

**CITY OF CLEVELAND
DIVISION OF WATER POLLUTION
CONTROL**



**USEPA PHASE II
STORMWATER MANAGEMENT
PROGRAM**

2016

TABLE OF CONTENTS

Page

EXECUTIVE SUMMARY

ES.1	Introduction	ES-1
ES.2	Public Education and Outreach	ES-2
ES.3	Public Involvement / Participation	ES-2
ES.4	Illicit Discharge Detection and Elimination	ES-3
ES.5	Construction Site Stormwater Runoff Control	ES-3
ES.6	Post Construction Site Stormwater Management	ES-4
ES.7	Pollution Prevention / Good Housekeeping	ES-5
ES.8	Additional Requirements	ES-6

INTRODUCTION/OVERVIEW

I.1	Introduction	I-1
I.2	Stormwater Steering Committee	I-2
I.3	City Information	I-3

SECTION 1 PUBLIC EDUCATION AND OUTREACH

1.1	Requirements	1-1
1.2	Best Management Practices	1-1
1.2.1	Brochures/Fact Sheets	1-2
1.2.2	Alternative Information Sources	1-2
1.2.3	Riparian Buffer/Wetland Setback	1-2

SECTION 2 PUBLIC INVOLVEMENT / PARTICIPATION

2.1	Requirements	2-1
2.2	Best Management Practices	2-1
2.2.1	City of Cleveland Stormwater Steering Committee	2-1
2.2.2	Stream Cleanups	2-2
2.2.3	Build Your Own Rain Barrel Workshop	2-2
2.2.4	Brochures/Fact Sheets	2-3

SECTION 3 ILLICIT DISCHARGE DETECTION AND ELIMINATION

3.1	Requirements	3-1
3.2	Best Management Practices	3-2
3.2.1	City Policy Regarding Non-Stormwater Discharges	3-2
3.2.2	Revise City of Cleveland Codified Ordinance (CCO) 541	3-2
3.2.3	Update the Storm Sewer and Comprehensive Sewer System Maps	3-3
3.2.4	Revise Illicit Discharge Detection and Elimination	3-3

Program

SECTION 4 CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

4.1	Requirements	4-1
4.2	Best Management Practices	4-2
	Protect On-Site Areas Prior to Construction; Maintain	
4.2.1	Wetlands in Natural States (When Feasible); Ensure	4-2
	Proper Storage of Materials On-Site	
4.2.2	Natural Vegetative Buffers Between Limits of	4-3
	Disturbance and Water Resources	
4.2.3	Pre-Construction Meetings	4-3
4.2.4	Site Plan Review Procedures	4-4
4.2.5	Procedure for Site Inspection and Enforcement of	4-4
	Control Measures	
4.2.6	Procedures for Enforcement Escalation	4-6

SECTION 5 POST-CONSTRUCTION STORMWATER MANAGEMENT

5.1	Requirements	5-1
5.2	Best Management Practices	5-2
	Require MS4 Compliance Inspectors to Provide a	
5.2.1	Written Report to Post-Construction Facility	5-2
	Owners/Operators for Every Inspection	
	Require the Department of Building and Housing to	
5.2.2	Annually Inspect Public and Private Post-Construction	5-3
	Stormwater Control Measures (SCMs)	
	Adopt Conservation Development, Riparian/Wetland	
5.2.3	Setbacks or Other BMP Planning and Development	5-3
	Code	

SECTION 6 POLLUTION PREVENTION / GOOD HOUSEKEEPING

6.1	Requirements	6-1
6.2	Best Management Practices	6-1
6.2.1	Operation and Maintenance Program	6-1
6.2.2	Employee Training Program	6-4
6.2.3	Street Sweeping Program	6-4
6.2.4	Catch Basin Maintenance Program	6-5
6.2.5	Preventative Maintenance Program	6-5

SECTION 7 ADDITIONAL REQUIREMENTS

7.1	Proper Operation and Maintenance	7-1
7.2	Availability of Information	7-1

7.3	Keeping Plans Current	7-1
7.4	Reporting and Record Keeping	7-2
7.5	Total Maximum Daily Load (TMDL) Allocations	7-2
7.6	Duty to Correct and Report Violations	7-2
7.7	Duty to Provide Information	7-3
7.8	Correction of Inaccuracies	7-3
7.9	Other Applicable Law	7-3

APPENDIX A - ABBREVIATIONS AND DESCRIPTIONS

APPENDIX B - MEMORANDA OF UNDERSTANDING

APPENDIX C - RIPARIAN SETBACK ORDINANCE (Ord. No. 1555-13; CCO CHAPTER 351)

APPENDIX D - CITY OF CLEVELAND CODIFIED ORDINANCE CHAPTER 541

CITY OF CLEVELAND DIVISION OF WATER POLLUTION

APPENDIX E - CONTROL'S ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM MANUAL

APPENDIX F - OHIO ENVIRONMENTAL PROTECTION AGENCY'S STORMWATER POLLUTION PREVENTION PLAN (SWP3) CHECKLIST FOR CONSTRUCTION ACTIVITIES (OHC000004)

EXECUTIVE SUMMARY

ES.1 INTRODUCTION

The Clean Water Act (CWA) Section 303(d) requires states, territories, and authorized tribes to list the waters for which technology-based limits alone do not ensure attainment of water quality standards. As such, the CWA and United States Environmental Protection Agency (USEPA) regulations require that Total Maximum Daily Loads (TMDLs) be developed for waters on the Section 303(d) list. Per the Ohio Environmental Protection Agency (OEPA) and the Northeast Ohio Stormwater Training Council's "TMDL Community Identifier Table," the City of Cleveland must address the following TMDLs in the designated watersheds/sub-watersheds:

Watershed	Sub-watershed	TMDL Load
Lower Cuyahoga River	Big Creek	Phosphorus, Nitrogen, Habitat, Bacteria, Dissolved Oxygen (DO)
Lower Cuyahoga River	Cuyahoga River (within City of Cleveland)	Phosphorus, Nitrogen, Habitat, Bacteria, Dissolved Oxygen (DO)
Lower Cuyahoga River	Mill Creek	Phosphorus, Nitrogen, Habitat, Bacteria, Dissolved Oxygen (DO)
Euclid Creek	Euclid Creek	Phosphorus, Habitat, Total Suspended Solids (TSS)

Because the majority of these pollution problems are caused by increases in impervious cover and the resulting increases in stormwater volume and velocity, much of our Public Education and Outreach program will focus on increasing public awareness of the links between land use practices and stormwater pollution.

The City of Cleveland agreed to work with other communities in the various watersheds on a comprehensive, Public Involvement and Public Education (P.I.P.E) program. Given the similarity of these two MCMs a unified P.I.P.E. program was developed to encompass all of our watersheds. The City has contracted with Euclid Creek Watershed Partners, Doan Brook Watershed Partnership, and Cuyahoga Soil and Water Conservation District, to provide assistance with these efforts.

This SWMP outlines a plan of BMPs and measurable goals for each of the six (6) minimum control measures including Public Education and Outreach, Public Involvement/Participation, Illicit Discharge Detection and Elimination, Construction Site Stormwater Runoff Control, Post Construction Stormwater Management and Pollution Prevention/Good Housekeeping. The plan requires that a combination of tasks be undertaken to carry out the BMPs selected for each measure. This includes documentation of policies, procedures and training, development of specific programs and products, conducting public information meetings, development of storm sewer

system map, outfall inspection, development of new training and additional maintenance requirements.

The BMPs selected for each minimum control measure are summarized and briefly described in this section. Specific details for each BMP are included in the respective sections for each control measure in this plan. The Commissioner of the Division of Water Pollution Control is the Stormwater Manager for the City and is responsible for overseeing the City's Stormwater Management Program.

ES.2 PUBLIC EDUCATION AND OUTREACH (MCM #1)

This minimum control measure is managed by the Commissioner of Water Pollution Control. Public education and outreach outlines the City's initiative to educate employees and the public of the impacts of stormwater discharges on water bodies, and inform them of the steps that can be taken to reduce stormwater pollution.

The following BMPs have been selected to address the Public Education and Outreach minimum control measure:

- Brochures/Fact Sheets (e.g. pet waste management, grass clipping and yard waste composting);
- Alternative Information Sources (e.g. Website, Social Media); and
- Riparian Buffer/Wetland Setback

These BMPs will require the development and distribution of informational materials such as brochures/fact sheets, and a web site. These materials are expected to reach a diverse audience covering a large geographic area, and help inform the public of the importance of stormwater.

ES.3 PUBLIC INVOLVEMENT/PARTICIPATION (MCM #2)

This minimum control measure, also managed by the Commissioner of Water Pollution Control, outlines the City's program to ensure public support as well as provide community knowledge of pollution problems, by taking a proactive approach and encouraging City employees and the public to get personally involved with improving the quality of the environment.

The following BMPs have been selected to address the Public Participation/Involvement minimum control measure:

- City of Cleveland Stormwater Steering Committee;
- Stream cleanups;

- Build your own rain barrel workshop;
- Storm drain stenciling/decorating; and
- Brochures/Fact sheets

Public information and outreach information is included on WPC's website and at public meetings.

ES.4 ILLICIT DISCHARGE DETECTION AND ELIMINATION (MCM #3)

The illicit discharge detection and elimination program, managed by the Commissioner of WPC, is designed to detect and eliminate potential point sources of contaminants, leaking or discharging into storm sewer systems and ultimately to receiving water bodies.

The following BMPs have been selected to address the Illicit Discharge Detection and Elimination minimum control measure:

- Revise City of Cleveland Codified Ordinance (CCO) 541 to reflect changes to SWMP;
- Update the Storm Sewer and Comprehensive Storm Sewer System Maps;
- Revise Illicit Discharge Detection and Elimination Program;
- At least 1 screening of all outfalls per permit term; and
- Train WPC House Connection Inspectors (HCIs) to identify sources of illicit discharge

The City does not allow non-stormwater discharges into its storm sewer systems. This policy and guideline will continue as part of this plan.

The City has and will continue to monitor its stormwater discharges in an effort to detect and address future non-stormwater discharges, and will coordinate with other agencies in identifying illegal discharge/dumping.

ES.5 CONSTRUCTION SITE STORMWATER RUNOFF CONTROL (MCM #4)

Construction site stormwater runoff control outlines the program that reduces pollutants in any stormwater runoff to MS4s from construction activities that result in a land disturbance greater than or equal to one acre. The City of Cleveland Department of Building and Housing (B & H), is responsible for managing this MCM. B & H administers Cleveland Codified Ordinance Chapter 3116 titled "Construction and Post-Construction Site Stormwater Runoff Control," that was passed by Cleveland City Council in 2009. B & H, also entered into a contract with the Cuyahoga Soil and Water Conservation District to review plans, conduct inspections, provide reports, and do field enforcement of the ordinance.

The following BMPs have been selected to address the Construction Site Runoff Control minimum control measure:

- Require on-site protected areas be physically marked in field prior to construction; maintain wetlands in natural states wherever feasible; and ensure proper storage of materials on site;
- Require 50 foot natural vegetative buffers to be maintained between limits of disturbance and water resources;
- Hold pre-construction meetings;
- Develop procedures for site plan review;
- Develop procedures for site inspection and enforcement of control measures; and
- Develop an enforcement escalation plan that outlines how and when the City will address non-compliance with approved erosion, sediment and non-sediment control plans

Under CCO Chapter 3116, the City requires erosion and sediment controls and registration of permits for all construction projects within the City that disturb one or more acres of land. CCO 3116 incorporates the requirements prescribed in OEPA's general permit governing construction activity. CCO Chapter 3116 states that any person undertaking construction activity that disturbs one or more acres of land, of which the threshold acreage includes the entire area disturbed in the larger common plan of development or sale, must obtain a permit from the Department of Building and Housing. Any project involving land owned by the City, or in the City's right-of-way, that disturbs one or more acres must also submit their project for review and approval under the same standards to B & H. Any public agency submitting plans to the Division of Engineering and Construction (E & C) or other City divisions will be directed to submit plans to B & H for review and approval.

The City has several phone lines for receiving complaints from the public about construction sites. These numbers include the Mayor's Action Center, the Department of Building and Housing, the Division of Water Pollution Control Customer Service, and the Cleveland Police's Illegal Dumping hot line.

ES.6 POST CONSTRUCTION STORMWATER MANAGEMENT (MCM #5)

The post construction stormwater management component, also managed by B & H, addresses stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one (1) acre, including projects less than one acres that are part of a larger common plan of development, that discharge into small MS4s.

The following BMPs have been selected to address the Post Construction Site Runoff Control minimum control measure:

- Require MS4 compliance inspectors to provide a written report to post-construction facility owners/operators for every inspection;
- Require the Department of Building and Housing to annually inspect public and private post construction BMPs; and
- Adopt a conservation development, riparian/wetland setbacks or other BMP planning and development code

Following the update to CCO 3116 in 2009, the Department of Building and Housing agreed to annually renew their contract with the Cuyahoga Soil and Water Conservation District to assist with regulation of post-construction sites. Beginning in 2012, all applicable public projects had to undergo the same process. All applicable plans are submitted to B & H, reviewed, and approved by CSWCD. Per this plan, CSWCD will make annual inspections of the stormwater control measures (SCMs) and enforce the proper controls according to the approved plans.

The enforcement and penalty provisions for CCO Chapter 3116 are found in CCO Chapter 3103, "Enforcement and Penalty." It provides the Director of B & H with the authority to conduct inspections, issue stop work orders, revoke permits, issue notices of violation, institute an action to restrain the execution of work, and institute criminal action for violations for which penalties are provided in CCO Section 3103.99.

ES.7 POLLUTION PREVENTION/GOOD HOUSEKEEPING (MCM #6)

This minimum control measure will outline an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing stormwater pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and stormwater system maintenance. The City of Cleveland Department of Public Works is responsible for managing this MCM.

The following BMPs have been selected to address the Pollution Prevention/Good Housekeeping minimum control measure:

- Operation and Maintenance Program;
- Employee Training Program;
- Catch Basin Maintenance Program; and
- Preventative Maintenance Program

Training will be developed to directly address stormwater management and the requirements of this SWMP. Record keeping will be performed and will be modified to incorporate additional information associated with this SWMP.

Sweeping of all roadways and City facilities will continue to be performed at least once every year. The sweeping will be performed as soon as possible after snowmelt. Priority areas such as interchange zones, places of public gatherings, and environmentally sensitive areas will be given priority.

WPC will attempt to annually clean at least one-third (1/3) of the City's total number of catch basins. These catch basins may be selected based upon routine scheduled field inspections and also inspections resulting from other program requirements. WPC will conduct routine inspections by selecting a representative number of catch basins once every year. If a catch basin sump is found to be more than one-half (1/2) full, the catch basin will be cleaned.

The WPC will continue to operate its preventative maintenance program and will incorporate all of the requirements of this general permit.

ES. 8 ADDITIONAL REQUIREMENTS

The following topics are also required for compliance with the MS4 General Permit. A detailed explanation of these requirements is located in Section 7 of this plan.

- Proper Operation and Maintenance
- Availability of Information
- Keeping Plan Current
- Reporting and Record Keeping
- Total Maximum Daily Load (TMDL) Allocations
- Duty to Correct and Report Violations
- Duty to Provide Information
- Correction of Inaccuracies
- Other Applicable Law

INTRODUCTION/OVERVIEW

I.1 INTRODUCTION

The City of Cleveland developed this Stormwater Management Program (SWMP) for the purpose of reducing the discharge of pollutants, to the maximum extent practicable, to protect local water quality, and to satisfy the appropriate requirements of the Clean Water Act.

The U.S. Environmental Protection Agency (EPA) published the regulation entitled “National Pollutant Discharge Elimination System – Regulations for Revision of the Water Pollution Control Program Addressing Storm Water Discharges on December 8, 1999, as required by Section 402(p) of the Clean Water Act (CWA). This is commonly referred to as the National Pollutant Discharge Elimination System (NPDES) Phase II program.

This SWMP also directly addresses the requirements of the NPDES Phase II program as implemented and administered by the Ohio Environmental Protection Agency (OEPA) as the regulatory authority for the State of Ohio. The NPDES Phase II program is implemented by OEPA through the use of the General Permit for the Discharge of Stormwater from Small Municipal Storm Sewer Systems (MS4).

The City currently has many practices and programs in place relating to stormwater management and pollution prevention. This plan will coordinate and incorporate these programs, policies, guidelines and practices into the SWMP document by reference.

The plan outlines a program of best management practices (BMPs) and measurable goals for the following six minimum control measures (MCM):

- Public Education and Outreach (MCM #1)
- Public Involvement / Participation (MCM #2)
- Illicit Discharge Detection and Elimination (MCM #3)
- Construction Site Stormwater Runoff Control (MCM #4)
- Post-Construction Stormwater Management (MCM #5)
- Pollution Prevention / Good Housekeeping (MCM #6)

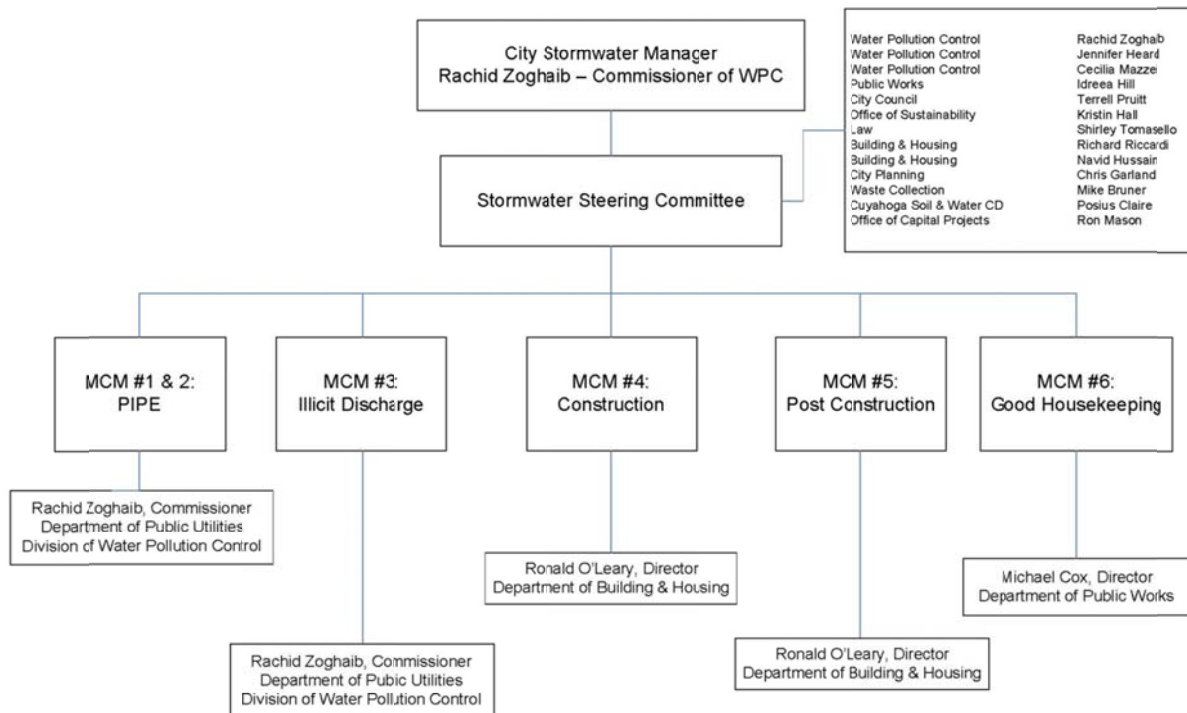
For each MCM, the City will define appropriate BMPs, a timeframe for implementation for each BMP, and measurable goals for each BMP.

I.2 STORMWATER STEERING COMMITTEE

The City of Cleveland (City) has the legal authority to implement the following SWMP under Article XVIII, Section 3, of the Ohio Constitution, granting municipalities the authority to adopt land use and control measures for promoting the peace, health, safety, and general welfare of their citizens.

The Commissioner of the Division of Water Pollution Control (WPC) has been designated as the Stormwater Manager for the City of Cleveland, responsible for overseeing the implementation of the entire stormwater management program. As part of the development of the SWMP, the Stormwater Steering Committee was established with representatives from various City departments/divisions to provide assistance to the Commissioner. Figure I.1, details the structure of the City of Cleveland's Stormwater Management Program, including the City department/division that is responsible for managing each of the minimum control measures.

