetland areas.	Engineering / Lawrence Kelley	Collaborate with the Conservation Commission over the next year(s) to establish requirements and a review process. Generate covenant within the next Year. Revise City code to support enforcement of covenant.	None.	None.
Revised					

C3	Require escrow account from developer for all construction projects.	DPU-S / David Turocy	Revise City code and/or subdivision regulations to require an escrow account from the developer to be used by the City to employ the services of an independent, qualified construction inspector selected solely by the City. This account will be required <i>in addition to a performance bond</i> .	Implemented. Using funds for third party review.	Use funds also for construction inspection.
Revised					
Revised					
Revised					
Revised					

4a. Additions

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

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14 (Reliance on non-municipal partners indicated, if any)	Planned Activities
PC1	Structural	Engineering / Lawrence Kelley	Inventory and document all existing structural storm water management facilities within the city, evaluate their current condition, identify the parties responsible for maintenance and any existing maintenance schedules (typically part of the articles of incorporation), request schedule if none exists, request written documentation of maintenance performed to date and annually thereafter. Review and revise as necessary the City's construction specifications and standards, city code, zoning ordinances and subdivision regulations.	Continued same (has been effective): All new construction applicants are required to manage stormwater runoff onsite and maximize infiltration and water quality treatment. Connections to the city's storm drain system <i>are prohibited</i> unless the applicant can prove that site conditions will not fully support onsite management. Encouraged low impact development through reduction of subdivision roadway width requirement (from 30 feet to 24 feet). All new catch basins are required to have a deep sump and oil / water /debris separator. Revised construction standards, permit language and development requirements	Continue to develop.
Revised					

PC2	Non-structural	Engineering / Lawrence Kelley	Establish criteria for site planning that requires incorporation of <i>nonstructural</i> storm water management measures (trees, shrubs, flowers, etc.) where applicable.	The city continues to study and encourage low impact development. We continue to collaborate with designers and developers to include items such as rain gardens and water quality swales.	Continue to develop.
Revised					
PC3	Ordinance	DPU-S / David Turocy and City Council	Review and revise as necessary, the City's construction specifications and standards, city code, zoning ordinances and subdivision regulations to clearly define storm water management requirements, policies and practices.	The ordinance was adopted in 2015.	Revise as needed.
Revised					
Revised					
Revised					
Revised					

5a. Additions

6. Pollution Prevention and Good Housekeeping in Municipal Operations

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14 (Reliance on non-municipal partners indicated, if any)	Planned Activities
PPGH1	Continue used motor oil, oil filter and antifreeze recycling.	DPS / David Turocy		Continue same.	Continue same.
Revised					
PPGH2	Responsible pest control	DPS / David Turocy Water & Sewer / Brian Stack Wastewater / Carl Shaw Parks / Jim McGrath Buildings / Brian Filiault	Although the City of Pittsfield uses little to no chemical pesticides at this time, we will be working with CET to create an Integrated Pest Management (IPM) plan for the City that minimizes use of Tier 1 chemicals to the MEP.	Idle for now, as it was determined that the City currently uses little to no pesticides, herbicides and fertilizers.	None.
Revised					

PPGH3	Vehicle washing	DPS / Dave Turocy Water & Sewer / Brian Stack Wastewater / Carl Shaw Parks / Jim McGrath Buildings / Brian Filiault	Establish and implement a policy for washing City vehicles only on grassed areas, areas that drain to the sanitary sewer via an oil / water separator or in an area where wash water is contained and pumped to the sanitary sewer. City conducted audits of all municipal facilities including facilities that include vehicle washing operations. Recommendations were made regarding long term washing operations which are currently under review by the City.	A City vehicle washing area was built and began operation during calendar year 2017. It is in operation at the City's Municipal Highway Yard. This new facility allows Pittsfield City staff and contractors, to wash vehicles, and to divert wash water through an oil/grit separator, catching potentially environmentally-harmful materials.	Write official policy. Share policy with all City departments that own/operate or maintain City vehicles. Check to see if we are implementing. If not, re-educate Department Heads and staff.
Revised					

PPGH4	Research alternatives to road salts and effective application rates	Engineering / Lawrence Kelley DPS / David Turocy	Research effective alternatives to conventional road salts that are more environmentally friendly and techniques of effective lower salt application rates. Research road salt application rates of other communities in Berkshire County and the northeast region. Perform active experimentation on designated sections of roadway and document results, starting winter 2003/2004. Create a map identifying sensitive areas where little or no salt shall be applied (bridges, culverts, wetlands, etc.); to be completed and distributed within the next year.	Lawrence Kelley has been monitoring an experiment road “wood-chip” (to reduce use of damaging road salts) prototype project in Quebec Province, for possible use in Pittsfield.	Review “Manual of Practice for an Effective Anti-Icing Program” and additional research. Involve the Highway Superintendent and Commissioner.
Revised					
PPGH5	Household hazardous waste collection events (HHWCE)	CET and DPU-S / David Turocy	Collaborate with CET (or others) to organize one HHWCE for each spring, summer and fall in the City of Pittsfield.	Event was held October 7th, 2017.	Continue same.
Revised					