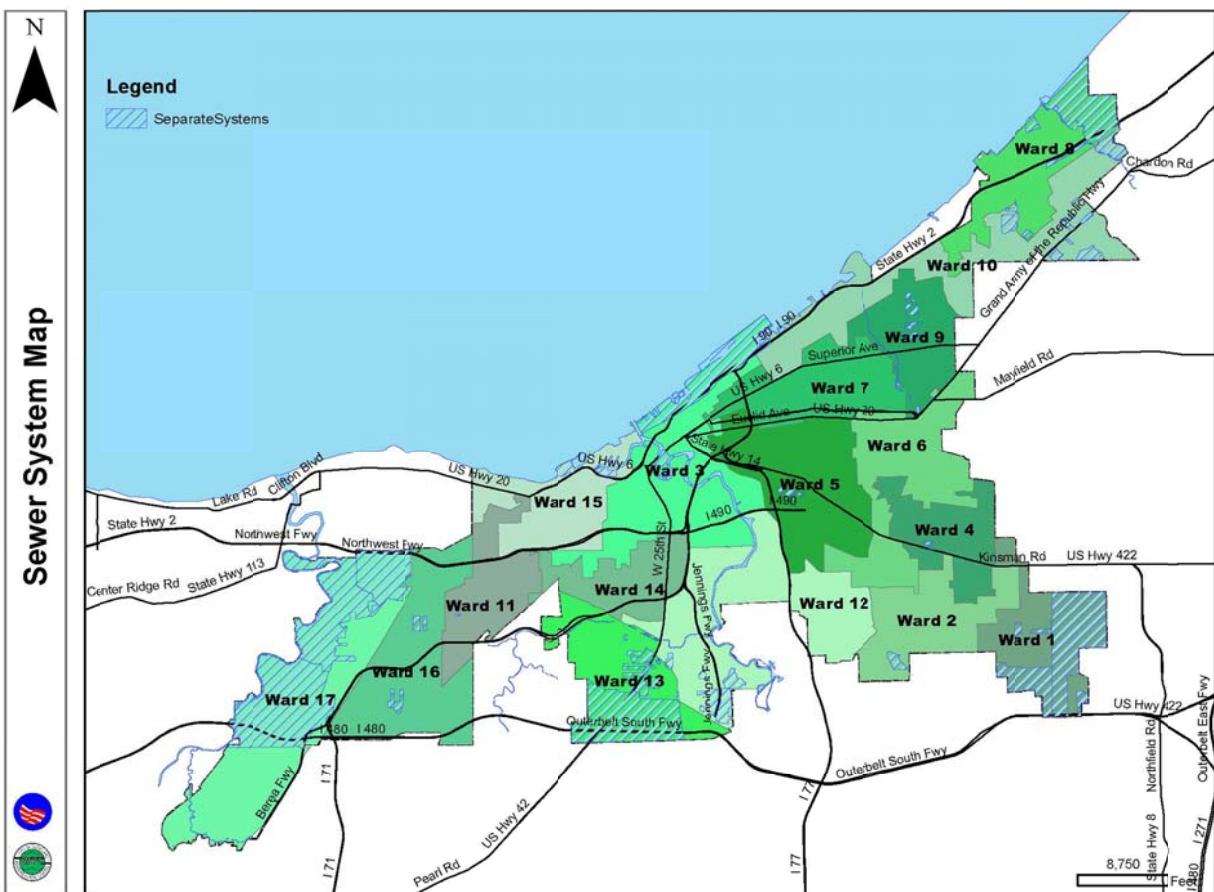
Figure I.1 Stormwater Management Program Organizational Chart



I.3 CITY INFORMATION

The City of Cleveland, located in the Lake Erie Drainage Basin, covers an area of approximately 75.6 square miles, of which approximately 6.8 square miles drains into natural watercourses. The community is 91% combined sewers and 9% separate sewers (see Figure I.2). The Lake Erie Drainage Basins includes the Rocky River Watershed, Big Creek Watershed, Mill Creek Watershed, Doan Brook Watershed, and Euclid Creek Watershed. Cleveland also includes Morgan Run Watershed, Dugway Brook Watershed, Shaw Brook Watershed, Nine Mile Creek Watershed, Green Creek Watershed, Kingsbury Run Watershed, and Walworth Run Watershed.

Figure I.2 City of Cleveland Sewer System Map



SECTION 1 – PUBLIC EDUCATION AND OUTREACH

According to the 2010 U.S. Census, the population of Cleveland was 396,815, of which approximately 81% of the land use was comprised of single-family residents; residents whose activities directly contribute to polluted stormwater runoff in the City's MS4. As a result, the focus of our Public Education and Outreach program will be on increasing public awareness of the links between land use practices and stormwater pollution. This MCM is critical to the success of the overall stormwater management program as it helps to ensure greater support for the program by the public and City employees and effectuates greater compliance.

The Commissioner of Water Pollution Control is responsible for executing this MCM. To assist in implementing our public education/outreach activities under MCM #1, we have entered into a joint Memorandum of Understanding (MOU) with the Cuyahoga Soil and Water Conservation District (CSWCD) and the Euclid Creek Watershed Council (ECWC). We have also entered into agreement with the Doan Brook Watershed Partnership (copies of these MOUs can be found in Appendix B).

1.1 REQUIREMENTS

Implementation of a public education program to distribute educational materials to the public and/or conduct equivalent outreach activities regarding the impacts of stormwater discharges on water bodies and the steps the public can take to reduce pollutants in stormwater runoff.

1.2 BEST MANAGEMENT PRACTICES

The City's MS4 ultimately discharges to receiving waters that have been identified as not meeting water quality standards. Subsequent studies, called Total Maximum Daily Load (TMDL) studies, have been performed and identify specific pollutants causing the impairments to the receiving waters and designate the amount of the pollutant the receiving water can assimilate to achieve water quality standards. A required reduction of the pollutants is typically assigned to the MS4s that drain to the impaired segment of the water body. A list of the impaired water bodies and their respective pollutants of concern are listed in the Executive Summary.

Our education and outreach program will target pollutant sources identified in our TMDL(s), such as sediment pollution from stream bank erosion and improperly controlled construction sites and habitat alteration due to land use changes. The goal is to reach a minimum of 50% of our MS4 population over the five-year permit term. Appropriate themes for this minimum control measure must be determined, along with designating the person(s) or position(s) responsible for the implementation of each BMP. CSWCD and our community will conduct public opinion and awareness surveys in 2017 and 2019 with the goal of evaluating public knowledge and awareness of

stormwater issues and to what extent the public has adopted appropriate BMPs. If it appears that this goal is not being reached, the program will be re-evaluated and different themes and/or mechanisms will be selected.

The following BMPs will be utilized in the implementation of the program to address the minimum control measure for Public Education and Outreach.

1.2.1 Brochures/Fact Sheets

Brochures/fact sheets have been developed to increase public awareness on the links between land use practices and stormwater pollution. Program themes or messages will be established to convey the effects of stormwater quality on the environment and how it can be improved. Brochures are typically distributed at community activities, workshops, and public information meetings. Brochures will continue to be developed and updated to provide the public with easy to comprehend stormwater knowledge.

The benefits associated with this BMP include reaching a diverse audience covering a large geographic area.

1.2.2 Alternative Information Sources

A web site has been developed that addresses the effect of stormwater quality on the environment. The web site is part of WPC's main web page and is available to the public by means of internet access. The web site URL is: <http://www.clevelandwpc.com>. Continued development and updating to the website will take place.

A multi-layered campaign consisting of utilizing several large kiosks posters positioned around Cleveland, messaging on Cleveland Public Power's digital billboard on Interstate 90, and social media will be developed to also increase public awareness.

By offering multiple sources of information, convenience, and a point of reference, we are adding value to our purpose by creating awareness and reaching a very large, diverse audience.

1.2.3 Riparian Buffer/Wetland Setback

To date, riparian corridors and wetlands have been undervalued and poorly understood. As a result, these important parts of the watershed have ranged in many stretches from benign neglect to overt destruction. Few communities in the Cuyahoga River watershed have policies or programs to protect riparian corridors and wetlands. The status of riparian corridor protection and restoration

can be described as the missing piece of the puzzle to preserve natural features and mitigate damages.

Embarking on an initiative to raise awareness on the protection of riparian corridors and wetlands will plant the seed of responsible stewardship. In 2016, the City of Cleveland adopted a Riparian Setback Ordinance (Ord. No. 1555-13) that is found in CCO Chapter 351 and administered and enforced by the Director of Building and Housing and other City officials, such as the City's Zoning Administrator, to protect areas along the banks of rivers, streams, and wetlands. Through policy development, such as the Riparian/Wetland Setback Ordinance, public education and stakeholder engagement efforts will need to be maintained long-term to nurture the growth of this SMWP component (See Appendix C for a copy of the ordinance).

SECTION 2 – PUBLIC INVOLVEMENT/PARTICIPATION

A key component to the stormwater management program, public involvement/participation, helps to ensure broader public support, and shorter implementation schedules, as well as provide a broader base of knowledge. People who are actively engaged with the decision making process are less likely to challenge the program and can provide a valuable resource of knowledge that will be beneficial to the development, implementation and enforcement of the program.

As described in Section 1, the primary audience for this MCM will be homeowners as well, as residential homes comprise over 80% of the City's land use. We will work with individual landowners, homeowner's associations, children, and public employees.

The Commissioner of Water Pollution Control is responsible for executing this MCM. To assist in implementing our public involvement/participation under MCM #2, we have entered into a joint Memorandum of Understanding (MOU) with the Cuyahoga Soil and Water Conservation District (CSWCD) and the Euclid Creek Watershed Council (ECWC). We have also entered into agreement with the Doan Brook Watershed Partnership.

2.1 REQUIREMENTS

Compliance with applicable state and local public notice and Freedom of Information regulations are required when implementing a public involvement/participation program. Where notice requirements are inconsistent, the notice provisions providing for the most notice and opportunity for public comment shall be followed.

The development of a public involvement/participation program that includes the public in developing, implementing, and reviewing the stormwater management program is required.

2.2 BEST MANAGEMENT PRACTICES

The following BMPs will be utilized in the implementation of the program to address the minimum control measure of Public Involvement and Participation. In an effort to engage the public to garner public support to improve the quality of the environment, BMPs were selected based on their ability to improve in-stream habitat and nutrient pollution, excessive stormwater flow, sediment, and low DO, which are noted in the Big Creek, Lower Cuyahoga River, and Mill Creek watersheds as issues of concern.

The goal is to reach a minimum of 50% of our MS4 population over the five-year permit term. Appropriate themes for this minimum control measure must be determined, along with designating the person(s) or position(s) responsible for the implementation of each BMP. CSWCD and our community will conduct public opinion and awareness surveys in 2017 and 2019 with the goal of evaluating public knowledge and awareness

of stormwater issues and to what extent the public has adopted appropriate BMPs. Individual involvement activities will include a post-activity survey to gauge whether awareness of stormwater issues increased as a result of the program.

2.2.1 City of Cleveland Stormwater Steering Committee

As part of the development of the stormwater management plan, a working committee was established with representatives from several units within the City including the Division of Water Pollution Control, the Division of Building and Housing, the Department of Public Works, and the Mayor's Office of Sustainability. Representatives from our watershed partnerships are also on the committee.

The Stormwater Steering Committee's primary objective is to provide support, guidance and oversight of the City's stormwater management efforts. The Committee meets once, bi-monthly to discuss stormwater management issues, events, and/or trends, in order to make sure the City remains in compliance with stormwater regulations.

2.2.2 Stream Cleanups

Many of our streams, creeks, and rivers are regularly polluted with trash. Littering and illegal dumping results in unwanted trash and debris in our waterways. The goal of stream cleanups is to promote watershed stewardship by encouraging environmental awareness through positive actions and advocacy. Public involvement is meant to ensure that citizens are actively engaged and have an opportunity to participate in the decision process.

WPC participates in or coordinates several stream cleanups per year to clear streams and their banks of debris and flow obstructions in an effort to improve local water quality. Following is a tentative schedule of annual cleanups:

- April - Doan Brook Stream Cleanup
- May – River Sweep Mill Creek Falls
- June – Big Creek Cleanup
- September – Euclid Creek Reservation/Wildwood Park

2.2.3 Build Your Own Rain Barrel Workshop

Urban runoff is a major cause of water pollution. Rain barrels help preserve water quality and reduce water pollution by decreasing the amount of stormwater runoff reaching local streams and rivers by capturing water from rooftops and holding it for later use.

Do-it-yourself (DIY) rain barrel workshops have been and will continue to be a stormwater community engagement activity implemented in the City of Cleveland. The workshops are organized and conducted by the Cuyahoga Soil & Water Conservation District (CSWCD). Participants pay a nominal fee to build their own rain barrel. The cost covers the barrel, spigot, water diverter, installation instructions, and a brief lesson on the benefits of rain barrels. In addition to CSWCD workshops, Community Development Corporations (CDCs) conduct free rain barrel programs throughout the City of Cleveland.

2.2.4 Brochures/Fact Sheets

Brochures/fact sheets have been developed to increase public awareness on the links between land use practices and stormwater pollution. Program themes or messages have been established to convey the effects of stormwater quality on the environment and how it can be improved. Brochures are distributed at community activities, workshops, and public information meetings. Brochures will continue to be developed and updated to provide the public with easy to comprehend stormwater knowledge.

The benefits associated with this BMP include reaching a diverse audience covering a large geographic area.

SECTION 3 – ILLICIT DISCHARGE DETECTION AND ELIMINATION

This minimum control measure, which is administered by the Division of Water Pollution Control for the City of Cleveland, is critical to the success of the stormwater management program as it will identify and reduce untreated discharges that contribute high levels of pollutants, including heavy metals, toxic materials, oil and grease, solvents, nutrients, and bacteria to receiving water bodies. Pollutant levels from these illicit discharges have been shown to be high enough to significantly degrade receiving water quality and threaten aquatic, wildlife, and human health.

3.1 REQUIREMENTS

- 3.1.1 Implement revised City of Cleveland Codified Ordinance (CCO) 541 to reflect changes to the SWMP and effectively prohibit non-stormwater discharges.
- 3.1.2 Inform public employees, businesses and the general public of hazards associated with illegal discharges and improper disposal of waste.
- 3.1.3 By the end of the 5th year of the General Permit for the Discharge of Stormwater from small MS4s, expand the map showing all stormwater discharges from a pipe or conduit with a diameter of 15" or greater owned or operated by the City of Cleveland. The 15" minimum outfall requirement allows for collection of a manageable amount of outfalls, if 12" outfalls were collected a much larger data set would need to be collected and would complicate collection efforts. For each discharge the following information shall be included:
 - a. Type, material, and size of conveyance, outfall or channelized flow (e.g. 24" concrete pipe).
 - b. The name of the immediate surface water body (if available) or wetland to which the stormwater runoff discharges within 500'.
 - c. If the outfall does not discharge directly to a named water body, the name of the nearest named water body to which the outfall eventually discharges.
- 3.1.4 Develop, implement, and enforce a program to detect and eliminate existing illicit discharges, as defined by 40 CFR 122.26(b)(2).
- 3.1.5 Develop and implement a plan to detect and address future non-stormwater discharges.

3.2 BEST MANAGEMENT PRACTICES

The following BMPs will be utilized in the implementation of the program to address minimum control measure #3 - Illicit Discharge Detection and Elimination.

3.2.1 Division Policy Regarding Non-Stormwater Discharges

The City currently does not allow non-stormwater discharges into storm sewer systems owned and maintained by the City. City policy and guidelines requires action by Water Pollution Control for discharges of this type that are discovered. Upon identifying a non-stormwater discharge, the source of the discharge shall be determined and if found to be outside the City's permitted system, the MS4 will be notified along with Northeast Regional Sewer District (NEORS). If the non-stormwater discharge is from a City facility, the source location shall be confirmed and corrective actions taken to eliminate the non-stormwater discharge. The City will continue to prohibit these discharges and will use all available resources for its enforcement.

Training will be provided to City personnel regarding the hazards associated with illegal discharges and improper disposal of wastes.

3.2.2 Revise City of Cleveland Codified Ordinance (CCO) 541

City of Cleveland Codified Ordinance 541 – Sewer Connections and Sewer Use Code, is the mechanism used to prohibit illegal/illicit discharges and establishes the process for dealing with these discharges (See Appendix D). The Division of Water Pollution Control responds to illicit discharge violations and enforces the requirements of the ordinance. The ordinance has been revised to ensure that it meets or exceeds the requirements of OEPA's NPDES General Permit for the Discharge of Stormwater from Small MS4s and will be introduced for passage in 2017.

Training will be provided to WPC personnel regarding the hazards associated with illegal discharges and improper disposal of wastes. The results of these activities will be reviewed by the Stormwater Management Committee at least once annually.

3.2.3 Update the Storm Sewer and Comprehensive Sewer System Maps

The City has developed a comprehensive collection system map that includes home sewage treatment system (HSTS) locations using GIS mapping. The receiving waters for the City's MS4 drainage are Lake Erie, Rocky River, Big Creek, and Euclid Creek. Outfalls were located using existing topography and maps. The comprehensive sewer system map was completed in 2006. Updates are made annually to include catch basins, pipes, flood control facilities, and public and private post construction water quality BMPs installed to satisfy OEPA's NPDES Construction General Permit requirements. The most recent version of the 2016 storm sewer map is included in the SWMP Appendix. Updated copies of the map are available upon request at WPC.

3.2.4 Revise Illicit Discharge Detection and Elimination Program

An illicit discharge detection and elimination program manual has been developed to provide written procedures to detect, identify, and address unauthorized non-stormwater discharges, including illegal dumping to WPC's small municipal separate storm sewer system to the maximum extent practicable. The plan will utilize personnel and equipment, along with the storm sewer map for locating sources of illicit discharge.

WPC's IDDE program includes five distinct components:

- **Training** – procedures to train applicable field personnel related to the IDDE program are discussed in Section 2.0 of this manual
- **Tracking** – Procedures to track and document all efforts related to the IDDE process are outlined in Section 6.2 of this manual
- **Identification of an illicit discharge** – Procedures to screen, identify and report questionable illicit discharges are outlined in Section 4.0 of this manual
- **Investigating the source of an illicit Discharge** – Procedures to investigate questionable illicit discharges that have been reported are outlined in Section 5.0 of this manual
- **Elimination of an illicit discharge** – Procedures to eliminate illicit discharges that have been confirmed through the investigation efforts are outlined in Section 7.1 of this manual.

For WPC to demonstrate compliance with the conditions of the MS4 permit, documentation of IDDE activities performed is paramount. WPC will continue to monitor its stormwater discharges in an effort to detect and address future non-stormwater discharges. For a complete overview of WPC's comprehensive IDDE program, see Appendix E for a copy of WPC's IDDE Program Manual.

SECTION 4 – CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

This minimum control measure, which is administered by the Director of the Department of Building & Housing for the City of Cleveland, with assistance provided through a written agreement with the Cuyahoga Soil & Water Conservation District, is a critical component of the stormwater management program because polluted stormwater runoff from construction sites often flows to storm sewer systems and ultimately is discharged into local rivers and streams. Sediment is typically the main pollutant of concern however other pollutants include solid and sanitary wastes, phosphorus (fertilizer), pesticides, nitrogen (fertilizer), oil and grease, concrete truck washout, construction chemicals and construction debris.

Sediment runoff rates from construction sites are typically greater than those of agricultural lands, and significantly greater than those of forested lands. During a short period of time, construction sites can contribute more sediment to streams than can be deposited naturally during several decades. The resulting siltation, and the contribution of other pollutants from construction sites can cause physical, chemical, and biological harm to the state's waters.

4.1 REQUIREMENTS

The development, implementation and enforcement of a program, or modification of an existing program, is required to reduce pollutants in any stormwater runoff to the MS4 from construction activities that result in a land disturbance of greater than or equal to one (1) acre. Reduction of stormwater discharges from construction activity disturbing less than one acre shall be included in the program if that construction activity is part of a larger common plan of development that would disturb one acre or more. The program shall include but not be limited to the following:

- 4.1.1 An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions for non-compliance, to the extent allowable under State or local law.
- 4.1.2 Procedures for notifying construction site developers and operators of the requirements for registration under the General Permit for Stormwater Discharges Associated with Construction Activities.
- 4.1.3 Requirements for construction site operators to implement appropriate erosion and sediment control best management practices in accordance with the Ohio Environmental Protection Agency's Rainwater and Land Development Manual or Ohio Department of Transportation's Location & Design Manual, Volume 2.
- 4.1.4 Requirements for construction site operators to control waste at the site such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality.