PPGH6	Street & parking lot sweeping	DPS / David Turocy	Sweep streets before flushing water mains, consider vacuum sweepers	Streets & parking lots were swept. Pre water main flushing priority is being given to streets closest to lakes and streams.	Streets & parking lots will be swept.
Revised				Increased frequency of downtown area sweeping.	
PPGH7	Storm drain system cleaning	Water & Sewer/ Brian Stack DPS / Dave Turocy	Clean each catch basin once annually. Inspect each outfall once annually and clean accordingly.	City's Water, Sewer & Drain Department and Highway Department clean catch basins; city also contracts this work.	Continue same.
Revised					
PPGH8	Proper snow disposal	DPS / David Turocy	Develop policy and train Highway Department personnel.	No activity this reporting period.	Write official policy. Train staff.
Revised					

6a. Additions

Code of the City of Pittsfield
Part II The Code
Chapter 26 Land Disturbance and Stormwater Management

Article 1: Purpose

- (a) Regulation of discharges to the municipal separate storm sewer system (MS4) is necessary for the protection of the City's water bodies and groundwater, and to safeguard the public health, safety, welfare and the environment. Increased and contaminated stormwater runoff associated with developed land uses and the accompanying increase in impervious surface are major causes of:
 - (1) Impairment of water quality and flow in lakes, ponds, streams, rivers, wetlands and groundwater;
 - (2) Contamination of drinking water supplies,
 - (3) Erosion of stream channels;
 - (4) Alteration or destruction of aquatic and wildlife habitat; and
 - (5) Flooding.
- (b) Therefore, this Chapter establishes clearing, grading and stormwater management standards for the final conditions that result from development and redevelopment projects to minimize adverse impacts offsite and downstream which would be born by abutters, city residents and the general public. Regulation of clearing and grading activities will also protect and preserve existing healthy native trees and vegetation, and minimize fragmentation of wildlife habitat.
- (c) Further, the Chapter prohibits non-stormwater discharges to municipal storm drains that could contribute contaminants and additional flow to the City drain system.
- (d) The objectives of this Chapter are:
 - (1) To require enhanced and low impact development practices that control the flow of stormwater from new and redeveloped sites into the City's storm drainage system in order to prevent flooding and erosion;
 - (2) To prohibit illicit connections and unauthorized discharges to the City's MS4;
 - (3) To require removal of all such illicit connections;
 - (4) To require practices that eliminate soil erosion and sedimentation and control the volume and rate of stormwater runoff resulting from land disturbance activities;
 - (5) To promote infiltration and the recharge of groundwater;
 - (6) To promote preservation of existing healthy trees and vegetation;
 - (7) To ensure that soil erosion and sedimentation and stormwater runoff control practices are incorporated into the site planning and design process and are implemented and maintained;
 - (8) To require practices to control waste such as discarded building materials, concrete truck washout, chemicals, vehicle and equipment fluids, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality;
 - (9) To protect groundwater and surface water and wetland resource areas from degradation;
 - (10) To prevent pollutants from entering the City's municipal separate storm sewer system (MS4) and to minimize discharge of pollutants from the MS4;
 - (11) To ensure adequate long-term operation and maintenance of structural stormwater best management practices so that they work as designed;

- (12) To comply with state and federal statutes and regulations relating to stormwater discharges; and,
- (13) To establish the City's legal authority to ensure compliance with the provisions of this Chapter through permitting, inspection, monitoring, and enforcement.

Article 2: Definitions

- (a) **ALTERATION OF DRAINAGE CHARACTERISTICS:** Any activity on an area of land that changes the water quality, force, direction, timing or location of runoff flowing from the area. Such changes include: change from distributed runoff to confined, discrete discharge, change in the volume of runoff from the area; change in the peak rate of runoff from the area; and change in the recharge to groundwater on the area.
- (b) **APPLICABLE AUTHORITY:** The employees and/or agents of the Department of Public Services (DPS). An applicant that is required to obtain a permit from Conservation Commission and/or DEP must obtain such permit prior to applying under this ordinance.
- (c) **APPLICANT:** Any person, individual, partnership, association, firm, company, corporation, trust, authority, agency, or department (including local, state and Federal government) required to apply for a Stormwater Management Permit for proposed land-disturbance or construction activity.
- (d) **BEST MANAGEMENT PRACTICE (BMP):** An activity, procedure, restraint, or structural improvement that helps to reduce the quantity or improve the quality of stormwater runoff.
- (e) **THE BOARD** – The City of Pittsfield Community Development Board.
- (f) **CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC):** A certified specialist in soil erosion and sediment control. This certification program, sponsored by the Soil and Water Conservation Society in cooperation with the American Society of Agronomy, provides the public with evidence of professional qualifications.
- (g) **CONSTRUCTION AND WASTE MATERIALS:** Excess or discarded building or site materials, including but not limited to concrete truck washout, vehicle and equipment fluids, soils, aggregates, chemicals, litter and sanitary waste at a construction site that may adversely impact water quality.
- (h) **CONVEYANCE:** Any surface or subsurface means of transporting stormwater runoff from an impervious surface, detention, or retention basin to another point on the same or on a neighboring parcel of land.
- (i) **CLEAN WATER ACT:** The Federal Water Pollution Control Act (33 U.S.C. § 1251 et seq.) as hereafter amended.
- (j) **CLEARING:** Any activity that removes the vegetative surface cover.
- (k) **DEVELOPMENT:** The modification of land to accommodate a new use or expansion of use, usually involving construction.
- (l) **Discharge of Pollutants:** The addition from any source of any pollutant or combination of pollutants into the municipal storm drain system or into the Wetland Resource Areas.

(m) Discharger: A person or persons who discharge any pollutant or combination of pollutants into the municipal storm drain system or into the Wetland Resource Areas from any source.

(n) Disturbed Area – Any area where activities have changed, or will cause change to, the physical, chemical, and biological influences of land surface(s). Examples of disturbed areas, include, but are not limited to, the following:

1. the changing of pre-existing drainage characteristics, soil/surface permeability, flushing characteristics, sedimentation patterns, flow patterns and flood retention areas;
2. areas involved in the translocation of any soil, parent materials, and the derivatives of parent material;
3. the destruction of vegetation;
4. any area causing or contributing to an excursion above water quality standards due to nutrients (nitrogen and phosphorous), solids, bacteria/pathogens, metals, and hydrocarbons.

(o) EROSION: The wearing away of the land surface by natural or artificial forces such as wind, water, ice, gravity, or vehicle traffic and the subsequent detachment and transportation of soil particles.

(p) EROSION AND SEDIMENTATION CONTROL PLAN: A document containing narrative, drawings and details developed by a qualified professional engineer (PE) or a Certified Professional in Erosion and Sedimentation Control (CPESC), which includes best management practices, or equivalent measures designed to control surface runoff, erosion and sedimentation during pre-construction and construction related land disturbance activities.

(q) ESTIMATED HABITAT OF RARE WILDLIFE AND CERTIFIED VERNAL POOLS: Habitats delineated for state-protected rare wildlife and certified vernal pools for use with the Wetlands Protection Act Regulations (310 CMR 10.00) and the Forest Cutting Practices Act Regulations (304 CMR 11.00).

(r) GRADING: Changing the level or shape of the ground surface.

(s) GRUBBING: The act of clearing land surface by digging up roots and stumps.

(t) Illicit Connection: A surface or subsurface drain or conveyance, which allows an illicit discharge into the municipal storm drain system, including without limitation sewage, process wastewater, or wash water and any connections from indoor drains, sinks, or toilets, regardless of whether said connection was previously allowed or approved before the effective date of this Ordinance.

(u) Illicit Discharge: Discharges of untreated stormwater. Notwithstanding the foregoing, an illicit discharge does not include discharges from the following activities or facilities: firefighting, water line flushing, landscape irrigation, uncontaminated groundwater, potable water sources, foundation drains, air conditioning condensation, footing drains, individual resident car washing, flows from riparian habitats and wetlands, dechlorinated water from swimming pools, water used for street washing and water used to clean residential buildings without detergents.

(v) Illicit Discharge Detection and Elimination (IDDE): one of six Minimum Control Measures regulated under the City's NPDES Phase II MS4 Permit. The federal regulation governing implementation of the IDDE program under this Permit is Section (b) (3) of 40 CFR 122.34, "Storm Water Phase II Regulations."

(w) IMPERVIOUS SURFACE: all surfaces influenced by anthropogenic actions that prohibit, or greatly reduces, the ability of that lands surface to absorb water. Examples of an impervious surface, include, but are not limited to, the following:

1. Any paved (concrete, bitumen, brick/stone pavers, etc.) area, including, but not limited to, driveways, roadways, parking lots, airport runways, tennis/basketball courts, and patios. For the purposes of this Chapter, porous pavement is to be considered an impervious surface.
2. Compacted earth material (gravel, stone, clay, etc.)
3. Structures, including, but not limited to, buildings, homes, sheds and other out-buildings, swimming pools, stonewalls, pole barns, and storage sheds; and,
4. Areas containing long-term stockpiles of construction materials, including, but not limited to, wood, concrete, brick, and landscaping stone.

(x) parking area, a paved access road or driveway, a paved area used for the storage and/or maintenance of vehicles and/or equipment; a paved area used for the storage of materials, products and/or waste and a roof, other than a green roof constructed in accordance with the Massachusetts Stormwater Handbook. The term “paved access road or driveway” includes an impervious surface leading to any of the following: a paved parking area; a paved area used for the storage and/or maintenance of vehicles and/or equipment; or a paved area used for the storage of materials, products and/or waste. For purposes of this Chapter, porous pavement is considered to be an impervious surface.

(y) LAND-DISTURBING ACTIVITY: Any activity that causes a change in the position or location of soil, sand, rock, gravel, or similar earth material.

(z) MASSACHUSETTS STORMWATER MANAGEMENT POLICY: The Policy issued by the Department of Environmental Protection, and as amended, that coordinates the requirements prescribed by state regulations promulgated under the authority of the Massachusetts Wetlands Protection Act G.L. c. 131 § 40 and Massachusetts Clean Waters Act G.L.c. 21, §. 23-56. The Policy addresses stormwater impacts through implementation of performance standards to reduce or prevent pollutants from reaching water bodies and control the quantity of runoff from a site.

(aa) MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) or MUNICIPAL STORM DRAIN SYSTEM: The system of conveyances designed or used for collecting or conveying stormwater, including any road with a drainage system, street, gutter, curb, inlet, piped storm drain, pumping facility, retention or detention basin, natural or man-made or altered drainage channel, reservoir, and other drainage structure that together comprise the storm drainage system owned or operated by the City of Pittsfield.

(bb) Non-Stormwater Discharge: Discharge to the municipal storm drain system not composed entirely of stormwater.

(cc) OPERATION AND MAINTENANCE PLAN: A plan setting up the functional, financial and organizational mechanisms for the ongoing operation and maintenance of a stormwater management system to insure that it continues to function as designed.