- 4.1.5 Procedures for site plan review, which incorporate consideration of potential water quality impacts.
- 4.1.6 Procedures for site inspection and enforcement of control measures.

4.2 BEST MANAGEMENT PRACTICES

Damage to natural resources is often an unavoidable consequence of construction. The goal of construction site BMPs is to keep clearing, grading, and other site disruptions to a minimum. The City requires erosion and sediment controls for all projects in accordance with all State and Federal regulations. Construction site operators are required to implement appropriate erosion and sediment control best management practices as outlined in contract plans, contract specifications and standard drawings. The contractor is also required, at all times, to conduct operations in conformity with all State and Federal permit requirements concerning water, air noise pollution and the disposal of contaminated, or hazardous materials.

The following BMPs will be utilized in the implementation of the program to address the minimum control measure for Construction Site Runoff Control.

4.2.1 Protect On-Site Areas Prior to Construction; Maintain Wetlands in Natural States (When Feasible); Ensure Proper Storage of Materials On-Site

On-site tree and natural area preservation ensures that designated vegetation survives the construction process. All areas that are to remain undisturbed during construction should be clearly marked on plans and on the site; these areas are best staked out during a site walk through. Temporary fencing, such as snow fence or bright plastic mesh fencing provides a tangible, visible boundary to protect features.

Maintenance of a stormwater pond or wetland is necessary for it to operate as designed on a long-term basis. Pollutant removal, channel protection and flood control capabilities will decrease if sediment accumulates in the pond (reducing pond storage volume), debris blocks the outlet structure, slope stabilizing vegetation is lost, or if the structural integrity of the embankment, weir, or riser is compromised.

Responsible management of common chemicals, such as fertilizers, solvents, paints, cleaners, and automotive products, can significantly reduce polluted runoff. Such products must be handled properly during all stages of development, use, and disposal. Sites where chemicals, cements, solvents, stockpiles or other potential water pollutants are to be stored should be isolated in areas where they will not cause runoff pollution.

For a comprehensive list of perimeter controls and on-site protection methods, consult the Ohio Environmental Protection Agency's Rainwater and Land Development Manual or Ohio Department of Transportation's Location & Design Manual, Volume 2.

4.2.2 Natural Vegetative Buffers Between Limits of Disturbance and Water Resources

Natural vegetation filters runoff, prevents sediment from washing into streams and water supplies, provides shelter for wildlife, and improves soil percolation. A healthy vegetative buffer minimizes stream bank erosion and traps pollutants before they wash into the water. Without a buffer, sediment accumulates in the stream channel; changing stream flow dynamics and creating stagnant pools of trapped water. Protecting these areas provides a cost-free method of preventing erosion.

The recently adopted Riparian Setback Ordinance administered and enforced by the Director of Building and Housing, is a tool that was implemented to protect areas along the banks of rivers, streams, and wetlands from construction and post-construction activities and other damaging impacts. The ordinance promotes natural flood control, assists in stabilizing stream banks to reduce erosion, and promotes vegetated areas to reduce the amount of pollutants entering streams. These setback areas are based on a map titled "Water Features of the City of Cleveland," produced by the City Planning Commission as the map identifying designated water courses within the City and their respective setbacks. These setbacks were also based on OEPA classified wetlands, the Ohio Wetland Inventory, the National Wetland Inventory, local soil surveys, and topographic maps.

4.2.3. Pre-Construction Meetings

Most construction problems result from differing expectations on the part of the owner and/or the contractor. The source of which is typically poor communication. The best time to clarify what is unclear in the plans and/or specifications and to identify and reconcile potential job-site conflicts is before construction begins. A pre-construction meeting assists the owner and the contractor by helping to avoid surprises or conflicts that may arise during work.

For projects that require the submittal of a Stormwater Pollution Prevention Plan (SWP3) to and approved by the Department of Building & Housing (B & H), a pre-construction meeting will be held prior to commencing construction activity in order to discuss SWP3 implementation. Dates and times will be coordinated by B & H or their designated representative.

4.2.4 Site Plan Review Procedures

Procedures for site plan review which incorporate consideration of potential water quality impacts are utilized by the City. Construction plans and specifications are reviewed by the Department of Building & Housing for conformance to B & H's requirements and Federal and State permit requirements relating to construction site runoff control.

Projects requiring permitting and approval under CCO Chapter 3116 or the OEPA General Permit for the Discharge of Stormwater Associated with Construction Activities shall submit site plans, the permit application, and a site specific stormwater pollution prevention plan to B & H. B & H will then forward copies of the SWP3 to the Cuyahoga Soil & Water Conservation District for review. CSWCD reviews the SWP3 for compliance with established Federal, State, and local regulations that govern activities including but not limited to the following: erosion control, sediment control, post-construction stormwater management, and filling of wetlands (See Appendix F for a copy of OEPA's SWP3 checklist for Construction Activities). CSWCD provides comments, if applicable, to the SWP3 designer so that any deficiencies may be revised. Once the SWP3 is approved by CSWCD, a *Recommendation of Approval* letter is issued to the SWP3 designer and the Department of Building & Housing, after which, B & H will issue an approval and permit.

4.2.5 Procedures for Site Inspection and Enforcement of Control Measures

Site inspection and enforcement of control measures are utilized on all projects requiring a SWP3. CSWCD will perform monthly inspections of active construction sites to verify proper implementation of the approved SWP3. The inspection will also look for unintended erosion, sediment-laden discharges, and non-sediment pollution discharges. A report of findings is prepared for each inspection and forwarded to the owner, site contractor, and the City of Cleveland. CSWCD will also follow-up with the owner and site contractor to ensure that any noted deficiencies are corrected.

In the event site deficiencies persist, the site will be issued a *Notice of Violation* and referred to the Department of Building & Housing for enforcement action. A re-inspection fee may be assessed if a follow-up inspection is required.

4.2.6 Procedures for Enforcement Escalation

The primary goal of MCM #4, is to educate and advise owners, contractors, and engineers in order to achieve compliance with City regulations through effective communication and voluntary remediation of deficiencies. In the event that compliance with City regulations cannot be obtained, the enforcement escalation process will be implemented:

1. Upon issuance of the *First Notice of Violation*, the owner will have 30 days to remedy the noted violation. A re-inspection of the project site must be conducted in order to verify remediation and lift the *Notice of Violation*. A fee may be assessed for the re-inspection.
2. If the violation has not been corrected within 30 days of the *First Notice of Violation*, a Stop Work Order will be issued. A re-inspection of the project site must be conducted prior to work commencing on the job site. A fee may be assessed for the re-inspection.
3. Failure to comply with an order from the Director of Building and Housing subjects the person in non-compliance to criminal prosecution and penalty.

SECTION 5 – POST CONSTRUCTION STORMWATER MANAGEMENT

This minimum control measure is a critical component of the stormwater management program because stormwater runoff from developed sites often flows to storm sewer systems and ultimately is discharged into local lakes, rivers and streams. Runoff from these development and/or redevelopment areas has been shown to significantly affect receiving water bodies.

There are two significant water quality impacts generally associated with post-construction runoff. The first is caused by an increase in the type and quantity of pollutants in stormwater runoff. As runoff flows over areas altered by development, it picks up harmful sediment and chemicals such as oil and grease, pesticides, heavy metals, and nutrients. These pollutants often become suspended in runoff and are carried to receiving waters. Once deposited, these pollutants can enter the food chain through small aquatic life, eventually entering the tissues of fish and humans.

The second significant water quality impact occurs due to the increased quantity of water delivered to the water body during storms. Increased impervious surfaces interrupt the natural cycle of gradual percolation of water through vegetation and soil. Instead, water is collected from surfaces such as asphalt and concrete and routed to drainage systems where large volumes of runoff quickly flow to the nearest receiving water body. The effects of this process include stream bank scouring and downstream flooding, which often leads to a loss of aquatic life and damage to property.

The Department of Building and Housing, with assistance provided through a Memorandum of Understanding by the Cuyahoga Soil & Water Conservation District, manages and implements this minimum control measure.

5.1 REQUIREMENTS

The development, implementation and enforcement of a program, or modification of an existing program is required to address stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development, that discharge into the City's storm sewer system or directly to the waters of the State. The program shall ensure that controls are implemented to require appropriate infiltration practices, reduction of pervious surface, creation of or conversion to sheet flow, measures and/or structures to reduce sediment discharge and any other innovative measures that will prevent or minimize water quality impacts and including the following:

- 5.1.1 The development and implementation or modification of strategies which include a combination of structural and/or non-structural best management practices.
- 5.1.2 Use of an ordinance, regulatory mechanism or procedures to address post construction runoff from new development and redevelopment projects to the extent allowable under State law.
- 5.1.3 Ensure long term operation and maintenance of Best Management Practices.

Appropriate BMPs and measurable goals for this minimum control measure must be determined. These include the person(s) or position(s) responsible and implementation dates for each BMP.

5.2 BEST MANAGEMENT PRACTICES

The following BMPs will be utilized in the implementation of the program to address the minimum control measure for Post Construction Stormwater Management.

5.2.1 Require MS4 Compliance Inspectors to Provide a Written Report to Post-Construction Facility Owners/Operators for Every Inspection

In order to address post-construction stormwater runoff from new development and redevelopments that disturb one or more acres, the City requires developments to mitigate stormwater impacts by implementing practices to treat, store, and infiltrate runoff on site before it can affect water bodies downstream.

Typically, B & H or their designated representative will inspect or cause to be inspected all public and private stormwater control measures (SCM). The inspection process is as follows:

1. The site inspection/site visit occurs;
2. A report is compiled of the inspector's findings and issued to the property owner and B & H;
3. If items need to be addressed an Out of Compliance report will be sent to the owner with a description of what needs to be done along with a reasonable time frame;
4. If the issues are not addressed within the agreed upon time frame, procedures for enforcement escalation (found in Section 4.2.6) will be followed;
5. Once the issues have been addressed, within the established time frame, the owner of the SCM is directed to send compliance photos to B & H or

their designated representative to request a compliance letter be issued;
and

6. A follow up inspection/visit may occur if needed to verify compliance

5.2.2 Require the City to Inspect or Cause the Inspection of Public and Private Post-Construction Storm Control Measures (SCMs)

Public and private SCMs will be inspected or cause to be inspected by the City or their designated representative to ensure that that the long term operation and maintenance of each SCM is taking place. The inspection procedure listed in Section 5.2.1 will be followed.

5.2.3 Adopt conservation development, riparian/wetland setbacks or other BMP planning and development code

In 2016, the City of Cleveland adopted a Riparian Setback Ordinance (Ord. No. 1555-13) that is found in CCO Chapter 351 and administered and enforced by the Director of Building and Housing and other City officials, such as the City's Zoning Administrator, to protect areas along the banks of rivers, streams, and wetlands from construction and post-construction activities and other damaging impacts. This regulatory tool was implemented to promote natural flood control, assist in stabilizing stream banks to reduce erosion, and to promote well vegetated areas to reduce the amount of pollutants entering streams. These setback areas are based on a map titled "Water Features of the City of Cleveland" produced by the City Planning Commission as the map identifying designated water courses within the City and their designated setbacks and are also based on OEPA classified wetlands including in the Ohio Wetland Inventory, the National Wetland Inventory, local soil surveys or topographic maps and wetlands setbacks established in the ordinance.

SECTION 6 – POLLUTION PREVENTION/GOOD HOUSEKEEPING

This minimum control measure helps to improve or protect receiving water quality by evaluating, altering and maintaining City facility operations.

This measure requires the City to examine and subsequently alter its own actions to help ensure a reduction in the amount and type of pollution that collects on roadways, parking lots, open spaces, storage and vehicle maintenance areas, and all City maintained facilities (owned or leased) that have operations that ultimately discharge into local waterways in MS4 areas.

6.1 REQUIREMENTS

- 6.1.1 The development and implementation of an operation and maintenance program that includes a training component for City employees and contractors and has the ultimate goal of preventing or reducing pollutant runoff from City operations
- 6.1.2 The development and implementation of a program to sweep all streets at least once a year
- 6.1.3 The development and implementation of a program to evaluate and, if necessary, clean catch basins and other stormwater structures that accumulate sediment at least once a year including a provision to identify and prioritize those structures that may require cleaning more than once a year.
- 6.1.4 The development and implementation of a program to evaluate and, if necessary, prioritize for repairing, or upgrading the conveyances, structures and outfalls of the MS4
- 6.1.5 The development and implementation of a program to evaluate and prioritize those streets that may require sweeping more than once a year

6.2 BEST MANAGEMENT PRACTICES

The following BMPs will be utilized in the implementation of the program to address the minimum control measure for Pollution Prevention/Good Housekeeping.

6.2.1 Operation and Maintenance Program

Operation and maintenance is an integral component of all stormwater management programs. This measure is intended to improve the efficiency of these programs through appropriate maintenance practices, internal procedures and scheduling. Proper development and implementation of these programs reduce the risk of water quality problems. There are several elements that are

essential for the success of an operation and maintenance program including, training, record keeping, internal reporting, maintenance and preventative maintenance. The City will include the following elements in the development and implementation of its program.

Employee Training

The City will continue a program to provide education and training to its employees, regarding stormwater management and how it relates to the City's design, construction and maintenance operations. The training will focus on pollution prevention, best management practices and good housekeeping. Training may also include topics such as illicit discharge detection, inspection, record keeping, internal reporting, general maintenance, preventative maintenance and other topics relating to proper stormwater management and the requirements of the General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems. Employee training will be discussed in greater detail in Section 6.2.2.

Record Keeping

The City's procedures for record keeping will incorporate the documentation of information and data, resulting from the General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems procedures. Keeping records of spills, leaks, and other discharges provide useful information for ensuring proper maintenance of facilities and equipment, and improving best management practices to prevent future spills. Generally, record keeping will be conducted on a department/division level for information pertaining to that department/division. Within City departments/divisions, records may be kept at individual facilities, providing greater accessibility to personnel that would need immediate information.

The key to a successful records keeping program is to maintain records through regularly scheduled updates. The City will utilize the following techniques to document and report data and records:

- Field notebooks
- Timed and dated photographs
- Drawings and maps
- Computer spreadsheets and database programs

Record keeping will be coordinated with internal reporting and other BMPs as it is integrated into the development of City's stormwater pollution prevention plan.

The City will submit annual reports containing records required by the General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems, to OEPA. These annual reports will include the information as described in Section 7 "Additional Requirements" of this plan.

Internal Reporting

Internal reporting provides a framework for "chain-of-command" reporting of stormwater management issues, and is an essential part of any good records keeping program. When properly employed, an internal reporting program can clearly define individual's roles and responsibilities for implementing and maintaining the stormwater pollution prevention program, thereby making it easier to prevent and contain potential stormwater contamination.

The City's internal reporting procedures will incorporate the additional effort needed with this stormwater management program, and the position(s) responsible for each stormwater management task. In general, the position(s) responsible for each BMP is mentioned in each section of this stormwater management plan. Stormwater problems identified in the field will be relayed from the field personnel to the crew leader, then the immediate supervisor, Commissioner/Director. If the issue requires special attention, the City will notify OEPA.

Maintenance Program

Maintenance involves pollution prevention techniques that reduce or eliminate pollutant loadings from existing roadways and facility surfaces as part of the operation and maintenance program. Substantial amounts of sediment and pollutants are generated during daily roadway and facility use, and these pollutant loadings can threaten local water quality by contributing heavy metals, hydrocarbons, sediment, and debris to stormwater runoff. Good cleaning practices including street sweeping and catch basin cleaning can help limit impacts to stormwater runoff. Sweeping heavily traveled roadways to remove sediment and debris can reduce the amount of pollutants in runoff. Regular cleaning of runoff control structures such as catch basins can help improve the overall quality of stormwater discharges.

The City's maintenance plan for sweeping roadways and facility surfaces and cleaning catch basins will meet the requirements of this stormwater management program.

Street sweeping and catch basin cleaning will be discussed in greater detail in Sections 6.2.3 & 6.2.4 respectively.

Preventative Maintenance Program

Preventative maintenance will be utilized by the City for eliminating potential problems associated with drainage systems, facilities and equipment. These measures are intended to reduce the frequency and quantity of pollutants that are discharged to water bodies as a result of the failure and deterioration of aging systems. Preventative measures utilized by the City include the following:

- Catch basin inspection during routine maintenance
- Drainage system inspection for Capital Improvement Projects (CIPs)

Preventative maintenance will be discussed in greater detail in Section 6.2.5.

6.2.2 Employee Training Program

The Mayor's Office of Sustainability conducts an employee training program that provides personnel with an understanding of the City's stormwater management plan, including BMPs, proper maintenance SCMs, processes and materials with which they are working, and preventing discharges. Additional topics may include the proper procedures for reporting and documenting any potential pollutants discovered.

The program will consist of scheduled training for design, construction, maintenance, and facility personnel, including both office and field positions. Topics will include sedimentation and erosion control and permanent BMPs. Training will also be implemented for agencies/businesses operating and maintaining facilities located on property owned by the City.

6.2.3 Street Sweeping Program

Street sweeping is practiced in most areas to remove sediment buildup and large debris from curb gutters. Street sweeping is also used during the spring snowmelt to reduce pollutant loads from road salt to receiving waters.

The City will continue to conduct street sweeping on a scheduled basis to minimize pollutant export to State and local water bodies. These cleaning practices will remove sediment, large debris from curb gutters and other pollutants, from roadways, and facility surfaces. Street sweeping frequency will range from one time per year, to multiple times per year for areas with heavier concentrations of sediment and debris.

6.2.4 Catch Basin Maintenance Program

Catch basins fitted with sumps are intended to retain coarse sediment by trapping this material in a chamber or low area below the invert of the outlet pipe. By trapping sediment, the catch basin prevents solids from clogging the storm sewer and being washed into receiving waters.

The City (WPC) has instituted a catch basin maintenance program that consists of inspecting and cleaning catch basins on a regularly scheduled basis. WPC is using the following criteria for catch basin inspecting and cleaning:

Clean all catch basins throughout the City at least once in a three (3) year period. These catch basins may be selected based upon routine scheduled field inspections and also inspections resulting from other program requirements. Priority areas will be established to maximize the effectiveness of available resources for routine inspections. These priority areas will be developed using WPC's knowledge of problem areas.

WPC will conduct routine inspections by selecting a representative number of catch basins for each stretch of roadway once every year. If a catch basin sump is found to be more than one half (1/2) full, the catch basin will be cleaned. Additional catch basins will be inspected and cleaned if necessary for that given stretch to ensure that the cleaning is completed to the maximum extent practicable.

6.2.5 Preventive Maintenance Program

Preventative maintenance takes a proactive approach to stormwater management and seeks to prevent problems before they occur. This measure involves the inspection, evaluation and replacement or repair of equipment and operational systems. Inspections can identify cracks, leaks, and other conditions that could cause breakdowns or failures of stormwater structures and equipment, which in turn could result in discharges of pollutants to surface waters either by direct overland flow or through storm drainage systems.

The Division of Water Pollution Control is currently conducting a sewer system evaluation survey (SSES) that will assess sewers that have exceeded their useful life based on age (100 years). This equates to approximately 27% of the 1,436 miles of combined, sanitary, and storm main sewers in the City of Cleveland. The scope of the project will consist of flow monitoring, manhole inspection, smoke and dye testing, sewer cleaning, closed circuit television (CCTV) inspection, and hydraulic and cost effective analysis. The assessment will concentrate on this portion of the collection system in an effort to prioritize capital improvement projects. Coordination efforts are underway between WPC

and the Northeast Ohio Regional Sewer District, who is also currently performing a SSES in combined sewer areas in the City of Cleveland.

SECTION 7 – ADDITIONAL REQUIREMENTS

7.1 PROPER OPERATION AND MAINTENANCE

The City will properly operate and maintain all facilities, including related appurtenances, which are installed or used by the City to achieve compliance with the conditions of the general permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems. Section 6 of this document contains detailed information for specific operation and maintenance measures.