(dd) OUTFALL: The point at which stormwater flows out from a point source discernible, confined, and discrete conveyance into waters of the Commonwealth.

(ee) OUTSTANDING RESOURCE WATERS (ORWs): Waters designated by Massachusetts Department of Environmental Protection as ORWs. These waters have exceptional sociologic, recreational, ecological and/or aesthetic values and are subject to more stringent requirements under both the Massachusetts Water Quality Standards (314 CMR 4.00) and the Massachusetts Stormwater Management Standards. ORWs include vernal pools certified by the Natural Heritage Program of the Massachusetts Department of Fisheries and Wildlife and Environmental Law Enforcement, all Class A designated public water supplies with their bordering vegetated wetlands, and other waters specifically designated.

(ff) OWNER: A person(s) with a legal or equitable interest in property.

(gg) POINT SOURCE: Any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, or container from which pollutants are or may be discharged.

(hh) POLLUTION: Any contaminant that could potentially harm a water body or aquatic life.

(ii) PRIORITY HABITAT OF RARE SPECIES: Habitats delineated for rare plant and animal populations protected pursuant to the Massachusetts Endangered Species Act and its regulations.

(jj) Process Wastewater: Water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any material, intermediate product, finished product, or waste product.

(kk) REDEVELOPMENT: Development, rehabilitation, expansion, demolition or phased projects that disturb the ground surface or increase the impervious area on previously developed sites.

(ll) RUNOFF: Rainfall, snowmelt, or irrigation water flowing over the ground surface.

(mm) SEDIMENT: Mineral or organic soil material that is transported by wind or water, from its origin to another location; the product of erosion processes.

(nn) SEDIMENTATION: The process or act of deposition of sediment.

(oo) SITE: Any lot or parcel of land or area of property where land-disturbing activities are, were, or will be performed.

(pp) STORMWATER MANAGEMENT PLAN: A plan required as part of the application for a Stormwater Management Permit. See Article 13.

(qq) STORMWATER: Rainfall, snow melt, storm water runoff, snow melt runoff, and surface water runoff and drainage.

(rr) TSS: Total Suspended Solids (solid particles in the water).

(ss) Watercourse: A natural or man-made channel through which water flows, or a stream of water, including a river, brook or underground stream.

(tt) Wetland Resource AreaS: All wetlands and watercourses protected under the Massachusetts Wetlands Protection Act and the Pittsfield Conservation Commission.

(uu) Wastewater: Any sanitary waste, sludge, or septic tank or cesspool overflow, and water that during manufacturing, cleaning or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct or waste product.

Article 3: Applicability

- (a) All new stormwater conveyances that discharge into areas subject to jurisdiction under M.G.L. c 131 § 40 and 310 CMR 10.02 of the Wetlands Protection Act and their associated buffers zones.
- (b) Any cumulative land-disturbing activity greater than one-half (0.5) acre in area is to, at minimum, incorporate temporary Best Management Practices and construction period erosion control devices following guidelines set forth in the Erosion and Sediment Control for Urban and Suburban Areas, Massachusetts Department of Environmental Protection (“Handbook”).
- (c) Any cumulative land-disturbing activity greater than one (1) acres in area which would result in any increased amount of stormwater runoff from the property to other public/private property shall comply with Article 8 of this ordinance. In the case of new real estate subdivisions where approval is required and where approval is not required under the Subdivision Control Law, M.G.L. C. 41 § 81K-81G, all land disturbing activity is to be determined over the cumulative area of the original common plan of land; and not determined by the individual subdivided lots.
- (d) Any authorized stormwater conveyances that discharge into the regulated MS4.

Article 4: Exemptions

- (a) Maintenance work to ways, utilities, or structures owned by the City of Pittsfield.
- (b) Normal maintenance and improvement of land in agricultural use as defined in 310 CMR 10.04 of the Massachusetts Wetlands Protection Act
- (c) (Maintenance, repair and improvement, but not expansion of, existing; impervious surfaces (provided that the repair and/or improvement do not increase surface water runoff rates), maintained lawn and gardens areas, residential on-site sewage disposal systems, residential potable wells. The maintenance of an approved stormwater management system having an approved operation and maintenance plan constructed after November 18, 1996 is exempt from this Chapter.
- (d) The construction of fencing that will not substantially alter existing terrain or drainage patterns.
- (e) Logging or forestry activities undertaken under an approved forest management plan.
- (f) Routine maintenance of vegetation, including, but not limited to, nuisance plant material (terrestrial and aquatic) and treatment, removal of dead or diseased limbs and/or trees necessary to maintain the health of cultivated plants, to contain noxious weeds and/or vines in accordance with a Department of Environmental Management Approved Forest Management Plan, or to remedy a potential threat to public safety.
- (g) Industrial Stormwater discharges with a valid NPDES permit (copy provided to City) and that discharge outside of wetland resource areas and their associated buffer zone.
- (h) Discharges or flows resulting from firefighting activities or other authorized hydrant use are exempt.
- (i) The following non-stormwater discharges or flows are exempt from the prohibitions of this Chapter provided that the source is not a significant contributor of a pollutant to the municipal storm drain system:

- (1) Waterline flushing;
- (2) Water from exterior foundation drains, footing drains (not including active groundwater dewatering systems), crawl space pumps, or air conditioning condensation;
- (3) Discharge from landscape irrigation or lawn watering;
- (4) Water from individual residential car washing; Washing and rinsing should be done on grass area;
- (5) Discharge from dechlorinated swimming pool water (less than one ppm chlorine) provided the water is allowed to stand for one week following last chlorination prior to draining and the pool is drained in such a way as not to cause a nuisance;
- (6) Discharge from street sweeping;
- (7) Flow from potable water sources;
- (8) Natural groundwater discharges (i.e. springs);
- (9) Natural flow from riparian habitats and wetlands;
- (10) Diverted stream flow;
- (11) Rising groundwater;
- (12) Uncontaminated groundwater infiltration as defined in 40 CFR 35.2005(20), or uncontaminated pumped groundwater (e.g. sump pump), provided that the operator seeks written approval from the Applicable Authority prior to discharge, and thereafter discharges in accordance with the applicable laws and regulations to be issued by the Applicable Authority;
- (13) Dye testing, provided verbal notification is given to the Applicable Authority prior to the time of the test;
- (14) Non-stormwater discharge permitted under an NPDES permit, waiver, or waste discharge order administered under the authority of the United States Environmental Protection Agency, provided that the discharge is in full compliance with the requirements of the written approval, waiver, or order and applicable laws and regulations; and
- (15) Discharge for which advanced written approval is received from the Applicable Authority as necessary to protect the public interest.

Article 5: Administration

(a) The Applicable Authority shall administer, implement and enforce this Chapter. Any powers granted to or duties imposed upon the Applicable Authority may be delegated in writing by the Applicable Authority to its employees or agents.

Article 6: Fees

(a) All Stormwater Management Permit Applications filed pursuant to this Chapter shall be accompanied by a filing fee as determined by the fee schedule out lined in section (b) of this Article. Payments shall be made payable, by check or money order, to the City of Pittsfield.

(b) Fee Schedule: Refer to Chapter 24 Schedule of Fees – “Stormwater”

Article 7: Prohibited Activities

- (a) Illicit Discharges - No person shall dump, discharge, cause or allow to be discharged any pollutant or non-stormwater discharge into the municipal separate storm sewer system (MS4), into an open drainage course, or into jurisdictional Wetland Resource Areas. Where actions involve the alteration of less than one-half (0.5) continuous acres of land, such actions shall not discharge stormwater without first complying with the regulations of this Chapter.
- (b) Illicit Connections - No person shall construct, use, allow, maintain or continue any illicit connection to the municipal storm drain system, regardless of whether the connection was permissible under applicable law, regulation or custom at the time of the connection.
- (c) Obstruction of Municipal Storm Drain System (MS4) - No person shall obstruct or interfere with the normal flow of stormwater into or out of the MS4 without prior consent from the Applicable Authority. No person shall dump or dispose of yard waste (leaves, grass clippings, etc.) into the open watercourses (swales, brooks and streams,) that make up the MS4.
- (d) No person shall discharge, or cause to be discharges, water or any other liquid, on to the streets, sidewalks or ways of the City in such a manner as to cause an obstruction of traffic or to endanger travel by freezing, flooding, or otherwise. This shall include chlorinated pool water.
- (e) Drains – No one shall tie any pump, cellar, yard, roof or area drain directly into the municipal water drainage system without approval from the Applicable Authority.
- (f) Catch Basins – No person shall directly or indirectly dump, discharge, or cause or allow to be discharged into any catch basin, any solid waste, construction debris, paint or paint product, antifreeze, hazardous waste, oil, gasoline, grease and all other automotive and petroleum products, solvents, and degreasers, drain cleaners, commercial and household cleaners, soap, detergent, ammonia, food and food waste, grease or yard waste, animal feces, dirt, sand, gravel or other pollutant. Any Person determined by the Applicable Authority to be responsible for the discharge of the above substances to a catch basin may be held responsible for cleaning the catch basin and any other portions of the storm water system impacted according to the City standards and requirements or paying the cost for such cleaning. In addition, the Person shall be responsible for paying any penalties assessed by the City.
- (g) Septage – No Person shall discharge or cause or allow to be discharged any septage, or septage tank or cesspool overflow into the City’s stormwater drainage system.

- (h) Storage and Disposal of Hazardous Material - The disposal of waste, gasoline, or any other hazardous material into the storm drainage system is strictly prohibited and is in violation of State and Federal pollution laws.
- (i) Private Drainage System - It is prohibited for anyone with a private drainage system from tying into the public stormwater disposal system without a permit from the Applicable Authority. The maintenance of any and all private drainage systems shall be the responsibility of the owners.

Article 8: Stormwater Design and Management Plan

(a) Design Parameters.