7.2 AVAILABILITY OF INFORMATION

As stormwater manager for the City of Cleveland, Water Pollution Control will make a copy of the Stormwater Management Plan available to the following upon request:

- OEPA – Office of Surface Water
- In the case of an MS4 adjacent to or interconnected with the WPC's storm sewer system, to the operator of that MS4

7.3 KEEPING PLANS CURRENT

Water Pollution Control will amend the Stormwater Management Plan whenever: (1) there is a change which has the potential to cause pollution of the waters of the State; or (2) the actions required by the SWMP fail to ensure or adequately protect against pollution of the waters of the state; or (3) the Commissioner of WPC requests modification of the SWMP. The amended plan will be completed and all actions required by such SWMP will be completed within a time period determined by the Commissioner of WPC.

The Commissioner of WPC may notify relevant City departments at any time that the SWMP does not meet one or more of the requirements of this general permit. Within 30 days of such notification, unless otherwise specified by the Commissioner of WPC in writing, the other City departments will respond to the Commissioner of WPC indicating how they plan to modify the SWMP to address these requirements. Within 90 days of this response or within 120 days of the original notification, whichever is less, unless otherwise specified by the Commissioner of WPC in writing, the City will then revise the SWMP, perform all actions required by the revised SWMP, and shall certify to the Commissioner of WPC that the requested changes have been made and implemented.

7.4 REPORTING AND RECORD KEEPING

Records required by the general permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems will be kept for at least 5 years following its expiration or longer if requested by the Commissioner of WPC in writing. Such records, including the Stormwater Management Plan, will be available to the public at reasonable times during regular business hours.

The City will submit an annual report to OEPA by April 1st each year.

The annual report will include the following:

- The status of compliance with the general permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems, an assessment of appropriateness of the identified best management practices, and progress towards achieving the implementation dates and measurable goals for each of the minimum control measures
- All monitoring data collected and analyzed pursuant of Section 3, Illicit Discharge Detection and Elimination, of this Stormwater Management Plan
- All other information collected and analyzed, including data collected under Section 3 of this Stormwater Management Plan
- A summary of the stormwater activities the City plans to undertake during the next reporting cycle
- A change in any identified measurable goals or implementation dates that apply to the program elements

7.5 TOTAL MAXIMUM DAILY LOAD (TMDL) ALLOCATIONS

If a TMDL is approved for any water body into which the City discharges, the City will review its Stormwater Management Plan to determine if the plan includes control of stormwater discharges required by the TMDL. If the stormwater discharge(s) do not meet TMDL allocations, the City will modify its Stormwater Management Plan to implement the TMDL within four months of the TMDL's approval and notify OEPA of this modification.

7.6 DUTY TO CORRECT AND REPORT VIOLATIONS

Upon learning of a violation of a condition of the general permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems, the City will immediately take all reasonable action to determine the cause of such violation, correct and mitigate the results of such violation and prevent further such violation. The City will report in writing such violation and such corrective action to OEPA within five (5) days of the City's learning of such violation. Such information will be filed in accordance with the requirements of this general permit.

7.7 DUTY TO PROVIDE INFORMATION

If OEPA requests any information pertinent to or in compliance with the general permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems or with the City's authorization under this general permit, the City will provide such information within thirty (30) days of such request. Such information shall be filed in accordance with the requirements of this general permit.

7.8 CORRECTION OF INACCURACIES

Within fifteen days (15) after the date the City becomes aware of a change in any information in any material submitted pursuant to this general permit, or becomes aware that any such information is inaccurate or misleading or that any relevant information has been omitted, the City will correct the inaccurate or misleading information or supply the omitted information in writing to the OEPA. Such information will be filed in accordance with the requirements of this general permit.

7.9 OTHER APPLICABLE LAW

Nothing in the general permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems will relieve the City of the obligation to comply with any other applicable Federal, State and local law, including but not limited to the obligation to obtain any other authorizations required by such law.

APPENDIX A
ABBREVIATIONS AND DEFINITIONS

ABBREVIATIONS AND DEFINITIONS

The definition of terms used in this stormwater management plan shall be the same as the definitions used in the general permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer System. The following additional definitions shall apply:

"Authorized activity" means any activity authorized under the General Permit for the Discharge of Storm Water from Small Municipal Separate Storm Sewer Systems.

"Best Management Practices (BMP)" means those practices, which reduce pollution and which have been determined by the Ohio Environmental Protection Agency, to be acceptable based on, but not limited to, technical, economic, and institutional feasibility.

"Catch Basin" any structure designed and constructed to collect stormwater runoff and convey the flows through a storm sewer system.

"City" means the City of Cleveland

"CWA" means Clean Water Act

"Drainage System" means any structure(s) or facility, including inlets, catch basins, storm drains, under drains, ditches, channels, culverts, designed and constructed for the removal of stormwater from streets, highway sections, parking areas, and other drainage areas.

"Dry Weather Flows" means flows that exist within storm sewer systems during dry weather periods experiencing little or no precipitation.

"EPA" means the United States Environmental Protection Agency.

"Facility" may be defined by the following, but not be limited to buildings, parking lots, highways, roadways, and railways.

"First Flush" pollutants deposited on to exposed areas can be dislodged and entrained By the rainfall-runoff process. Usually the stormwater that initially runs off an area will be more polluted than the stormwater that runs off later, after the rainfall has "cleansed" the catchment. The stormwater containing this high initial pollutant load is called the "first flush."

"Hazardous Substance" means any substance, other than oil, which when discharged in any quantity into waters of the United States, presents an imminent and substantial danger to the public health or welfare, including but not limited to

fish, shellfish, Wildlife, shorelines and beaches (Section 311 of the CWA); identified by EPA as the Pollutants listed under 40 CFR Part 116.

"Illicit Discharge" means any unpermitted discharge to waters of the State that does not consist entirely of stormwater or uncontaminated groundwater except those discharges identified authorized under a NPDES permit (other than the NPDES permit for discharges from the municipal sewer system) and also except discharges resulting from firefighting activities.

"Industrial Activity" activities subject to the NPDES Industrial Stormwater Permit as defined in 40 CFR, Section 122.26(b) (14).

"Minimum Control Measure" means the measures as described by EPA, when implemented in concert, are expected to result in significant reductions of pollutants discharged into receiving water bodies.

"Municipal Separate Storm Sewer System" the system of conveyances (including roads With drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels or storm drains) owned or operated by the federal government, State municipality, township, county, district, or other public body (created by or pursuant to State or Federal law) including special district under State law such as a sewer district, flood control district or drainage districts, or similar entity or a designated and approved management agency under Section 208 of the Clean Water Act that discharges into surface waters of the State; and designed or used for collecting or conveying solely storm water, that is not a combined sewer; and not part of a publicly owned treatment works.

"National Pollutant Discharge Elimination System (NPDES)" means a permit issued by US EPA (or by the State) under authority delegated pursuant to 33 USC Sec. 1342(b) that authorizes the discharge of pollutants to waters of the United States, whether the permit is applicable to an individual, group, or general area-wide basis.

"Outfall" the mechanism or structure by which a storm sewer, storm drain, stream or water course discharges to a receiving water body.

"Point Source" means any discernable, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged.

"Pollutants" means dredged spoil, solid waste, incinerator residue, filter backwash,

Sewage, garbage, sewage sludge munitions, chemical wastes, biological materials, radioactive materials (except those regulated under the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et seq.), heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water.

“Registrant” means a municipality, State or Federal agency, which files a registration pursuant to Section 4 of the NPDES Phase II MS4 general permit.

“Regulated Small MS4” means any small MS4 (as defined below) authorized by the general permit including all those located partially or entirely within an urbanized area and those additional small MS4s located outside an urban area which, as of the issuance of this general permit, have been designated as a Regulated Small MS4.

“Retain or retention” means to permanently hold stormwater runoff on-site with no subsequent point source release.

“Small MS4” any MS4 that is not already authorized by the Phase I MS4 stormwater program including State and Federally-owned systems, such as colleges, universities, prisons, and military bases. State and Federally-owned MS4s are authorized under separate general permits.

“State” means State of Ohio

“Storm Drain” means inlet, including catch basins, which capture stormwater runoff for conveyance through a storm sewer system.

“Storm Sewer System” means any structure(s) or facility, including inlets, catch basins, storm drains, under drains, ditches, channels, culverts, designed and constructed for the removal of water from streets, highway sections, parking areas, and other drainage areas.

“Stormwater” means waters consisting of precipitation runoff.

“Stormwater Management Plan (SWMP)” means a stormwater management program required under the general permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems, designed to reduce the discharge of pollutants from the small MS4 to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act.

“SWPP” means a Stormwater Pollution Prevention Plan, usually associated with an individual permit for the discharge of stormwater.

"Urbanized Area (UA)" means the areas of the State of Ohio so defined by the U.S. Census Bureau for the 2010 Census.

"Total Maximum Daily Load (TMDL)" means the maximum capacity of a surface water to assimilate a pollutant as established by the Director of the Ohio Department of Environmental Protection including pollutants contributed by point and non-point sources and a margin of safety.

"Water Bodies" means any natural or artificial inland body of water or expanded part Of a water course, including lakes, ponds and reservoirs.

"Water Courses" means any natural or artificial channel including, rivers, creeks, Streams, wash, arroyo, channels or other topographic feature on or over which waters flows at least periodically.

"Waterways" any navigable body of water, such as a river, channel, or canal.

APPENDIX B
MEMORANDA OF UNDERSTANDING

MEMORANDUM OF UNDERSTANDING
Between the Cuyahoga Soil and Water Conservation District
and the
City of Cleveland

Purpose

Recognizing the need for effective collaboration in carrying out mandated responsibilities, especially related to the NPDES Storm Water Phase II permit, the City of Cleveland (City) and the Cuyahoga Soil and Water Conservation District (SWCD) accept this agreement as the document which describes the process for exchange. Cooperation between these two units of government facilitates solutions to problems encountered by the City as it plans for the development/redevelopment and conservation of its environment, as well as, water quality improvements. In making technical assistance and expertise available to the City, the SWCD hopes to influence local planning and regulatory capability toward better conservation of soil and water resources. The Ohio Revised Code, Ch 1515, describes the District's authority for engaging in this Mutual Agreement.

For ease of understanding, this agreement is arranged according to the order of the Six Minimum Controls for the National Pollutant Discharge Elimination System (NPDES) Phase II for Storm Water as defined with the Ohio Revised Code 3745-39-04 (B)(1) through (6).

Project Tasks

The SWCD and the City have mutually agreed to the Scope of Services listed related to public involvement and public education (Minimum Control Measures 1 & 2).

Project Appropriation

Annual appropriation for services related to public involvement and public education will not exceed **\$5,500**. These services may be billed on a semi-annual basis. The City will provide a Purchase Order for the annual appropriation to the SWCD.

District's Role Related to Public Involvement and Public Education Activities
Minimum Control Measures 1 & 2

The SWCD will work with the City to provide the public education and public involvement services listed in the City's Storm Water Management Plan and/or others as mutually agreed upon. The goal of the public involvement and public education program is to reach diverse stakeholders, including City residents, City staff, school children, etc. through the following services:

1. SWCD staff will coordinate activities and facilitate their implementation with feedback from the City's Storm Water Manager or designee.
2. SWCD staff will attend a minimum of one Storm Water Task Force meeting for planning or reporting purposes.
3. SWCD staff will attend City council meetings, as requested.

4. SWCD will create a poster for display purposes that can be used on an annual basis; staff will work with the City to determine suitable locations for maximum exposure.
5. SWCD will assist the City in identifying a local storm water event, in planning the event and assisting in event promotion. Assist in identifying partnerships with various community stakeholders. An events may include stream clean ups, drain stenciling, water festivals or other activities to engage the public.
6. On the City's behalf, the SWCD will participate in the Northeast Ohio Public Involvement and Public Education Work group (NEO PIPE). Products produced by the NEO PIPE Work Group will be provided to the City for outreach efforts.
7. Provide 2-4 storm water or watershed-related factsheets for the City's display and/or other uses.
8. Provide articles for the City newsletter, as requested, 2 per year minimum. The SWCD will work with the appropriate staff person to place the information in City publications.
9. Notices of educational programs or events for students and teachers in grades K-12, including, but not limited to Envirothon, Conservation Day, and Forestry Camp.
10. SWCD will host an annual teacher workshop or provide tools with current, age-related curricula related to soils, water quality, storm water and/or watersheds.
11. The SWCD will seek to opportunities to maximize impact and minimize additional program costs related to printing large quantities of selected materials that become available to the public.
12. The SWCD will provide an annual report of all activities undertaken, including copies of all fliers, notices, and types of stakeholders reached, attendance records and any data collected.

District's Role Related to General Technical Assistance

1. The SWCD will provide limited technical services, related to erosion and sediment control and storm water management, specifically to assist in the development of local ordinances to promote universal application of best management practices at construction sites.
2. The SWCD will provide limited technical advisory services to the City on matters related to
 - a. Sound storm water management through accepted best management practices
 - b. General evaluation of sensitive areas such as creeks, floodplains, soils, slopes, wetlands, watersheds, woodlands or other unique areas that are planned for development
 - c. Protection of sensitive natural areas
 - d. Small drainage systems and wildlife habitat enhancements

Agreed Procedures


- That the SWCD is a conservation technical and education service agency and therefore is not granted regulatory authority in the Ohio Revised Code.
- That the working relationship will be defined to include lines of communications with appropriate departments. The SWCD and the City will meet at least once a year to coordinate a work plan and

exchange information with the goal of developing a multi-disciplinary approach to resource management.

- SWCD will provide a written annual report, relevant to its role, as outlined in this MOU. The City will submit it an Annual Report to the Ohio EPA, which will include, *but is not limited* to the report provided by the District, as required by its Storm Water Permit.
- That the standards and specifications developed by the City shall take precedence in planning and application of conservation measures. Where the City's policies are moot, the standards of the USDA, Natural Resources Conservation Service and the current edition of Ohio's "Rainwater and Land Development" manual will be used in planning and application of conservation measures.
- That all parties will review quality of service and address concerns as they arise.
- That credit will be given jointly to the SWCD and the City in natural resource/ NPDES Phase II related publications prior to publication.
- The City recognizes the SWCD's obligation to make its reports and other written materials available to the public on request in accordance with the Ohio Public Records Act.
- All services of the SWCD are offered on a non-discriminatory basis without regard to race, age, marital status, handicap or political persuasion.
- The City will provide a Purchase Order for the annual appropriation to the SWCD.
- This agreement may be amended or terminated at any time by mutual consent of both parties, and the agreement may be terminated by either party giving (30) days notice in writing to the other.

In witness thereof, the Memorandum executed and agreed to on the day, month and year written:

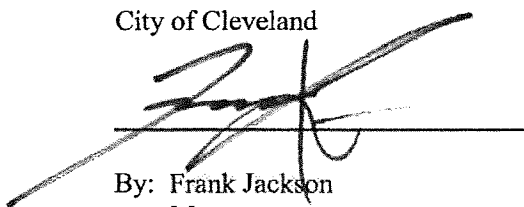
Cuyahoga Soil & Water
Conservation District



By: Ruth Skuly
Chair

Date: 2/6/08

City of Cleveland



By: Frank Jackson
Mayor

Date: 1-22-08

MEMORANDUM OF UNDERSTANDING
Between the Cuyahoga Soil and Water Conservation District
and the
Euclid Creek Watershed Council

This Memorandum of Understanding (MOU) is made and entered into by and between the Cuyahoga Soil and Water Conservation District, hereinafter referred to as SWCD, and the Euclid Creek Watershed Council, hereinafter referred to as the Council.

Background and Purpose

In 2000, ten municipalities in the Euclid Creek Watershed organized informally with the assistance of the Northeast Ohio Areawide Coordinating Agency (NOACA) to form a **Euclid Creek Watershed Council** to address common environmental, stormwater and development concerns in the Euclid Creek Watershed.

In 2001, NOACA obtained a grant from the Ohio Lake Erie Protection Fund to develop a regional stormwater program model and to undertake a demonstration of the use of this model with Euclid Creek Communities. Nine of the communities in Euclid Creek agreed to provide matching funds for and to cooperate with this effort. NOACA contracted with the SWCD to serve as watershed coordinator for this demonstration effort.

In 2002, the SWCD obtained a grant from the Ohio Department of Natural Resources (ODNR) for a Watershed Coordinator position for Euclid Creek, this six-year declining matching grant expired December 31, 2008.

In 2004, the Council established by-laws as an operational organization with governance.

Since 2004, the program has developed a Euclid Creek Watershed Action Plan (WAP), established an annual public involvement and education program work plan, a volunteer water monitoring program, and brought in over \$5.23 million to implement its programs and plan recommendations for improvement. In 2008, planning and organizational development decreased and WAP implementation continued to rise.

From 2008 to 2014, the SWCD obtained two, three-year matching implementation grants from the ODNR for the Watershed Coordinator position for Euclid Creek that expired in December 31, 2014 and these funds are no longer available.

The purposes of this agreement are to:

Facilitate implementation of the 2006 State of Ohio fully endorsed Watershed Action Plan for the Euclid Creek;

Encourage participation in the 2017 update of the WAP, in the form of the Ohio Nonpoint Source Pollution Implementation Strategies (NPS-IS) update and facilitate implementation of the NPS-IS once approved by the State of Ohio;

Promote coordinated participation of local units of government in the implementation of the plan;

Coordinate implementation of the Public Involvement & Public Education (PIPE) program of the ECWC member communities; and,

The Ohio Revised Code, Chapter 940, describes SWCD's authority for engaging in this Mutual Agreement.

Program Appropriation

The Euclid Creek Watershed Council member communities agree to grant an annual appropriation for the Euclid Creek Watershed Coordinator and for the Euclid Creek Watershed Program to the SWCD, not to exceed **\$5,500** per Community per twelve month period following the Effective Date. And the Cuyahoga SWCD agrees to use the grant funds to provide the Euclid Creek Watershed Program for each community.

The Cuyahoga SWCD, through the Euclid Creek Watershed Program, agrees to:

Provide a Watershed Coordinator for the Euclid Creek Watershed and supervise the position;

Provide staff support to the Euclid Creek Watershed Council;

Coordinate the Euclid Creek Watershed Council meetings and committees, including the PIPE Committee, Technical Committee and Volunteer Monitoring Committee, and assist in agenda and minute preparation;

Provide support to local communities for watershed improvement projects and coordinate with local communities on watershed goals and their implementation within the context of community goals, such as those listed in the Community(s) Stormwater Management Plan, the Watershed Action Plan and corresponding NPS-IS update, and Total Maximum Daily Load (TMDL) document recommendations;

Encourage broad based stakeholder involvement in the watershed implementation process;

Conduct and coordinate the Public Involvement & Public Education Minimum Control Measures 1 & 2 for the National Pollutant Discharge Elimination System (NPDES) Phase II requirements, working with the Community(s) to provide PIPE services listed in the City's Stormwater Management Plan and / or others mutually agreed upon.

The goal of the PIPE program is to reach diverse stakeholders, including community residents, community staff, school children, etc., through the following services:

1. SWCD staff and the Watershed Council's PIPE Committee will coordinate activities and facilitate their implementation with feedback from the Community's Stormwater Coordinator or designee.
2. SWCD staff will attend council meetings and/or stormwater or drainage committee meetings, as requested.
3. On the behalf of the Euclid Creek Watershed Council and its member communities, the SWCD will participate in the Northeast Ohio Public Involvement and Public Education Work group (NEO PIPE). Products produced by the NEO PIPE Work Group will be provided to the Communities for outreach efforts.
4. SWCD will establish an annual water quality or watershed theme for the PIPE program.
5. District staff will provide a yearly Outreach Strategy to the Community indicating the yearly theme, theme rationale, and overall goals. Additionally, the Outreach Strategy will outline

- public education and public involvement outreach messages, target audiences, delivery methods and tracking/evaluation techniques.
6. SWCD will create a variety of educational materials, including brochures, fact sheets, newsletters, newsletter articles, web-based information for the City's use, special mailings, educational posters and school programs, such as age-specific student programs and teacher workshops related to conservation concerns, including watershed issues, soils and water.
 7. SWCD will work with the Council's PIPE Committee in identifying a local water education event, in planning the event, in assisting in event promotion, in implementing the event, and in identifying partnerships with various community stakeholders. Event(s) may include stream clean ups, storm drain stenciling, rain barrel workshops, water festivals or other activities to engage the public.
 8. SWCD will provide opportunities for student involvement in local, state and national programs and competitions.
 9. SWCD will update events and information on the Euclid Creek Watershed website.
 10. SWCD will provide an Annual Report of all activities undertaken to each community for incorporating into its annual submission of the stormwater management program to OEPA. Copies of all flyers, notices, types of stakeholders reached, attendance records, and any data collected in the formatting required by Ohio EPA will be maintained and stored at the SWCD offices.
 11. SWCD will seek opportunities to maximize impact and minimize additional program costs related to printing large quantities of selected materials that become available to the public.
 12. SWCD will work with the Euclid Creek Watershed communities to educate them about new requirements of the NPDES general permit for the PIPE program as they develop, related to the program decision process, performance standards, and annual reporting requirements.