Stormwater design shall be evaluated using Standards 2 through 10 of the DEP *Massachusetts Stormwater Management Standards* using the applicable *Best Management Practices (BMP) Guidelines*, set forth in the latest editions of the *Massachusetts Stormwater Handbook, Volumes 1-3 ("Guidelines")*, and its companion book, *Erosion and Sediment Control for Urban and Suburban Areas, Massachusetts Department of Environmental Protection ("Handbook")*. Rainfall data shall be obtained from the most recent accepted data available, but shall not be less than those design storms referenced in the "Atlas of Precipitation Extremes for the Northeastern United States and Southeastern Canada" (http://www.nrcc.cornell.edu/reports/RR_93-5.pdf)

For Standard 4 of the DEP Massachusetts Stormwater Management Standards, applicants shall use a water quality volume of 1" of runoff times the amount of total impervious area of the construction phase and post-development condition on all projects and all stormwater management systems on new and re-developed sites shall be designed to either:

1. Retain the first one (1) inch of runoff from all impervious surfaces on site, or;
2. Provide the level of pollutant removal equal to or greater than the level of pollutant removal provided through the use of biofiltration on the first one (1) inch of runoff from all impervious surfaces on site. This standard shall be met through a combination of practices designed to retain runoff on site (environmentally sensitive site design, low impact development techniques) where technically feasible, and stormwater BMPs designed to treat the remainder of runoff that cannot be retained on site due to site constraints. The level of pollutant removal from BMPs shall be calculated consistent with EPA Region 1's BMP Performance Extrapolation Tool¹. BMP's shall be optimized for Nitrogen and Phosphorous removal.
 - (1) Redevelopment of previously developed sites shall meet the applicable Guidelines and Handbook standards, principally Standards 4, 5, 6, 8 and 9, to the maximum extent practicable. However, if it is not practicable to meet all standards, new (retrofitted or expanded) stormwater management shall, at a minimum, be designed to improve existing conditions.
 - (2) The post-development peak discharge rate is equal or less than the pre-development rate from the 2-year, 10-year, 25-year, and 100 year 24-hour storms. If increased off-site flooding will result from peak discharges from the 100-year 24-hour storm, BMPs must be provided to attenuate these discharges.
 - (3) The annual recharge from the post-development site shall approximate the annual recharge rate from pre-development conditions based on soil type. Post development infiltration volume of precipitation into the ground shall be at least as much as infiltration pre-development.

- (4) At sites with Class D Soil Hydrologic Groups, or that have bedrock at or near the surface, Standard #3 of the MA Stormwater Management Standards may be waived provided that a preponderance of evidence clearly supports that infiltration volumes of 0.10 inches of runoff multiplied by the amount of impervious surfaces is unobtainable. It is the responsibility of the applicant to provide infiltration rates throughout the soil profile (A and B horizons, and C layer), and provide, to the best extent practicable, BMP's that promote infiltration.
- (5) The system shall remove 80% of the average annual post construction load of Total Suspended Solids (TSS)
- (6) The developer is strongly encouraged to utilize Environmentally Sensitive Site Design techniques, including but not limited to; Low Impact Development (LID) and nonstructural Best Management Practices (BMPs) whenever possible, to reduce costs and to minimize disturbance to the site.

¹The BMP Performance Extrapolation tool, instructions and background can be found here: <http://www.epa.gov/region1/npdes/stormwater/>

(b) Stormwater Management Submittal Requirements

- (1) The Stormwater Management Plan shall contain sufficient information for the Applicable Authority to evaluate the environmental impact, effectiveness, and applicability of the measures proposed by the applicant for reducing the adverse impacts from stormwater. It shall include:
 - (a) A locus map,
 - (b) The existing zoning and land use of the site,
 - (c) The proposed land use,
 - (d) The location(s) of existing and proposed easements,
 - (e) The location of existing and proposed utilities,
 - (f) The site's existing and proposed topography with contour intervals of two feet or less,
 - (g) The existing site hydrology,
 - (h) Field data – At a minimum, field data is to consist of the items listed in the below:
 - 1. Test pits, with a minimum depth of four (4) feet and also at least two (2) feet below the bottom of the proposed exfiltration components of the system. Test pit logs shall document the estimated seasonal high ground water table, soil horizons, soil texture, and any refusal or perched soil depths.
 - 2. Infiltration test. Stormwater infiltration is not permitted through fill materials composed of asphalt, brick, concrete, construction debris, and materials classified as solid or hazardous waste.

Test shall be performed using the “Static”, “Simple Dynamic”, or “Dynamic Field” Methods; whichever is most applicable to the system design. A mounding analysis shall be provided in areas where vertical separation from the bottom of the exfiltration system to the estimated seasonal high groundwater table is less than four (4) feet and the recharge system is proposed to attenuate the ten (10) year of higher 24-hour storm event. In the event a mounding analysis is to be performed, the Hantush Method, or another equivalent method, is to be used. Standard septic system percolation testing is not an acceptable infiltration test.

- (i) A description and delineation of existing stormwater conveyances,
- (j) impoundments, and state and local jurisdictional wetlands on or adjacent to the site or into which stormwater flows,
- (k) A delineation of 100-year floodplains, if applicable,
- (l) Estimated seasonal high groundwater elevation (November to April) in areas to be used for stormwater retention, detention, or infiltration,
- (m) The existing and proposed vegetation and ground surfaces with runoff coefficient for each,
- (n) A drainage area map showing pre- and post-construction watershed boundaries, drainage areas and stormwater flow paths,
- (o) A description and drawings of all components of the proposed drainage system including:
 - 1. locations, cross-sections, and profiles of all brooks, streams, drainage swales and their method of stabilization;
 - 2. all measures for the detention, retention or infiltration of water;
 - 3. all measures for the protection of water quality;
 - 4. the structural details for all components of the proposed drainage systems and stormwater management facilities;
 - 5. notes on drawings specifying materials to be used, construction specifications, and typicals;
 - 6. hydrologic soil group and soil texture; and,
 - 7. expected hydrology with supporting calculations.
- (p) Proposed improvements including location of buildings or other structures, impervious surfaces, and drainage facilities, if applicable,
- (q) Computations for pre- and post-development calculations for 24-hour storm events with return periods of two (2), ten (10), twenty-five (25), and one hundred (100) year probability;
- (r) A stormwater management report providing certification of the design to show that there is adequate disposal capacity for the drainage water and surface runoff. The report shall include all off-site watershed influences including existing storm sewers, streams and/or tributaries and downstream watercourses;

- (s) Timing, schedules, and sequence of development including clearing, stripping, rough grading, construction, final grading, and vegetative stabilization;
 - (t) A maintenance schedule for the period of construction; and,
 - (u) Any other information requested by the Applicable Authority.
- (2) A Stormwater Management Report written narrative and a completed MA DEP Checklist for Stormwater Reports.
 - (3) An Operation and Maintenance Plan as per Standard 9 in the Massachusetts DEP Stormwater Handbook.
 - (4) An Erosion and Sediment Control Plan as per Standard 8 in the Massachusetts DEP Stormwater Handbook.

Article 9: Permits and Procedure

- (a) Filing Application. The site owner or his agent shall file with the Applicable Authority, four (4) copies of a completed application package for a Stormwater Management Permit (SMP). Permit issuance is required prior to any site altering activity. While the applicant can be a representative, the permittee must be the owner of the site. The SMP Application package shall include:
 - (1) a completed Application Form with original signatures of all owners;
 - (2) a list of abutters within 100' of the subject parcels property lines, certified by the Assessor's Office;
 - (3) four (4) copies of the Stormwater Management Plan and project description as specified in Article 8 (b)(1);
 - (4) four (4) copies of the Operation and Maintenance Plan as required by Article 8 (b)(3) of this Chapter;
 - (5) four (4) copies of the Erosion and Sediment Control Plan as specified in Article 8(b)(4) of this Chapter;
 - (6) four (4) copies of the Erosion and Sediment Control Plan as specified in Article 8(b)(4) of this Chapter;
 - (7) one (1) copy of the application form, the Erosion and Sediment Control Plan, the Stormwater Management Plan, the Operation & Maintenance Plan, and the list of abutters filed with the City Clerk; and,
 - (8) payment of the application and review fees.
- (b) Entry. Filing an application for a permit grants the Applicable Authority, or its agent, permission to enter the site to verify the information in the application and to inspect for compliance with the resulting permit.
- (c) Other Boards. The Applicable Authority shall notify the City Clerk of receipt of the application, and shall give one copy of the application package to each of the Conservation Commission, Building Inspector and the Community Development Department for review and comment.

- (d) Fee Structure. The Applicable Authority shall obtain with each submission an Application Fee established by the Applicable Authority to cover expenses connected with the application review of the Stormwater Management Permit. A technical Review Fee may also be required to cover professional review (per M.G.L. Ch. 44 §53G and its amendments). The Applicable Authority is authorized to retain a Registered Professional Engineer or other professional consultant to advise the Applicable Authority on any or all aspects of these requirements. Applicants must pay review fees before the review process may begin.
- (e) Actions. The Applicable Authority's action, rendered in writing, shall consist of either:
 - (1) Approval of the Stormwater Management Permit Application based upon determination that the proposed plan meets the Standards in Articles 8 and will adequately protect the water resources of the community and is in compliance with the requirements set forth in this Chapter;
 - (2) Approval of the Stormwater Management Permit Application subject to any conditions, modifications or restrictions required by the Applicable Authority which will ensure that the project meets the Standards in Articles 8 and adequately protect water resources, set forth in this Chapter;
 - (3) Disapproval of the Stormwater Management Permit Application based upon a determination that the proposed plan, as submitted, does not meet the Standards in Articles 8 or adequately protect water resources, as set forth in this Chapter.
- (f) Failure of the Applicable Authority to take final action upon an Application within the time specified above shall be deemed to be approval of said Application. Upon certification by the City Clerk that the allowed time has passed without Applicable Authority action, the Applicable Authority must issue a Stormwater Management Permit.
- (g) Project Completion. At completion of the project the permittee shall submit as-built record drawings of all structural stormwater controls and treatment best management practices required for the site. The as-built drawing shall show deviations from the approved plans, if any, and be certified by a Registered Professional Engineer. A digital copy of such plan, compatible with ESRI-ARC GIS software shall be submitted to the City.

Article 10: Emergency Suspension of Storm Drainage System Access

- (a) The Applicable Authority may suspend municipal storm drain system access to any person or property without prior written notice when such suspension is necessary to stop an actual or threatened discharge of pollutants that presents imminent risk of harm to the public health, safety, welfare or the environment. In the event any person fails to comply with an emergency suspension order, the Applicable Authority may take all reasonable steps to prevent or minimize harm to the public health, safety, welfare or the environment.
- (b) A person commits an offense if the person reinstates water service, sanitary sewer service, and or MS4 access to premises terminated pursuant to this Ordinance, without the prior written approval of the Applicable Authority.

Article 11: Watercourse Protection

- (a) Every person owning property through which a watercourse passes, or such person's lessee, shall keep and maintain that part of the watercourse within the property free of trash, debris, and other obstacles that would pollute, contaminate, or significantly retard the flow of water through the watercourse. In addition, the owner or lessee shall maintain existing privately owned structures within or adjacent to a watercourse so that such structures will not become a hazard to the use, function, or physical integrity of the watercourse.

- (b) Failure by the property owner to maintain the watercourse does not constitute an obligation on the part of the City to assume this responsibility.