Serve as fiscal agent for the Euclid Creek Watershed Council.

SWCD's Role Related to General Technical Assistance

1. SWCD may also provide limited technical advisory services, related to erosion and sediment control and stormwater management, specifically to assist in the development of local ordinances to promote universal application of stormwater control measures (SCM) at construction sites.
2. SWCD may also provide limited technical services to the Euclid Creek Watershed Council communities on matters related to:
 - Sound stormwater management through accepted stormwater control measures
 - General evaluation of sensitive areas such as creeks, floodplains, soils, slopes, wetlands, watersheds, woodlands or other unique areas that are planned for development
 - Protection of sensitive natural areas and conservation easements
 - Small drainage systems and wildlife habitat enhancements

Community's Role Related to Public Education and Public Involvement and General Technical Assistance

1. The Community will designate someone to serve as the Community's liaison to the SWCD and to help provide guidance regarding conservation education and public involvement and with coordination of activities such as improvement days, storm drain stenciling, and watershed planning activities.
2. The Community will help to identify potential leaders, including civic leaders, civic groups,

senior organizations, fraternal groups, scout leaders, school liaisons, business leaders and anyone else that should be contacted through an outreach program.

3. The Community will disseminate program information provided by the SWCD in a timely manner to residents.
4. The Community will assume full responsibility for completion and submittal of their required annual reports.

Agreed Procedures

1. The Community will provide a resolution or a letter signed by an authorized representative to the SWCD that acknowledges this working agreement and provides documentation to facilitate dispersal of funds to the SWCD on an annual basis.
2. That the SWCD is a conservation technical and educational service agency and therefore is not granted regulatory authority in the Ohio Revised Code.
3. That the working relationship will be defined to include open lines of communications with appropriate departments. The SWCD and the Community will work with the PIPE Committee and the Watershed Council to develop an annual work plan and to exchange information with the goal of developing a multi-disciplinary approach to resource management.
4. SWCD will provide a written annual summary, relevant to its role, as outlined in this MOU.
5. That all parties will review quality of service and address concerns as they arise.
6. That credit will be given jointly to the SWCD and the Euclid Creek Watershed Council Communities in any conservation publication produced.
7. That the Communities recognize the SWCD's obligation to make its reports and other written materials available to the public on request in accordance with the Ohio Public Records Act.
8. That all services of the SWCD are offered on a non-discriminatory basis without regard to race, age, marital status, handicap or political persuasion.

Termination of Agreement

This working agreement may be amended or terminated at any time by mutual consent of both parties, or the agreement may be terminated by either party giving thirty (30) days notice in writing to the other.

The Euclid Creek Watershed Council, acting on behalf of its member communities, agrees to:

Cooperate with the Euclid Creek Watershed Coordinator in implementing the Watershed Action Plan for Euclid Creek.

Operate the Euclid Creek Watershed Council as a forum for advising on the implementation of the Euclid Creek Watershed Action Plan.

Provide funding necessary to support the SWCD Watershed Coordinator position for the Euclid Creek.

Identification of Key Personnel

For the Cuyahoga SWCD, the supervisor of the Watershed Coordinator is:

1) Janine Rybka, District Administrator

Cuyahoga SWCD
6100 West Canal Road
Valley View, Ohio 44125
Phone: (216) 524-6580, ext. 13
Fax: (216) 524-6584
E-mail: jrybka@cuyahogawcd.org

2) Claire Posius, Euclid Creek Watershed Coordinator

Cuyahoga SWCD
6100 West Canal Road
Valley View, Ohio 44125
Phone: (216) 524-6580, ext.16
Fax: (216) 524-6584
E-mail: cposius@cuyahogawcd.org

3) Chair, Euclid Creek Watershed Council

Participating Communities in the Euclid Creek Watershed Council:

(Refer to *Exhibit A* for the Partnership Agreement.)

- City of Beachwood
- City of Cleveland
- City of Euclid
- City of Highland Heights
- City of Lyndhurst
- City of Mayfield Heights
- City of Richmond Heights
- City of South Euclid
- Village of Mayfield

Term of Agreement

This agreement will become effective when signed by the Chair of the Euclid Creek Watershed Council (ECWC) and the Chair of SWCD and will continue in force and effect for a period of four (4) years from January 1, 2017 to December 31, 2020 unless terminated earlier by agreement of either party. This agreement may be amended only by written instrument duly executed by the ECWC and the SWCD. The ECWC and the SWCD will annually review this agreement.

Signed by duly authorized officers of the ECWC and the SWCD on the latest day, month and year written below:

Euclid Creek Watershed Council

By _____, 2016
(City of Beachwood Appointee to the ECWC
Chris Vild, Chair)

Cuyahoga Soil and Water Conservation District

By _____, 2016
(Ruth Skuly, Chair, Board of Supervisors)

EXHIBIT A

PARTNERSHIP AGREEMENT among the **COMMUNITIES OF THE EUCLID CREEK WATERSHED COUNCIL**

I. Purpose

This agreement outlines the roles and responsibilities of the Euclid Creek communities for the Euclid Creek Watershed Council (ECWC).

The goals of the Euclid Creek Watershed Council are to promote interjurisdictional cooperation in addressing watershed issues in the Euclid Creek watershed including cooperation with the Euclid Creek Watershed Coordinator to implement the Watershed Action Plan for Euclid Creek.

II. Scope of Partnership Agreement

The geographic area of the Partnership Agreement is the entire watershed of the Euclid Creek.

The scope of this agreement includes the continuation of the Euclid Creek Watershed Council, formed in 2003 to promote interjurisdictional cooperation in watershed planning in the Euclid Creek.

This agreement is based upon the organizational structure outlined in the By Laws of the Euclid Creek Watershed Council, ratified as of January 22, 2004 by the nine ECWC communities (*Attachment A*).

The agreement will be reviewed annually by the participating communities.

III. Watershed Council

- A. The undersigned communities commit to the goals of the Euclid Creek Watershed Council (as outlined in *Purpose* Section I).
- B. The undersigned organizations agree to constitute a Steering Committee for the Council to serve the following functions:
 - 1. Annually formulate and update a Euclid Creek Watershed Work Plan.
 - 2. Participate in a watershed-wide public outreach program concerning watershed issues.

3. Oversee preparation of annual reports to the Euclid Creek communities describing the Euclid Creek Watershed Program goals and progress toward their achievement.
- C. Each Partner community will abide by the established rules set in the By Laws of the Euclid Creek Watershed Council in *Attachment A*.

IV. Financial Participation

Member communities agree to financially support the Euclid Creek Watershed Council according to the funding plan attached in *Attachment B*. Funding will be used to support the Euclid Creek Watershed program, including the Euclid Creek Watershed Coordinator position. The Cuyahoga SWCD is recognized as the fiscal agent for the Euclid Creek Watershed Council.

V. Effective Date and Time Frame of Partnership Agreement

This agreement is effective on the date that it has been executed by a majority of the undersigned communities. This agreement will be reviewed at least annually and modified as appropriate, with concurrence by all signatories.

VI. Authorizing Signatures

IN WITNESS WHEREOF, the following parties have caused this Agreement to be executed.

PARTICIPATING COMMUNITIES

**PARTICIPATING COMMUNITIES OF THE EUCLID CREEK WATERSHED
COUNCIL:**

City of Cleveland



Honorable Frank Jackson, Mayor

Date:

8.2.16

Attachment A

BY LAWS OF EUCLID CREEK WATERSHED COUNCIL

RECEIVED AL

The Euclid Creek Watershed Council was organized informally, with the assistance of the Northeast Ohio Areawide Coordinating Agency (NOACA), to address common environmental, storm water, and development concerns in the Euclid Creek watershed.

ARTICLE I NAME AND PURPOSE

- Section 1. The name of the organization shall be the Euclid Creek Watershed Council
- Section 2. The Euclid Creek Watershed Council is organized "to promote inter-jurisdictional cooperation in addressing watershed issues in the Euclid Creek watershed, including cooperation with the Euclid Creek Watershed Coordinator to develop a watershed plan for the Euclid Creek." (Partnership Agreement (Exhibit A) found in the formal Memorandum of Understanding between the Euclid Creek Watershed Council and Cuyahoga Soil and Water Conservation District, ratified May 12, 2003"

ARTICLE II STEERING COMMITTEE

Section 1: Membership.

The affairs and business of the Council shall be managed by a Steering Committee, composed of the mayor of each city in the watershed or his/her official designee. The Watershed Coordinator will also be a member of the Steering Committee. Each mayor in the watershed will appoint an official designee, in writing, to the Watershed Council.

Section 2: Election and Term of Office.

The term of each Steering Committee member shall be for as long as he/she is *servng his/her term of office*.

Section 3: The Steering Committee.

The Steering Committee shall have all the powers and duties necessary or appropriate for the administration of the affairs of the Council.

Section 4: Quorum.

Except as otherwise provided by law or these By Laws, a majority of the Steering Committee members of at least 2/3 of the voting members, who have been duly appointed at any given time and whose names and addresses have been recorded by the Secretary of the Council and who have not resigned shall be necessary to constitute a quorum for a meeting of the Steering Committee; provided, if at any meeting of the Steering Committee there shall be present less than a quorum, a majority of those present may adjourn the meeting from time to time without any notice other than by announcement at the meeting of the time and place to which the meeting is adjourned until a quorum shall attend.

Section 5: Meetings.

Regular meetings of the Steering Committee shall be held on such dates and at such times and place within the State of Ohio as the Steering Committee may designate. There shall be at least three (3) Regular meetings per calendar year.

A Special Meeting of the Steering Committee may be called by the Chair, Co-Chair, Secretary, or any three (3) Steering Committee members, on such date and at such time and place within the State of Ohio as shall be specified in the call thereof.

Written notice of each meeting of the Steering Committee, whether regular or special, shall be given to each Steering Committee member by personal delivery or by mail or facsimile, or email at least one week before the time of such meeting. Notice of any meeting may be waived by any Steering Committee member before or after the meeting by a signed writing and shall be deemed to be waived by any Steering Committee member who shall attend such meeting in person without protesting, prior to or at the commencement of the meeting, the lack of proper notice. Any meeting of the Steering Committee member shall be a legal meeting without notice having been given if attended by all the members of the Steering Committee.

Euclid Creek Watershed Council By-Laws
Adopted by council 1/22/041

A master list of Steering Committee members and all municipal media outlets will be utilized by the Watershed Coordinator; meeting notices will be sent to local media outlets and posted on the Euclid Creek Watershed website, in accordance to the Sunshine Laws.

Section 6: Voting.

The act of a majority of the Steering Committee present at a meeting at which a quorum is present is the act of the Watershed Council, unless the act of a greater number is otherwise required by these By Laws or by law. The Secretary/Watershed Coordinator is a non-voting member of the Steering Committee.

Section 7: Vacancies.

A vacancy in the office of a Steering Committee member shall be filled after consulting with the community where the vacancy occurs, by the Steering Committee for the unexpired portion of such Steering Committee member's term of office.

Section 8: Committees.

The Chair, with the approval of the majority of the Steering Committee, may authorize the delegation to any such committee of any of the authority of the Steering Committee. The powers and duties of such committees shall be such as may be specified by the Chair, with the approval of the majority of the Steering Committee, at the time of appointment to such committees. Vacancies in the membership of any committee may be filled at any time by the Steering Committee.

ARTICLE III
OFFICERS

Section 1: Composition.

The officers of the Watershed Council shall include a Chair, or Co-Chairs, and such other officers as the Steering Committee may consider necessary or appropriate.

Section 2: Term.

The Chair, or Co-Chairs, shall be elected by the affirmative vote of a majority of Steering Committee members present at the first meeting of the year at which a quorum is in attendance, until their respective successors are duly elected and qualified, or until the earlier of their resignation, removal from office or death.

Section 3: Removal.

Any officer elected by the Steering Committee may be removed at any time either with or without cause by the affirmative vote of a majority of the Steering Committee, present at a meeting at which a quorum is in attendance. Any other officer or employee of the Council may be removed at any time by vote of the Steering Committee present at a meeting at which a quorum is in attendance by any committee thereof.

ARTICLE IV
DUTIES OF OFFICERS

Section 1: Chair or Co-Chairs.

The Chair, or Co-Chairs, shall be the Chief Executive officer of the Watershed Council, shall have general supervision of the business affairs and property of the Council and over its several officers, and shall do all acts and execute all documents for and on behalf of the Council, as authorized with the approval of the majority of the Steering Committee, necessary, proper or incidental to all matters relating to the Council. The Chair, or Co-Chairs, shall perform such duties as are prescribed by law, such duties as are usually performed by Chair, or Co-Chairs, of like Councils and such other duties as may be assigned him from time to time by the Steering Committee.

Section 2: Secretary.

When and as required by the Steering Committee, the Secretary, who shall be the Watershed Coordinator, shall attend all meetings of the Steering Committee and shall keep minutes of all the proceedings thereof, and shall record all votes and the minutes of all of the proceedings in a book to be kept for that purpose. He/she shall perform like duties for committees of the Council when so required. He/she shall give, or cause to be given, notice of all meetings of the Steering Committee. The Secretary and Chair, or Co-Chairs, shall sign the records of the Steering Committee's meetings. The Secretary shall execute for or in the name of the Council all endorsements, assignments, transfers, share powers or perform such other duties usually incident to the office of Secretary, and such further duties as shall from time to time be prescribed by the Steering Committee or Chair or Co-Chair. At

any meeting of the Steering Committee at which the Secretary is not present, a secretary pro tempore may be appointed. The Secretary will give notice of all meetings as pursuant to the State Sunshine Laws.

ARTICLE V
NOTICES

Section 1: Notices by mail.

Whenever, under the provisions of these By Laws, notice is permitted to be given to any Steering Committee member by mail or facsimile, it may be given by depositing the same in the post office or letter box addressed to the Steering Committee member or by faxing, at such address as appears on the books of the Council, or in default of such address, at his/her place of residence or usual place of business, last known to the Council; and such notice shall be deemed to be given at the time when the same shall be deposited in the mail or is faxed to the fax address appearing in the books of the Council. Steering Committee members will be asked on an annual basis to submit their preferred method of receiving notice of meetings.

ARTICLE VI
FISCAL YEAR

The fiscal matters of the Council shall be determined by the Steering Committee of the Council.

ARTICLE VII
CONFLICTS OF INTEREST

Section 1: No member of the Steering Committee or officer of the Council shall have any personal financial interest in any contract relating to the operations of the Council, unless authorized by the Steering Committee.

Section 2: Any Steering Committee member having a duality or possible conflict of interest on any matter shall not vote or use his/her personal influence on the matter, shall not contribute to the deliberation, and shall not be counted in determining the quorum for the issue. The minutes of the meeting shall reflect that a disclosure was made, the abstention from voting, and the quorum situation.

ARTICLE VIII
NON-DISCRIMINATION

The selection of Steering Committee members, officers and employees of the Council, and the conduct of its activities, shall be without discrimination based upon sex, sexual orientation, color, race, religion and national or ethnic origin.

ARTICLE IX
AMENDMENTS

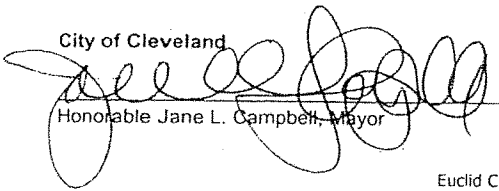
The Euclid Creek Watershed Partnership Agreement and By Laws, may be amended from time to time by the affirmative vote of two-thirds (2/3) of the voting members.

Ratified as of January 22, 2004 by the ~~Recky River~~ ^{EUCLID CREEK} Watershed Council members:

City of Beachwood


Honorable Merle S. Gordon, Mayor

City of Cleveland


Honorable Jane L. Campbell, Mayor

Euclid Creek Watershed Council By-Laws
Adopted by council 1/22/043

Handwritten notes:
9/14/04
SW.
9/21/04
MAE
MLB
9-23-04
see
9/23/04
BBB
10/8/04
D24
0/21/04

City of Euclid

Bill Cervenik
Honorable Bill Cervenik, Mayor

City Highland Heights

Scott Coleman
Honorable Scott Coleman, Mayor

City of Lyndhurst

Joseph M. Cicero, Jr.
Honorable Joseph Cicero, Mayor

City of Mayfield Heights

Margaret A. Egersperger
Honorable Margaret A. Egersperger, Mayor

City of Richmond Heights

Daniel J. Ursu
Honorable Daniel J. Ursu, Mayor

City of South Euclid

Georgine Welz
Honorable Georgine Welz, Mayor

Village of Mayfield

Bruce G. Rinker
Honorable Bruce G. Rinker, Mayor

Attachment B

**Annual Funding Allocation for Euclid Creek Watershed Coordinator:
Years 2017 through 2020 (January 1, 2017 through December 31, 2020)**

The following annual funding allocation for years 2017 through 2020 was agreed to by the Euclid Creek Watershed Council on March 24, 2016:

City of Beachwood	\$5,500.00
City of Cleveland	\$5,500.00
City of Euclid	\$5,500.00
City of Highland Heights	\$5,500.00
City of Lyndhurst	\$5,500.00
City of Mayfield Heights	\$5,500.00
Village of Mayfield	\$5,500.00
City of Richmond Heights	\$5,500.00
City of South Euclid	\$5,500.00
Total	\$49,500.00

**MEMORANDUM OF UNDERSTANDING
Between the**

**THE DOAN BROOK WATERSHED PARTNERSHIP
And the
CITY OF CLEVELAND**

Purpose

Recognizing the need for effective collaboration in carrying out mandated responsibilities, especially related to the National Pollutant Discharge Elimination System (NPDES) Stormwater Phase II permit, the City of Cleveland (City) and the Doan Brook Watershed Partnership (DBWP) accept this agreement as the document which describes the process for exchange. Cooperation between these two units facilitates solutions to problems encountered by the city as it plans for the development/redevelopment and conservation of its environment, as well as, water quality improvements. In making technical assistance and expertise available to the City, the DBWP hopes to influence local planning and regulatory capability toward better conservation of water resources.

For ease of understanding, this agreement is arranged according to the order of the Six Minimum Controls for NPDES Phase II for stormwater as defined with the Ohio Revised Code 3745-39-04 (B)(1) through (6).

Project Tasks

The DBWP and the City have mutually agreed to the Scope of Services listed related to public involvement and public education (Minimum Control Measures 1 & 2).

Project Appropriation

Annual appropriation for services related to public involvement and public education will not exceed \$18,000. These services will be billed on an annual basis. The City will provide a Purchase Order for the annual appropriation to the DBWP.

Doan Brook Watershed Partnership's Role Related to Public Involvement and Public Education Activities – Minimum Control Measures 1 & 2

The Doan Brook Watershed Partnership will work with the City to provide the public education and public involvement services listed in the City's Stormwater Management Plan and/or others mutually agreed upon. The goal of the public involvement and public education (PIPE) program is to reach diverse stakeholders, including City residents, City staff, school children, etc. through the following services:

1. Provide a Watershed Coordinator for the Doan Brook Watershed and supervise the position.
2. DBWP staff will coordinate activities and facilitate their implementation with feedback from the City's Stormwater Manager or designee.
3. DBWP will attend a minimum of one Stormwater Steering Committee meeting for planning or reporting purposes.
4. DBWP staff will attend City council meetings and/or stormwater or drainage committee meetings, as requested.
5. DBWP will assist the City in identifying a local stormwater event, in planning the event and assisting in event promotion. Assist in identifying partnerships with various community stakeholders. An event may include stream clean ups, drain stenciling, water festivals or other activities to engage the public.
6. DBWP will provide support to the City for watershed improvement projects and coordinate with local communities on watershed goals and their implementation within the context of community goals, the Watershed Action Plan and future Total Maximum Daily Load (TMDL) document recommendations.
7. On the City's behalf, the DBWP will participate in the Northeast Ohio Public Involvement and Public Education Work Group (NEO PIPE). Products produced by the NEO PIPE Work Group will be provided to the City for outreach efforts.
8. DBWP will establish an annual water quality or watershed theme for the PIPE program.
9. DBWP staff will provide a yearly outreach strategy to the City at the end of each program year for the following year. The strategy will indicate the yearly theme, theme rationale, and overall goals. Additionally, the outreach strategy will outline public education and public involvement outreach messages, target audiences, delivery methods and tracking/evaluation techniques.
10. DBWP will create a theme related poster for display purposes that can be used on an annual basis; DBWP will work with the City to determine suitable locations for maximum exposure.
11. Over the life of the permit, the PIPE programming will reach 50% of the population of the Doan Brook Watershed in the City of Cleveland.

12. Provide 2-4 stormwater or watershed related factsheets for the City's display and/or other uses.
13. Provide articles for the City newsletter, as requested, 2 per year minimum. The DBWP will work with the appropriate staff person to place the information in City publications.
14. DBWP will provide a package of quarterly watershed education materials for the City to display for residents. DBWP will work with the City to establish the best location for dissemination of these materials.
15. DBWP will provide notices of educational programs or events that serve students and teachers in grades K-12 to the WPC.
16. DBWP will coordinate an annual teacher workshop or provide tools with current, age-related curricula related to water quality, stormwater and/or watersheds.
17. DBWP will seek opportunities to maximize impact and minimize additional program costs related to printing large quantities of selected materials that become available to the public.
18. The DBWP will provide an annual report of all activities undertaken, including copies of all fliers, notices, and types of stakeholders reached, attendance records and any data collected.

Doan Brook Watershed Partnership's Role Related to General Technical Assistance

1. The DBWP will provide limited technical services, related to stormwater management, specifically to assist in the development of local ordinances to promote universal application of best management practices.
2. The DBWP will provide limited technical advisory services to the City on matters related to:
 - a. Sound stormwater management through accepted best management practices
 - b. General evaluation of sensitive areas such as creeks, floodplains, soils, slopes, wetlands, watershed, woodlands or other unique areas that are planned for development
 - c. Protection of sensitive natural areas
 - d. Small drainage systems and wildlife habitat enhancements

Agreed Procedures

1. That the working relationship will be defined to include lines of communication with appropriate departments. The DBWP and the City will meet at least once a year to coordinate a work plan and exchange information with the goal of developing a multi-disciplinary approach to resource management.
2. That the DBWP is a conservation, technical and educational service agency and therefore is not granted regulatory authority in the Ohio Revised Code.
3. DBWP will provide a written annual report, relevant to its role, as outlined in this MOU. The City will include that information with its annual report to the Ohio Environmental Protection Agency (EPA), which will include, but is not limited to, the report provided by DBWP, as required by its stormwater permit.
4. Standards and specifications developed by the City shall take precedence in planning and application of conservation measures. Where the City's policies are moot, the standards of the U.S. Department of Agriculture, Natural Resources Conservation Service, and the current edition of Ohio's "Rainwater and Land Development" manual will be used in planning and application of conservation measures.
5. That all parties will review quality of service and address concerns as they arise.
6. That credit will be given jointly to the DBWP and the City in natural resource/NPDES Phase II related publications prior to publication.
7. The City recognizes the DBWP's obligation to make its reports and other written materials available to the public on request in accordance with the Ohio Public Records Act.
8. All services of the DBWP are offered on a non-discriminatory basis without regard to race, age, marital status, handicap or political persuasion.

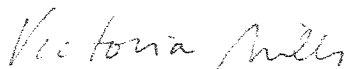
Term of Agreement


This agreement will become effective when signed by the Director of the Doan Brook Watershed Partnership and the City of Cleveland's Director of Public Utilities and will continue in force and effect unless terminated by agreement of either party. This agreement may be amended only by written instrument duly executed by the Doan Brook Watershed Partnership and the City of Cleveland. DBWP and the City will annually review this agreement.

In witness thereof, the Memorandum executed and agreed to on the day, month and year written:

Doan Brook Watershed
Partnership

City of Cleveland





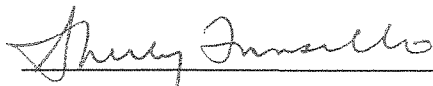
By: Victoria Mills
Director, Doan Brook Watershed
Partnership

By: Barry Withers, Director
Department of Public Utilities

Date: 3/1/13

Date: 3/7/13

City of Cleveland



By: Shirley Tomasello
Assistant Director of Law

APPENDIX C

RIPARIAN SETBACK ORDINANCE (Ord. No. 1555-13; CCO CHAPTER 351)



CITY OF CLEVELAND
Mayor Frank G. Jackson

City Planning Commission
601 Lakeside Avenue, Room 501
Cleveland, Ohio 44114-1071
Phone: 216.664.2210 - Fax: 216.664.3281

Ord. No. 1555-13

By Council Members Cleveland, Mitchell and Kelley (by departmental request).

An emergency ordinance to supplement the Codified Ordinances of Cleveland, Ohio, 1976 by enacting new Sections 351.01 to 351.19 relating to riparian setbacks and wetlands setbacks; and to amend Section 327.99, as amended by Ordinance No. 899-06, passed August 16, 2006, relating to penalties under the Zoning Code.

Whereas, flooding is a significant threat to public health and safety and public and private property in the City of Cleveland, and riparian areas and wetlands lessen flood damage by holding runoff and releasing it slowly over time; and, Whereas, streambank erosion in the City of Cleveland is a significant threat to public health and safety and public and private property, and riparian areas and wetlands control runoff and reduces its erosive force; and, Whereas, insufficient control of riparian areas and wetlands can result in significant damage to receiving water resources, impairing the capacity of these resources to sustain aquatic systems and their associated aquatic life use designations; and,

Whereas, there is a regional effort to reduce the flooding and erosion and to protect water quality, riparian areas and wetlands and to protect and enhance the water resources of the City of Cleveland, and the City of Cleveland recognizes its obligation as a part of a watershed to reduce flooding and erosion and to protect water quality by controlling runoff within its borders; and,

Whereas, to promote public health and safety and sound economic development in the City of Cleveland, it is important to provide homebuilders, developers, and landowners with consistent, technically feasible, and operationally practical standards for storm water management; and,

Whereas, Ohio EPA has interpreted Permit No. OHQ00002, effective January 30, 2009, Part II, §5 to require designated communities, including the City of Cleveland, to develop a Storm Water Management Program to address the quality of storm water runoff during and after soil disturbing activities through the use of best management practices such as appropriate policies and ordinances that provide requirements and standards to direct growth to identified areas, protect sensitive areas such as wetlands and riparian areas, maintain and/or increase open space, provide buffers along sensitive water bodies, minimize impervious surfaces, and minimize disturbance of soils and vegetation; and,

Whereas, Article XVIII, Section 3 of the Ohio Constitution grants municipalities the legal authority to adopt rules to abate soil erosion and water pollution by soil sediments; and,

Whereas, this ordinance constitutes an emergency measure providing for the usual daily operation of a municipal department; now, therefore,

Be it ordained by the Council of the City of Cleveland:

Section 1. That the Codified Ordinances of Cleveland, Ohio, 1976, are supplemented by enacting new Sections 351.01 to 351.19 to read as follows:

Chapter 351 Riparian Setbacks and Wetlands Setbacks

Section 351.01 Purpose

(a) It is determined that the system of wetlands, riparian areas, rivers, streams, and other natural watercourses within the City contributes to the health, safety, and general welfare of the residents. The specific purpose and intent of this chapter is to regulate uses and developments within riparian and wetland areas for the benefit of the City for the following reasons:

(1) To establish consistent, technically feasible and operationally practical standards to achieve a level of storm water quantity and quality control to minimize damage to public and private property and degradation of water resources from the impacts of flooding, erosion and storm water pollution.

-
- (2) To reduce flood impacts by absorbing peak flows, slowing the velocity of floodwaters, and regulating base flow.
- (3) To reduce urban storm water pollutants, including pollutants already present in watercourses, especially during periods of high flows, through filtration, settlement, and absorption and transformation of those pollutants in the riparian and wetland setback, before the pollutants enter watercourses.
- (4) To reduce sediment pollution, especially from erosion, by preventing unnecessary stripping of vegetation and loss of soil, especially adjacent to water resources and wetlands. (5) To assist in stabilizing the banks of watercourses to reduce bank erosion and the downstream transport of sediments eroded from water course banks.
- (6) To preserve to the maximum extent practicable the value of the natural drainage characteristics in the City, including on building sites, minimizing the need for costly engineering solutions to flooding and erosion problems such as the construction, repair, and replacement of enclosed storm drain systems.
- (7) To minimize encroachment on wetlands and watercourse channels and the need for costly engineering solutions such as dams, retention basins, and rip rap armoring, to protect structures and reduce property damage and threats to the safety of residents; and contribute to the scenic beauty and environment of the City preserving the character of the City, the quality of life of the residents of the City, and corresponding property values.
- (8) To reduce the need for costly maintenance and repairs to roads, embankments, sewage systems, ditches, water resources, and wetlands, resulting from inadequate storm water management due to the loss of riparian areas and wetlands.
- (9) To protect and maintain the receiving water's or wetland's physical, chemical, and biological characteristics and, in turn, to maintain its riparian or wetland functions, benefits and values.
- (10) Provide habitat to a wide array of aquatic organisms and wildlife, including but not limited to many that are on Ohio's Endangered and/or Threatened Species listings, by maintaining diverse and connected riparian and wetland vegetation.
- (11) To reduce the long-term expense of remedial projects and maintenance projects needed to address problems caused by inadequate storm water management and control.
- (b) The following regulations have been enacted to protect the values, services and benefits riparian and wetland areas provide by establishing reasonable management and controls governing structures and uses within a wetland setback and a riparian setback along designated watercourses in the City.

Section 351.02

Scope, Applicability, and Activities Requiring A Permit

(a) Applicability and Compliance:

(1) These regulations shall apply

to:

A. All activities, uses and structures on lands and waters that are within the jurisdiction of the City and that contain or are adjacent to designated watercourses or wetlands as defined in these regulations, excepting from all the portion of the Cuyahoga River and the Old River Bed & Ship Channel extending from Lake Erie southerly as shown in the City of Cleveland, Division of Engineering and Construction, Cuyahoga River Dock Line Maps (C32) sheets 1 through 3 to its intersection with the centerline of the Denison Harvard Bridge right of way as shown on sheet number 3 of the aforesaid Cuyahoga River Dock Line Maps and the Lake Erie Waterfront or as otherwise exempted in this chapter.

B. These regulations shall apply to property subdivision/property/parcel split plan approvals, site plan approvals, and land development plan approvals in regulated areas under this chapter.

C. These regulations shall apply to all building permits, which involve activities regulated under this chapter.

(2) Activities Regulated By Permit: All activities in regulated riparian or wetland areas in this chapter including: filling; excavating; dredging; clear-cutting; grading; construction; removal of peat, sand or gravel; alteration of the water level or water table; disturbance of any surface drainage characteristics, sediment patterns or flood retention characteristics; or any other alteration or use of a riparian or wetland area that is not exempted from the permit requirement under this chapter. Any such activity shall require a permit from the Department of Building and Housing. The Department of Building and Housing will issue no approvals or permits for activities that do not meet the standards and criteria in this chapter or without the applicant's full compliance with the terms of this chapter.

(3) Before any permit or certificate of occupancy is issued, the Director of Building and Housing or the Director's designated representative, shall examine or cause to be examined the application, and any plans and plot plan accompanying the application, to ascertain whether the proposed work and use will conform to the provisions of this Chapter, and all other applicable Codified Ordinances. At least four copies of site, construction, and topography plans and elevations drawn to a measurable scale to the specifications, required to determine compliance, are required to be submitted with the

application. No permit or certificate of occupancy shall be issued unless the proposed work and use conform to the provisions of all applicable sections of this Chapter and the Cleveland Codified Ordinances.

Section 351.03 Consultation and Coordination With Other Regulatory Agencies

(a) In implementing these regulations the Director of Building and Housing or other City officials may consult with the local county Soil and Water Conservation District (SWCD), state and federal agencies and any other technical experts the Director deems necessary. Any costs associated with such consultations may be assessed to the applicant or his or her designated representative.

(b) The Director may require that a permit applicant obtain any other applicable federal, state, or local regulatory permits needed for a proposed activity before applying for a permit under this chapter.

Section 351.04 Definitions

As used in this chapter:

(a) "Approving Authority" means the official responsible for administering the applicable program(s).

(b) "Best Management Practice (BMP)" With regard to this chapter, BMP means any practice or combination of practices that is determined to be the most effective, practicable (including technological, economic, and institutional considerations) means of preventing or reducing the amount of pollution generated by nonpoint sources of pollution to a level compatible with water quality goals. BMPs may include structural practices, conservation practices and operation and maintenance procedures.

(c) "Certified Professional in Erosion and Sediment Control (CPESC)" means a person that has subscribed to the Code of Ethics and has met the requirements established by the CPESC Council of Certified Professional In Erosion and Sediment Control, Inc. to be a Certified Professional in Erosion and Sediment Control.

(d) "Channel" means a natural stream that conveys water, or a ditch or channel excavated for the natural flow of water.

(e) "Concentrated Storm Water Runoff" means surface water runoff which converges and flows primarily through water conveyance features such as swales, gullies, waterways, channels, or storm sewers, and which exceeds the maximum specified flow rates of filters or perimeter controls intended to control sheet flow.

(f) "Conservation" means the wise use and management of natural resources.

(g) "Damaged or Diseased Trees" means trees that have split trunks, broken tops, heart rot, or insect or fungus problems, that will lead to imminent death or undercut root systems that put the tree in imminent danger of falling or leaning as a result of root failure that puts the tree in imminent danger of falling, or any other condition that puts the tree in imminent danger of being uprooted or falling.

(h) "Designated Watercourse" means a watercourse that is contained within, flows through, or borders the City and meets the criteria set forth in these regulations.

(i) "Deteriorated Structure" means a structure which has sustained substantial damage from any origin and which the cost of restoring the structure to its before-damaged condition would be equal to, or greater than 50% of, the market value of the structure before the damage occurred.

(j) "Development Area" means any tract, lot, or parcel of land, or combination of tracts, lots or parcels of land, which are in one ownership, or are contiguous and in diverse ownership, where earth disturbing activity is to be performed.

(k) "Ditch" means an excavation, either dug or natural, for the purpose of drainage or irrigation, and having intermittent flow.

(l) "Dumping" means the grading, pushing, piling, throwing, unloading or placing of soil or other material.

(m) "Earth Disturbing Activity" means any grading, excavating, filling, or other alteration of the earth's surface where natural or man-made ground cover is destroyed.

(n) "Erosion" means the process by which the land surface is worn away by the action of water, wind, ice, or gravity.

(o) "Existing" means in existence at the time of the passage of this chapter and these regulations.

(p) "Federal Emergency Management Agency ("FEMA)" means the agency with overall responsibility for administering the National Flood Insurance Program.

(q) "Grading" means earth disturbing activity such as excavation, stripping, cutting, filling, stockpiling, or any combination thereof.

(r) "Impervious Cover" means any surface that cannot effectively absorb or infiltrate water. This includes, but is not limited to, roads, streets, parking lots, rooftops, and sidewalks.

(s) "Intermittent Stream" means a natural channel that may have some water in pools, but where surface flows are non-existent or interstitial (flowing through sand and gravel in stream beds) for periods of one week or more during typical summer months.

(t) "Larger Common Plan of Development or Sale" means a contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedules under one plan.

(u) "Landslide" means the rapid mass movement of soil and rock material downhill under the influence of gravity in which the movement of the soil mass occurs along an interior surface of sliding.

(v) "Local County SWCD" means the Cuyahoga County Soil and Water Conservation District.

(w) "National Wetlands Inventory Map" means wetland maps that were created by the U.S. Fish and Wildlife Service and the U.S. Department of Interior.

(x) "Natural Resources Conservation Service (NRCS)" means an agency of the United States Department of Agriculture, formerly known as the Soil Conservation Service (SCS).

(y) "NPDES Permit" means a National Pollutant Discharge Elimination System Permit issued by Ohio EPA under the authority of the USEPA, and derived from the Federal Clean Water Act.

(z) "Noxious Weed" means any plant species defined by the Ohio Department of Agriculture as a "noxious weed" and listed as such by the Department. For the purposes of this regulation, the most recent version of this list at the time of application of these regulations shall prevail.

(aa) "Ohio EPA" means the Ohio Environmental Protection Agency. (bb) "Ohio Wetlands Inventory Map" means wetland maps that were created by the Natural Resources Conservation Service, USDA, and the Ohio Department of Natural Resources.

(cc) "Ordinary High Water Mark" means the point of the bank or shore up to which the presence and action of surface water is so continuous as to leave a distinctive mark by erosion, destruction or prevention of woody terrestrial vegetation, predominance of aquatic vegetation, or other easily recognized characteristic.

(dd) "Outfall" means an area where water flows from a structure such as a conduit, storm sewer, improved channel or drain, and the area immediately beyond the structure which is impacted by the velocity of flow in the structure.

(ee) "Person" means any individual, corporation, partnership, joint venture, agency, unincorporated association, municipal corporation, township, county, state agency, the federal government, or any combination thereof.

(ff) "Perennial Stream" means a natural channel that contains water throughout the year, except possibly during periods of extreme drought.

(gg) "Professional Engineer" means a person registered in the State of Ohio as a Professional Engineer, with specific education and experience in water resources engineering, acting in strict conformance with the Code of Ethics of the Ohio Board of Registration for Engineers and Surveyors.

(hh) "Qualified Forester" means any forester employed by the Ohio Department of Natural Resources, Division of Forestry, or any person attaining the credential of Certified Forester as conferred by the Society of American Foresters.

(ii) "Qualified Wetland Professional" means an individual qualified and competent in the areas of botany, hydric soils, and wetland hydrology, and is acceptable to the Director of Building and Housing as meeting these qualifications.

(jj) "Redevelopment" means the demolition or removal of existing structures or land uses and construction of new ones.

(kk) "Retention Basin" means a storm water management pond that maintains a permanent pool of water. These storm water management ponds include a properly engineered/designed volume dedicated to the temporary storage and slow release of runoff waters.

(ll) "Riparian Area" means the area adjacent to watercourses that if naturally vegetated and/or appropriately revegetated and appropriately sized, limits erosion, reduces flood flows, and/or filters and settles out runoff pollutants, or which performs other functions consistent with the purposes of these regulations.

(mm) "Riparian Setback" means those lands within the City that are alongside streams, and which fall within the area defined by the criteria set forth in these regulations.

(nn) "Sediment" means solid material, both mineral and organic, that is in suspension, is being transported, or has been moved from its site of origin by wind, water, gravity or ice, and has come to rest on the earth's surface either on dry land or in a body of water.

(oo) "Sediment Control" means the limiting of sediment being transported, by controlling erosion or detaining sediment-laden water, and allowing the sediment to settle out.

(pp) "Sediment Pollution" means failure to use management or conservation practices to control wind or water erosion of the soil and to minimize the degradation of water resources by soil sediment in conjunction with land grading, excavating, filling, or other soil disturbing activities on land used or being developed for commercial, industrial, residential, or other purposes.

(qq) "Sensitive Area" means an area or water resource that requires special management because of its susceptibility to sediment pollution or because of its importance to the wellbeing of the surrounding communities, region, or the state and includes, but is not limited to, the following:

- (1) Ponds, wetlands or small lakes with less than five acres of surface area;
- (2) Small streams with gradients less than ten feet per mile with average annual flows of less than 3.5 feet per second containing sand or gravel bottoms.
- (3) Drainage areas of a locally designated or an Ohio designated Scenic River.
- (4) Riparian and wetland areas. (rr) "Sheet Flow" means water runoff in a thin uniform layer or rills and which is of a small enough quantity to be treated by sediment barriers.

(ss) "Silviculture" means the theory and practice of controlling forest establishment, composition and growth.

(tt) "Slip" means a landslide as defined under "Landslides."

(uu) "Sloughing" means a slip or downward movement of an extended layer of soil resulting from the undermining action of water or the earth disturbing activity of man.

(vv) "Soil" means unconsolidated erodible earth material consisting of minerals and/or organics.