Article 12: Notification of Spills

- (a) Notwithstanding other requirements of local, state or federal law, as soon as a person responsible for a facility or operation, or responsible for emergency response for a facility or operation has information of or suspects a release of materials at that facility or operation resulting in or which may result in discharge of pollutants to the municipal drainage system or Wetland Resource Areas, the person shall take all necessary steps to ensure containment, and cleanup of the release. In the event of a release of oil or hazardous materials, the person shall immediately notify the municipal fire and police departments. In the event of a release of non-hazardous material, the reporting person shall notify the Applicable Authority no later than the next business day. The reporting person shall provide to the Applicable Authority written confirmation of all telephone, facsimile or in-person notifications within three business days thereafter. If the discharge of prohibited materials is from a commercial or industrial facility, the facility owner or operator of the facility shall retain on-site a written record of the discharge and the actions taken to prevent its recurrence. Such records shall be retained for at least three years.

Article 13: Inspection and Site Supervision

- (a) Pre-construction Meeting. Prior to starting clearing, excavation, construction, or land disturbing activity the applicant, the applicant's technical representative, the general contractor or any other person with authority to make changes to the project, shall meet with the Applicable Authority, to review the permitted plans and their implementation.
- (b) Authority Inspection. The Applicable Authority or its designated agent shall make inspections as hereinafter required and shall either approve that portion of the work completed or shall notify the permittee wherein the work fails to comply with the permit as approved. Applicant shall pay all fees associated with inspection services. The City shall select a qualified inspector. The Permit and associated plans for grading, stripping, excavating, and filling work, bearing the signature of approval of the Applicable Authority, shall be maintained at the site during the progress of the work. In order to obtain inspections, the permittee shall notify the Applicable Authority at least two (2) working days before each of the following events:
 - (1) Erosion and sediment control measures are in place and stabilized;
 - (2) Site Clearing has been substantially completed;
 - (3) Rough Grading has been substantially completed;
 - (4) Final Grading has been substantially completed;
 - (5) Close of the Construction Season; and,
 - (6) Final Landscaping (permanent stabilization) and project final completion.
- (c) Permittee Inspections. The permittee or his/her agent shall conduct and document inspections of all control measures no less than weekly or as specified in the permit, and prior to and following storms that exceed the statistical two-year, 24-hour event. The purpose of such inspections will be to determine the overall effectiveness of the control plan, and the need for maintenance or additional control measures. The permittee or his/her agent shall submit monthly reports to the Applicable Authority or designated agent in a format approved by the Applicable Authority.

Article 14: Surety

- (a) The Applicable Authority may require the permittee to post before the start of land disturbance or construction activity, a surety bond, irrevocable letter of credit, cash, or other acceptable security. The form of the performance guarantee shall be approved by the City Solicitor, and be in an amount deemed sufficient by the Applicable Authority to ensure that the work will be completed in accordance with the permit. If the project is phased, the Applicable Authority may release part of the performance guarantee as each phase is completed in compliance with the permit but the performance guarantee may not be fully released until the Applicable Authority has received the final inspection report as required by Article 16 and issued a Certificate of Completion.

Article 15: Enforcement

- (a) The Applicable Authority or an authorized agent of the Applicable Authority shall enforce this Chapter, regulations, orders, violation notices, and enforcement orders, and may pursue all civil and criminal remedies for such violations.
- (b) Orders
 - (1) The Applicable Authority or an authorized agent of the Applicable Authority may issue a written order to enforce the provisions of this Chapter or the regulations thereunder, which may include requirements to:
 - a) cease and desist from construction or land disturbing activity until there is compliance with the Chapter and the stormwater management permit;
 - b) repair, maintain; or replace the stormwater management system or portions thereof in accordance with the operation and maintenance plan;
 - c) perform monitoring, analyses, and reporting; and,
 - d) remediate adverse impact resulting directly or indirectly from malfunction of the stormwater management system.
 - (2) If the enforcing person determines that abatement or remediation of adverse impacts is required, the order shall set forth a deadline by which such abatement or remediation must be completed. Said order shall further advise that, should the violator or property owner fail to abate or perform remediation within the specified deadline, the City may, at its option, undertake such work, and the property owner shall reimburse the City's expenses.
 - (3) Within thirty (30) days after completing all measures necessary to abate the violation or to perform remediation, the violator and the property owner shall be notified of the costs incurred by the City, including administrative costs. The violator or property owner may file a written protest objecting to the amount or basis of costs with the Applicable Authority within thirty (30) days of receipt of the notification of the costs incurred. If the amount due is not received by the expiration of the time in which to file a protest or within thirty (30) days following a decision of the Applicable Authority affirming or reducing the costs, or from a final decision of a court of competent jurisdiction, the costs shall become a special assessment against the property owner and shall constitute a lien on the owner's property for the amount of said costs. Interest shall begin to accrue on any unpaid costs at the statutory rate provided in G.L. Ch. 59, § 57, after the thirty-first day at which the costs first become due.

(c) Criminal and Non-Criminal Penalty. Refer to Chapter 4½, Criminal and Non-Criminal Enforcement

(d) Remedies Not Exclusive. The remedies listed in this Chapter are not exclusive of any other remedies available under any applicable federal, state or local law.

Article 16: Severability

(a) If any provision, paragraph, sentence, or clause of this chapter shall be held invalid for any reason, all other provisions shall continue in full force and effect.