(ww) "Soil Conservation Service,

USDA" means the federal agency now titled the "Natural Resources Conservation Service," which is an agency of the United States Department of Agriculture.

(xx) "Soil Disturbing Activity" means clearing, grading, excavating, filling, or other alteration of the earth's surface where natural or human made ground cover is destroyed and which may result in, or contribute to, soil erosion and sediment pollution.

(yy) "Soil Erosion and Sediment Control" means a written and/or drawn soil erosion and sediment pollution control plan to minimize erosion and prevent off-site sedimentation throughout all earth disturbing activities on a development area.

(zz) "Soil Erosion and Sediment Control Practices" means conservation measures used to control sediment pollution and includes structural practices, vegetative practices and management techniques.

(aaa) "Soil Survey" means the official soil survey produced by the Natural Resources Conservation Service, USDA in cooperation with the Division of Soil and Water Conservation, ODNR and the local Board of County Commissioners.

(bbb) "Storm Water Conveyance System" means all storm sewers, channels, streams, ponds, lakes, etc., used for conveying concentrated storm water runoff, or for storing storm water runoff.

(ccc) "Stream" means a body of water running or flowing on the earth's surface, or a channel in which such flow occurs. Flow may be seasonally intermittent.

(ddd) "Substantial Damage" means damage of any origin sustained by a structure and the cost of restoring the structure to its before damaged condition would be equal to, or greater than, 50% of the market value of the

(iii) "Wetland" means those areas that are inundated or saturated by surface or ground water 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. Wetlands generally includes, but are not limited to lands and waters meeting this definition and otherwise often referred to as swamps, marshes, bogs, wetland meadows, ephemeral and tributary streams, vernal pools, reservoirs, ponds, lakes and the land under water bodies.

(jjj) "Wetland, Ohio EPA Category 2 Wetlands" means those wetlands classified by the Ohio EPA as Category 2 wetlands under OAC 3745-1-54 (C)(2), or current equivalent Ohio EPA classification, under generally accepted wetland functional assessment methods acceptable to the U.S. Army Corps of Engineers and Ohio EPA at the time of application of this regulation.

(kkk) "Wetland, Ohio EPA Category 3 Wetlands" means those wetlands classified by the Ohio EPA as Category 3 wetlands under OAC 3745-1-54(C)(3), or current equivalent Ohio EPA classification, under generally accepted wetland functional assessment methods acceptable to the U.S. Army Corps of Engineers and Ohio EPA at the time of application of this regulation.

(lll) "Wetland Setback" means those lands within the City that fall within the area defined by the criteria set forth in these regulations.

(mmm) "Winter" means October 1st to April 1st of each year.

Section 351.05 Establishment of Designated Watercourses and Riparian Setbacks

(a) Designated watercourses shall include those watercourses meeting any one of the following criteria:

- (1) All watercourses draining an area greater than square mile, or

(2) All watercourses draining an area less than square mile and having a defined bed and bank.

(2) At the time of application of this regulation, if any discrepancy is found between the map "Water Features of the City of Cleveland" and the criteria for designated watercourses, riparian setbacks, or wetland setbacks as set forth in these regulations, the criteria set forth in these regulations shall prevail.

(3) In reviewing and interpreting the maps, the City may consult with a representative of the local county SWCD and other technical experts as necessary.

(d) The following conditions shall apply in riparian and wetland setbacks:

(1) Riparian and wetland setbacks shall be measured in a perpendicular and horizontal direction outward from the ordinary high water mark of each designated watercourse and defined wetland boundary.

(2) Except as otherwise provided in this regulation, riparian and wetland setbacks shall be preserved in their natural state, except that non-conforming structures and non-conforming uses existing at the time of passage of this regulation may be continued in their existing state as determined in the these regulations. Riparian setbacks shall be established and marked in the field prior to any soil disturbing or land clearing activities. (3) Where the 100-year floodplain is wider than a riparian setback on either or both sides of a designated watercourse, the minimum riparian setback shall be extended to the outer edge of the 100-year floodplain. The 100-year floodplain shall be defined by FEMA and federal floodplain regulations and the City's Flood Plain Management Ordinances at Chapter 3167.

(4) Where a wetland is identified within a minimum riparian setback, the minimum riparian setback width shall be extended to the outermost boundary of the wetland. In addition, wetlands shall be protected to the extent detailed in these regulations.

(5) Wetlands shall be delineated by a site survey approved by the City using delineation protocols accepted

(eee) "USEPA" means the United States Environmental Protection Agency.

(fff) "100-Year Floodplain" means any land susceptible to being inundated by water from a base flood. The base flood is the flood that has a one percent (1%) or greater chance of being equaled or exceeded in any given year. For the purposes of this regulation, the 100-year floodplain shall be defined by FEMA or a sitespecific Floodplain Delineation in conformance with standard engineering practices and the standards and criteria in the City's Floodplain Management Ordinance at Chapter 3167.

(ggg) "Watercourse" means any natural, perennial, or intermittent lake, pond, channel, stream, river, creek or brook with a defined bed and bank or shore.

(hhh) "Water Resources" means all streams, lakes, ponds, wetlands, water courses, waterways, drainage systems, and all other bodies or accumulations of surface water, either natural or artificial, which are situated wholly or partly within, or border upon this state, or are within its jurisdiction, except those private waters that do not combine or affect a junction with natural surface waters.

may consult with a representative of the local county SWCD or other technical experts as necessary.

(b) Riparian setbacks on designated watercourses are established as follows:

(1) A minimum of 300 feet on each side of all watercourses draining an area greater than 300 square miles.

(2) A minimum of 120 feet on each side of all watercourses draining an area greater than 20 square miles and up to and including 300 square miles.

(3) A minimum of 75 feet on each side of all watercourses draining an area greater than one half square mile and up to and including 20 square miles.

(4) A minimum of 25 feet on each side of all watercourses draining an area less than one half square mile and having a defined bed and bank as determined above.

(c) Riparian Setback Map:

(1) The City shall use the map "Water Features of the City of Cleveland" produced by the City Planning Commission as the map identifying designated watercourses and their riparian setbacks. Nothing in this chapter shall prohibit the City from amending the map from time to time as may be necessary. cation is made under this regulation. If a conflict exists between the delineation protocols of these two agencies, the delineation protocol that results in the most inclusive area of wetland shall apply. Any costs associated with reviewing these delineations may be assessed by the City to the applicant.

(e) The applicant or his or her designated representative shall be responsible for delineating riparian and wetland setbacks, including any expansions or modifications as required by these regulations, and identifying these setbacks on all property subdivision/property/parcel splits, commercial development or other land development plans, and/or building permit applications submitted to the City. This delineation may be done by a metes and bounds, or higher

level survey and shall be subject to review and approval by the City. As a result of this review, the City may consult with a representative of the local county SWCD or other technical experts as necessary.

(f) Prior to any land clearing or soil disturbing activity, riparian and wetland setbacks shall be clearly delineated on site by the applicant or his or her designated representative, and the delineation shall be maintained throughout soil disturbing activities.

(g) No approvals or subdivision plan approval, site plan approval, nor land development plan approval shall be issued by the City prior to on-site delineation of riparian and wetland setbacks in conformance with these regulations. No building permits that include land clearing or soil disturbing activities shall be issued by the City prior to delineation of riparian and wetland setbacks in conformance with these regulations.

(h) Upon completion of an approved property subdivision/property/parcel split, land development, or other improvement, riparian and wetland setbacks shall be permanently recorded on the plat records of the City.

Section 351.06 Establishment of Wetland Setbacks

Wetland setbacks are established as follows:

(a) A minimum of 120 feet surrounding and including all Ohio EPA Category 3 Wetlands, or current equivalent Ohio EPA classification.

(b) A minimum of 75 feet surrounding and including all Ohio EPA Category 2 Wetlands, or current equivalent Ohio EPA classification.

Section 351.07 Procedure for Wetland Setbacks

(a) No change to parcel boundaries or land use change:

(1) Upon filing a request for a building permit that does not involve changing of any parcel boundaries or changes in land use, the applicant will check for indicators of wetlands on the National Wetlands Inventory maps, and Ohio Wetlands Inventory map, and the Cuyahoga County Wetlands Inventory (if applicable). A photocopy of the applicable section of each map will be attached to the permit application.

(2) If a potential wetland is shown on any of the maps or if there is reason for the City to believe that an unmapped wetland exists on or within 120 feet of the project site, the applicant will retain a qualified wetland professional to evaluate the proposed project site for wetlands or wetland buffer areas under this chapter. If no wetland or wetland buffer areas are found, the applicant shall submit a letter from the qualified wetland professional with the preliminary plat or permit application verifying his or her negative findings.

(b) New residential or commercial or other type development and projects involving a change to parcel boundaries or a land use change:

Upon filing a request for approval of a preliminary plat or building permit for new representative shall ensure that all wetlands are identified and wetland setbacks are delineated. The applicant shall check for indicators of wetland on the National Wetlands Inventory maps, and Ohio Wetlands Inventory map, and the Cuyahoga County Wetlands Inventory (if applicable). If a potential wetland is shown on any of the maps or if there is any other reason for the City to believe that an unmapped wetland exists on or within 120 feet of the project site, the applicant shall retain a qualified wetland professional to survey the proposed development site for wetlands or wetland buffer areas under this chapter. If no wetlands are found, the applicant or his or her representative shall retain a qualified wetland professional to survey the proposed development site for wetlands. If no wetlands are found, the applicant or his or her designated representative shall submit a letter with the preliminary plat or permit application verifying that a qualified wetland professional has surveyed the site and found no wetlands. If wetlands are found, the following procedures shall be followed:

(1) A qualified wetland professional, acceptable to the Director of Building and Housing, shall determine the presence of Ohio EPA Category 2 or 3 wetlands (or current equivalent Ohio EPA classification) on the proposed development site using the latest version of the Ohio Rapid Assessment Method for wetland evaluation approved at the time of application of this regulation. Acceptance of this determination shall be subject to approval by the Director of Building and Housing.

(2) If Ohio EPA Category 2 or 3 wetlands (or current equivalent Ohio EPA classification) are located on the proposed development site, the applicant or his or her designated representative shall delineate these wetlands and the wetland setback in conformance with these regulations. The applicant or his or her designated representative shall identify all delineated wetlands and their associated setbacks on all property subdivision/property/parcel split plans, land

development plans, and/or permit applications submitted to the City.

(c) Wetlands shall be delineated by a site survey, approved by the City, using delineation protocols accepted by the US Army Corps of Engineers and the Ohio EPA at the time of application of this regulation. If conflict exists between the delineation protocols of these two agencies, the delineation protocol that results in the most inclusive area of wetland shall apply.

(d) Wetland setbacks shall be delineated through a metes and bounds, or higher level, survey subject to approval by the City.

(e) Prior to any soil or vegetation disturbing activity, the applicant or his or her designated representative shall delineate wetland setbacks on the development site in such a way that they can be clearly viewed, and such delineation shall be maintained throughout construction.

(f) No approvals or permits shall be issued by the City prior to delineation of wetland setbacks in conformance with this regulation.

(g) Upon completion of an approved property subdivision/property/parcel split, commercial development or other land development or improvement, riparian and wetland setbacks shall be permanently recorded on the plat records for the City and shall be maintained as open space thereafter through a permanent conservation easement. A third party, not the landowner or permittee or the City, which is allowed by state law, shall be given the conservation easement. If no third party will accept the conservation easement, the City shall accept it and protect it in perpetuity.

Section 351.08 Uses Permitted in Riparian and Wetland Setbacks

(a) By-Right Uses Without A Permit: No use permitted under these regulations shall be construed as allowing public trespass on privately held lands. Open space uses that are passive in character shall be permitted in riparian and wetland setbacks, including the following:

(1) Recreational Activity. Passive recreational use activity, as otherwise legally permitted by federal, state, and local laws, such as hiking, swimming, fishing, hunting, picnicking, and similar uses.

(2) Removal of damaged or diseased trees and control of noxious weeds if the control does not involve drainage or fill.

(3) Revegetation and/or Reforestation. Riparian and wetland setbacks may be revegetated, enhanced or restored. Any revegetation must be performed with non-invasive plant species. Refer to the Ohio Invasive Plant Species list created by the Ohio Department of Natural Resources to determine invasive plant species undesirable for revegetation, reforestation, or restoration of riparian areas.

(4) Conservation of soil, vegetation, water, fish, and wildlife consistent with the purposes of this chapter that does not involve hydrologic modification or fill.

(5) Maintenance of lawns, gardens and landscaping: Lawns, gardens and landscaping that existed at the time this chapter was enacted, may be maintained as long as they are not increased in size to further encroach onto the riparian area, wetland or watercourse. In that case, trees, shrubbery and other non-lawn wood vegetation in the riparian or wetland setback must be maintained to the extent practicable to reduce the impact to the riparian area, wetland or watercourse.

(b) By-Right Uses With A Permit: (1) Streambank Stabilization and Erosion Control Measures. Any activity not prohibited by the regulations that also involves streambank stabilization and erosion control measures may be performed in regulated areas as long as it is conducted under the standards and specifications in the current edition of Ohio's Rainwater and Land Development manual or other standards acceptable to Ohio EPA.

(2) Crossings. Crossings of designated watercourses and through riparian setbacks or wetland setbacks by publicly and privately owned roads, drives, sewer and/or water lines and public and private utility transmission lines shall only be allowed upon approval of a Crossing Plan by the Manager of Engineering and Construction. Such crossings shall minimize disturbance in riparian setbacks, wetland setbacks, and watercourse substrate and shall mitigate any necessary disturbances. Soil erosive materials will not be used in making stream crossings.

(3) Construction of Fencing. Construction of fencing shall be allowed with the condition that reasonable efforts be taken to minimize the destruction of existing vegetation, provided that the fence does not impede stream or flood flow, and the disturbed area is replanted to the natural or preexisting conditions before the addition of the fence, as approved by the Director of Building and Housing.

Section 351.09 Uses Prohibited in Riparian and Wetland Setbacks

Any use not authorized under this chapter shall be prohibited in riparian and wetland setbacks. By way of example, the following uses are specifically prohibited; however, prohibited uses are not limited to those examples listed here:

(a) Construction. There shall be no structures of any kind.

(b) Dredging or Dumping. There shall be no drilling, filling, dredging, or dumping of soil, spoils, liquid, or solid materials, except for non-commercial composting of uncontaminated natural materials, and except as permitted under this chapter.

(c) Roads or Driveways. There shall be no roads or driveways permitted in riparian and/or wetland setback area, except as permitted under this chapter.

(d) Motorized Vehicles. There shall be no use of motorized vehicles, except as permitted under this chapter.

(e) Disturbance of Natural Vegetation. There shall be no disturbance, including mowing, of the natural vegetation, except for conservation maintenance necessary to control noxious weeds; for plantings that are consistent with this regulation; for disturbances that are approved under this chapter; and for the passive enjoyment, access, and maintenance of landscaping or lawns existing at the time of passage of this regulation as provided in the chapter.

(f) Parking Lots. There shall be no parking lots or other human-made impervious cover, except as permitted under this chapter.

(g) New Surface and/or Subsurface Sewage Disposal or Treatment Areas. Riparian and wetland setbacks shall not be used for the disposal or treatment of sewage except under local county Board of Health regulations in effect at the time of application of this regulation.

(h) Crossings. Crossings of designated riparian and wetland setbacks by publicly and privately owned sewer and/or water lines and small public and small private utility transmission lines in accordance with a permit or regulatory exemption issued by, or under the regulations of, the US Army Corps of Engineers and the Ohio EPA.

(i) Other permits and approvals. Nothing in this chapter shall be construed as exempting any person from obtaining other permits by other agencies that may be required, including permits from the US Army Corps of Engineers and/or the Ohio EPA under the federal and state Clean Water Acts.

Section 351.10 Non-Conforming Structures or Uses in Riparian and Wetland Setbacks

(a) A non-conforming use within a riparian and wetland setback that is in existence at the time of passage of this regulation and that is not otherwise permitted under these regulations, may be continued. However, the use shall not be changed or enlarged unless it is changed to a use permitted under these regulations.

(b) A non-conforming structure within a riparian or wetland setback that is in existence at the time of passage of this regulation and that is not otherwise permitted under these regulations, may be continued, but shall not have the existing building footprint or roofline expanded or enlarged.

(c) A non-conforming structure or use or deteriorated structure within a riparian and wetland setback that is in existence at the time of passage of this regulation and that is discontinued, terminated, or abandoned for a period of six (6) months or more, may not be revived, restored, or re-established. This section shall not apply to a structure that is vacant and that is not subject to condemnation orders by the Director of Building and Housing unless the vacant structure has been destroyed or damaged for more than 50% of its value by flooding, wind, fire, or other natural or man-made force. This section shall also not prohibit ordinary repairs to a residence or residential accessory building that are not in conflict with other provisions of this chapter.

(d) In the case of a non-conforming structure within a riparian or wetland setback, the City will allow a ten (10) foot maintenance access zone measured perpendicular to the structure, to temporarily extend further into the setback as long as disturbance to existing vegetation is minimized and vegetation is restored to the pre-existing state, as near as practical, upon completion. If any soil disturbance in a wetland will occur as part of any such maintenance activity, a permit from the U. S. Army Corps of Engineers or the Ohio EPA, as appropriate, must be submitted prior to the onset of the soil disturbing activity.

(e) In the case of a non-conforming residential structure, the Director of Building and Housing may allow minor upgrades to the structure that extend further into the riparian setback, such as awnings and pervious decks/patios, provided the modifications do not extend more than ten (10) feet further toward the watercourse than the original foundation of the structure existing at the time of passage of this regulation, and further provided that the modification will not impair the function of the riparian zone or wetland nor destabilize any slope nor stream bank, as determined by the Director of Building and Housing.

Section 351.11 Variances within Riparian and Wetland Setbacks

(a) The Board of Zoning Appeals may grant a variance from this regulation as provided in these codified ordinances. In determining whether there is unnecessary hardship or practical difficulty to justify the granting of a variance, the Board

of Zoning Appeals shall consider the potential harm to, or reduction in the functions of, the riparian area or wetland area that may be caused by a proposed structure or use.

(b) In making a variance determination, the Board of Zoning Appeals shall consider the following:

- (1) Varying the front, rear and side yard setback before the riparian and wetland setbacks are varied.
- (2) Variances should not be granted for asphalt or concrete paving in the riparian and wetland setbacks in any situation where gravel or porous pavement (i.e., porous pavers, and similar products) will do the job.

(c) In making a variance determination, the Board of Zoning Appeals may consider the following:

- (1) A parcel existing at the time of enactment of this chapter is made unbuildable.
- (2) The soil type and natural vegetation of the parcel, as well as the percentage of the parcel that is in the 100year floodplain. The standards and criteria for granting variances in the City's Flood Plain Management Ordinances at Chapter 3167 may be used as guidance.
- (3) The extent to which the requested variance impairs the flood control, soil erosion control, sediment control, water quality protection, ecological functions, or other functions of the riparian area or wetland area. This determination shall be based on sufficient technical and scientific data.
- (4) The degree of hardship with respect to the use of the property or the degree of practical difficulty with respect to maintaining the setback as established in this chapter placed on the landowner, and the availability of alternatives to the proposed structure or use.
- (5) Soil disturbing activities permitted in a riparian setback areas or wetland setback areas through variances should be controlled in order to minimize clearing to the maximum extent possible, and must include Best Management Practices necessary to minimize soil erosion and maximize sediment control.
- (6) The presence of significant impervious cover, or smooth vegetation such as maintained lawns, in or near the riparian setback areas or wetland setback areas that compromises the benefits of the riparian setback areas or wetland setbacks areas received by the City.
- (7) Whether the benefit of reduction of storm water infiltration into the soil in wetland areas will be lost.
- (8) If the request is for an aboveground fence, whether it increases the existing area of mowed grass or lawn.
- (9) Whether parking needs can be modified before varying the riparian setback.
- (10) Whether the building shape, size or design can be modified to avoid or minimize intrusion into the riparian setback.
- (11) In the case of a lot made unbuildable by this regulation, the minimum variance needed to make it buildable for an appropriately-sized and compatibly-designed structure, while following the guidance provided in this section.
- (12) Whether the variance will increase the likelihood of flood or erosion damage to either the applicant's property or to other properties.
- (13) Culverting of watercourses should be avoided.
- (14) Whether the variance will result in the need for artificial slope or bank stabilization measures that could interfere with the function of the riparian or wetland zone.

Section 351.12 Mitigation

All riparian or wetland restoration, creation and/or enhancement projects required under this chapter either as a permit condition or as a result of an enforcement action shall follow a mitigation plan prepared by a qualified professional and approved by the Director of Building and Housing. The applicant or violator shall receive written approval of the mitigation plan by the Director of Building and Housing prior to commencement of any wetland area restoration, creation or enhancement activity. To realize preservation goals, the City will use the following methods of riparian or wetland impact mitigation in order of preference:

- (a) The applicant shall avoid all impacts that degrade the functions and value of the wetland. Unless otherwise provided in this chapter if alteration to the area is unavoidable, all adverse impacts to the area and associated buffer resulting from a development proposal shall be mitigated under an approved wetland report and an approved mitigation plan.
- (b) Mitigation shall be in-kind and onsite, when possible, and sufficient to maintain the functions and values of the riparian/wetland area.
- (c) Mitigation shall not be implemented until after the Director of Building and Housing or his designated authority has approved the appropriate wetland report and mitigation plan.
- (d) Mitigation measures. Mitigation shall achieve equivalent or greater biological and habitat functions as existed in wetland prior to mitigation. Applicants shall demonstrate that all reasonable efforts have been examined with the intent to avoid and minimize impacts to these areas. When an alteration is proposed, such alteration shall be avoided, minimized, or compensated for in the following order of preference:

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- (1) Avoid impact altogether by not taking a certain action or parts of an action;
 - (2) Minimize impact by limiting the degree or magnitude of the action by project redesign, relocation, timing changes, or technological applications;
 - (3) Rectifying the impacts to wetlands, frequently flooded areas, and habitat conservation areas by repairing, rehabilitating, or restoring the affected environment to conditions equal to or higher quality than at the time of initiation of the project;
 - (4) Restoring, replacing, or enhancing the wetland on site of the project;
 - (5) Restoring, replacing, or enhancing degraded riparian corridors/wetlands in the same subbasin;
 - (6) Preserving high quality wetlands that are under eminent threat;
 - (7) Reduce or eliminate the impact over time by prevention and maintenance operations during the life of the actions;
 - (8) Compensate for the impact by replacing, enhancing or providing substitute resources or environments;
 - (9) All mitigation efforts will be monitored and remedial action taken if necessary
 - (10) Mitigation actions shall be conducted within the same sub-drainage basin and on the impacted site.

Section 351.13 Monitoring Program

The mitigation plan shall include a program for monitoring construction, and for assessing a completed project by a riparian corridor/wetland specialist. A protocol for the schedule of monitoring and reporting shall be implemented that verify the performance standards are being met. The period of monitoring shall be adequate to verify that the performance goals and objectives are being met and will vary at the discretion of the Director of Building and Housing, or his designated authority. Monitoring would never be less than three years.

Section 351.14 Financial Guarantees

The mitigation plan shall include financial guarantees, if necessary, to ensure that the mitigation plan is fully implemented. The requirement of financial guarantees is at the discretion of the Director of Building and Housing based on the size, complexity, and cost of the mitigation project. If financial guarantees are required they shall be of sufficient funding to ensure mitigation, maintenance, and monitoring.

Section 351.15 Boundary Interpretation and Appeals Procedure

Any applicant seeking a variance to the regulations or criteria under this chapter or any appeal of an administrative order made under this chapter may request the variance or make an appeal to the Board of Zoning Appeals. The following procedures shall apply:

- (a) Before filing the request or appeal, when an applicant or his or her designated representative disputes the boundary of a riparian or wetland setback or the ordinary high water mark of a watercourse, the applicant or his or her designated representative shall submit documentation to the Director of Building and Housing which describes the boundary, the applicant's proposed boundary, and justification for the proposed boundary change.
- (b) The Department of Building and Housing shall evaluate this documentation and shall make a determination within sixty (60) days. If during this evaluation the Department of Building and Housing requires further information, it may be required of the applicant. In the event that the Department of Building and Housing requests such additional information, the sixty (60) day period for determination shall be postponed until the applicant provides the information.
- (c) If the applicant does not receive the determination regarding the boundary dispute within 60 days, the applicant's submission shall be considered denied and the denial may be appealed to the Board of Zoning Appeals within 30 days. In the event the applicant receives an adverse determination, that determination may be appealed to the Board of Zoning Appeals within 30 days.

Section 351.16 Inspection of Riparian and Wetland Setback

The delineation of riparian setbacks or wetland setbacks may be inspected by the City, as follows:

- (a) Prior to any soil disturbing activities authorized by the City for a property subdivision/property/parcel split, land development plan, and/or building permit. The applicant or his or her designated representative shall provide the Department of Building and Housing with at least five (5) working days' notice under this chapter prior to starting soil disturbing or land clearing activities.

(b) Prior to starting any of the activities authorized by this chapter, the applicant or his or her designated representative shall provide the Department of Building and Housing with at least five (5) working days' notice prior to starting the activities.

(c) Any time evidence is brought to the attention of the City that uses or structures are occurring that may reasonably be expected to violate the provisions of these regulations.

Section 351.17 Disclaimer of Liability

Neither submission of a plan under the provisions of this chapter, nor compliance with the provisions of these regulations, shall relieve any person or entity from responsibility for damage to any person or property that is otherwise imposed by law.

Section 351.18 Conflicts, Severability, Nuisances & Responsibility

(a) Where this chapter imposes a greater restriction upon land than is imposed or required by other City provisions of law, ordinance, contract or deed, the provisions of this chapter shall prevail.

(b) If a court of competent jurisdiction declares any clause, section, or provision of these regulations invalid or unconstitutional, the validity of the remainder shall not be affected.

(c) These regulations shall not be construed as authorizing any person to maintain a private or public nuisance on his or her property. Compliance with the provisions of this regulation shall not be a defense in any action to abate the nuisance.

(d) Failure of the City to observe or recognize hazardous or unsightly conditions or to recommend corrective measures shall not relieve the owner from the responsibility for the condition or damage resulting there from, and shall not result in the City, its officers, employees, or agents being responsible for any condition or damage resulting there from.

Section 351.19 Authority to Stop Work

Upon notice from the Director of Building and Housing, or designated representative, that work is being performed contrary to this regulation, such work shall immediately stop. The notice shall be in writing and shall be given to the owner or person responsible for the development area, or person performing the work, and shall state the conditions under which the work may be resumed; provided, however, in instances where immediate action is deemed necessary for public safety or the public interest, the Director of Building and Housing may require that work be stopped upon verbal order pending issuance of the written order.

Section 2. That Section 327.99 of the Codified Ordinances of Cleveland, Ohio, 1976, as amended by Ordinance No. 899-06, passed August 16, 2006, is amended to read as follows:

Section 327.99 Penalty

(a) Except as provided in divisions (c) and (d) below, any person, firm or corporation who violates any of the provisions of this Zoning Code or who fails to comply shall, for each and every violation or failure, be fined not less than one hundred dollars (\$100.00), nor more than five hundred dollars (\$500.00) or imprisoned for not less than ten (10) days, nor more than ninety (90) days, or both. A separate offense shall be deemed committed each day during or on which such violation or failure to comply is permitted to exist under notification thereof. (b) The imposition of any penalty under this division shall not be construed as excusing or permitting the continuance of any violation, and when the violation constitutes a nuisance, any owner of the premises, whether the owner at the time the violation was committed or his or her assignee, shall be deemed guilty of a violation of this Zoning Code each day he or she permits such nuisance to continue unabated after due notice from the Director of Building and Housing of the existence of such nuisance. (c) Any person, firm, or corporation who violates any provision of Section 337.16 of this Zoning Code or who fails to comply shall, for each and every violation or failure, be fined not less than two hundred fifty dollars (\$250.00), nor more than five hundred dollars (\$500.00) which fine shall not be reduced, waived or suspended. In addition, imprisonment for not less than ten (10) days nor more than ninety (90) days may be imposed. A separate offense shall be deemed committed each day during or on which such violation or failure to comply is permitted to exist after notification thereof.

(d) Whoever violates Sections 337.23, 347.02, 347.10, 349.02, 349.04, 349.13, 350.19, 357.13, or, 357.14 or Section 347.08

as a first offense of that section shall be fined not more than one hundred fifty dollars (\$150.00). In addition to any other method of enforcement provided for in this chapter, the above listed minor misdemeanors may be enforced by the issuance of a citation in compliance with Rule 4.1 of the Ohio Rules of Criminal Procedure.

(e) Whoever violates Section 347.08 as a second offense of that section shall be fined not more than two hundred fifty dollars (\$250.00) or imprisoned for not more than thirty (30) days, or both. Whoever violates Section 347.08 as a third or subsequent offense of that section shall be fined not more than one thousand dollars (\$1,000.00) or imprisoned for not more than six (6) months, or both.

(f) Whoever violates or fails to comply with any provision of Chapter 351 is guilty of a misdemeanor of the first degree. A separate offense shall be deemed committed each day during or on which a violation or noncompliance occurs or continues.

Section 3. That existing Section 327.99 of the Codified Ordinances of Cleveland, Ohio, 1976, as amended by Ordinance No. 899-06, passed August 16, 2006, is repealed.

Section 4. That this ordinance is declared to be an emergency measure and, provided it receives the affirmative vote of two-thirds of all the members elected to Council, it shall take effect and be in force immediately upon its passage and approval by the Mayor; otherwise it shall take effect and be in force from and after the earliest period allowed by law.

Passed October 17, 2016. **Effective** October 19, 2016.

APPENDIX D

CITY OF CLEVELAND CODIFIED ORDINANCE CHAPTER 541

CHAPTER 541 - SEWER CONNECTIONS AND SEWER USE CODE

- 541.01 Definitions
- 541.02 Jurisdiction Over Sewer Connections
- 541.03 Responsibility for Installation and Maintenance of Sewer Connections
- 541.04 Sewer Builder's License and Bond
- 541.05 Sewer Connection Permits
- 541.06 Sewer Construction Requirements
- 541.07 Catch Basins
- 541.08 Clear Water Connections
- 541.09 Sewer Construction Inspection
- 541.10 Guarantee
- 541.11 Regulation of Discharges
- 541.12 Control of Unacceptable Discharges
- 541.13 Sewerage Test Tee Inspection, Installation and Snaking
- 541.97 Enforcement Procedures
- 541.98 Administration
- 541.99 Penalty

Charter reference:

Sewer, water and other connections, Charter § 163

Cross-reference:

Rules and regulations for sewerage system, CO 543.08

Sewerage service charges; payment, CO Ch. 543

Tampering with or possessing manhole covers, CO 625.22, 625.23

Statutory reference:

Compulsory sewer connections, RC 729.06

Interference with sewage flow, RC 4933.24

Management and control of sewerage system, RC 729.50

Power to construct sewerage system, RC 715.40, 717.01

Regulations to control house sewers and connections, RC 729.51

§ 541.01 Definitions

For the purposes of this chapter, the following words, letters, and phrases, or pronouns used in their stead, shall be construed as

follows:

- (a) "BOD" means Biochemical Oxygen Demand, or the quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory conditions in five (5) days at twenty degrees Centigrade (20°C), expressed in milligrams per liter.
- (b) "Building Drain" means that part of the lowest horizontal piping of a drainage system which receives, inside the walls of the building, the discharge from soil, waste, and other drainage pipes, sump pumps, and other similar conduits, and conveys it to the building sewer which begins three (3) feet outside the building wall.
- (c) "Building Sewer" means that part of the horizontal piping of a drainage system which extends from the end of the building drain, receives discharge therefrom and conveys it to the public sewer, a private sewer, an individual wastewater-disposal system, or other points of discharge.
- (d) "C" means Centigrade Degrees.
- (e) "Capital Financing Charge" means that portion of the total sewer charge assigned to each user to defray the cost of debt service on the sewer system.
- (f) "City" means the City of Cleveland, its officials and employees.
- (g) "Combined Sewer" means a sewer which intentionally serves as both a sanitary sewer and a storm sewer.
- (h) "Commissioner" means the Commissioner of Water Pollution Control.
- (i) "Commissioner of Assessments and Licenses" means the Commissioner of Assessments and Licenses of the City's Department of Finance.
- (j) "Cooling Water" means the water discharged from any use, including without limitation air conditioning, cooling or refrigeration, in the course of which discharge the only pollutant added is heat.
- (k) "Director" means the Director of Public Utilities.
- (l) "Division of Streets" means the Division of Streets of the City's Department of Public Service.
- (m) "Domestic Waste" means wastewater which originates as waste from kitchens, water closets, lavatories, bathrooms and showers and which derives principally from residences, commercial buildings, industrial facilities, and institutions.
- (n) "F" means Fahrenheit.
- (o) "Garbage" means solid waste from domestic or commercial preparation, cooking and/or dispensing of food or from the handling, storage and/or sale of produce.
- (p) "Grease or Fats" means any material which may be extracted from an acidified sample of waste by the use of hexane or any other solvent designated by the NEORSD or the Division of Water Pollution Control.
- (q) "Industrial Waste" means liquid waste resulting from processes employed in industrial, manufacturing, trade or business establishments, and does not include domestic waste of such establishments.
- (r) "Lateral" means a tap made to the public sewer when said sewer is originally installed, for the purposes of enabling future sewer connections to be made.
- (s) "Licensee" means a person to whom a sewer builder's license is issued.
- (t) "MG/L" means milligrams per liter.
- (u) "NEORSD" means the Northeast Ohio Regional Sewer District, formerly known as the Cleveland Regional Sewer District.
- (v) "NPDES Permit" means the National Pollutant Discharge Elimination System permit issued by the U.S. Environmental Protection Agency specifying effluent quality for treatment plants discharging into surface waters.
- (w) "Permittee" means a person to whom a sewer connection permit is issued.
- (x) "Person" means the state, any political subdivision, public or private corporation, partnership, firm, association, individual or entity.
- (y) "PH" means the logarithm of the reciprocal of the concentration of hydrogen ions in gram equivalents per liter.

(z) "Pretreatment" means the application of physical, chemical, and/or biological processes to wastewater to reduce the amount of pollutants in or alter the nature of the pollutant properties of the wastewater prior to its discharge into a public sewer.

(aa) "Public Sewer" means a sewer which is owned and/or controlled by a governmental entity.

(bb) "Roadway" means that portion of a street which is used for vehicular travel.

(cc) "Sanitary Sewer" means a sewer which carries domestic waste, industrial waste, and minor quantities of unintentionally admitted storm, surface or ground water.

(dd) "Sewer" means a pipe or conduit, other than a sewer connection, which is located in the street and carries wastewater.

(ee) "Sewer Connection" means that portion of a building sewer which connects with the privately owned portion of a building sewer at the property line, and carries discharge to a public sewer.

(ff) "Sewer Connection Permit" means a permit issued by the City which authorizes the permittee to install, extend, maintain or repair a sewer connection or a portion thereof.

(gg) "Sewer Service Charge" means the total sewer charge assigned to each user, which charge consists of a user charge and a capital financing charge.

(hh) "Sewer System" means the network of sewers within the City's corporate boundaries, which are owned by or are under the jurisdiction of the City.

(ii) "Storm Sewer" means a sewer which carries storm, surface or ground water, including cooling water and unpolluted industrial process water, but excluding wastewater and industrial waste.

(jj) "Storm Water" means water which is a part of the flow which occurs during or immediately after any natural precipitation and which results therefrom.

(kk) "Street" means the entire width between the boundary lines of every way dedicated to the public use as a thoroughfare for the purpose of vehicular and pedestrian travel.

(ll) "Surcharge" means a charge added to the sewer service charge to cover operation and maintenance costs incurred in the treatment of extra- strength wastes.

(mm) "Suspended Solids" means suspended matter that floats on the surface of or is suspended in water, wastewater or other liquids, and which is removable by laboratory filtering.

(nn) "Unpolluted Industrial Process Water" means water used in industrial or manufacturing processes which is sufficiently free of pollutants to qualify for an NPDES permit.

(oo) "User" means a user of the sewer system.

(pp) "User Charge" means that portion of the total sewer charge assigned to each user to defray the user's proportionate share of the cost of operation, maintenance and replacement of the sewer system.

(qq) "Wastewater" means a combination of water- borne waste from residences, commercial buildings, industrial facilities, and institutions, and such ground, surface, or storm water as may be present.

(Ord. No. 1439-86. Passed 9-15-86, eff. 9-17-86)

§ 541.02 Jurisdiction Over Sewer Connections

All sewer connections within the street shall be under the jurisdiction and control of the Director.

(Ord. No. 1439-86. Passed 9-15-86, eff. 9-17-86)

§ 541.03 Responsibility for Installation and Maintenance of Sewer Connections

(a) That portion of a sewer connection which extends from the public sewer to approximately one (1) foot beyond the existing or proposed curb line of the roadway may be installed originally by a licensed sewer builder or by the Division of Water Pollution Control.

In either case, installation shall be at the expense of the property owner whose premises are drained by the sewer connection under rules and regulations promulgated by the Commissioner. The cost of any work performed by the Division of Water Pollution Control shall be under Section 543.03 of the Codified Ordinances.

(b) Once installed, the portion of a sewer connection described in division (a) of this section shall be maintained by the Division of Water Pollution Control.

(c) That portion of a sewer connection which extends from approximately one (1) foot beyond the existing or proposed curb line of the roadway to the property line shall be installed and maintained by a licensed sewer builder at the expense of the property owner whose premises are drained by the sewer connection, and under rules and regulations promulgated by the Commissioner. On application by the sewer builder, the City shall furnish the information as it possesses relative to the location and depth of the sewer connection at the existing or proposed curb line of the roadway. The City shall not guarantee the correctness of the information, and shall not be liable for any error arising from the information.

(Ord. No. 779-06, § 2. Passed 6-5-06, eff. 6-9-06)

§ 541.04 Sewer Builder's License and Bond

(a) No person shall install, extend, maintain, or repair any sewer connection or do any related work without first obtaining a sewer builder's license from the Commissioner of Assessments and Licenses.

(b) Before issuing a sewer builder's license, each applicant shall pay a license fee of fifty dollars (\$50.00) and shall submit to the Commissioner of Assessments and Licenses an application on the form containing:

(1) A certificate satisfactory to and signed by the Commissioner of Water Pollution Control that the applicant agrees to comply with the Codified Ordinances and any rules and regulations promulgated by the Director or the Commissioner under this chapter;

(2) For each applicant who has never been licensed and bonded as a sewer builder, and for each sewer builder who has failed to renew his or her license and bond for a period of one (1) year or more, a certificate signed by at least two (2) reputable sewer builders to the effect that the applicant is known to them to be qualified to perform the work of a sewer builder; and

(3) A bond in the amount of five thousand dollars (\$5,000.00) with a surety company authorized to write surety bonds in the State. The bond shall be acceptable in form and content to the Director of Law, and shall state:

A. That the licensee indemnifies and holds harmless the City from any and all loss, injury, or damage caused by, related to, or resulting from the want of care, skill, or attention on the part of himself, herself or of anyone in his or her employ, in the prosecution, protection, or completion of any work, or by reason of any opening made, caused, or permitted to be made by him or her or by anyone in his or her employ, or by the placing of any material in any street;

B. That the licensee will employ only experienced pipe layers to lay any pipe or drain;

C. That the licensee will reimburse the City for replacing and restoring the street pavement and earth over any opening made by him or her;

D. That the licensee's operations and work shall conform in all respects to the Codified Ordinances and any and all rules and regulations which are now in existence or may from time to time be promulgated by the Division of Water Pollution Control and the Division of Streets; and

E. That if the Licensee performs all of his or her obligations under the license and bond, the surety's obligation shall cease, but if the City is unable to obtain satisfaction of any of the licensee's obligations under the license and bond, the City may look to the surety for satisfaction.

(c) No sewer builder's license shall be issued until the Commissioner of Assessments and Licenses has received the application and payment required by division (b) of this section, and has approved the applicant's bond.

(d) The sewer builder's license shall state the name of the licensee, firm name if any, address of the licensee's place of business, and date of issue. The license shall be signed by the Commissioner of Assessments and Licenses, and shall be valid until the 31st day of December in an even-numbered year after it is issued, unless it is revoked before that date under division (f) of this section.

(e) No licensed sewer builder shall allow his or her name to be used to obtain any permit for the prosecution of any sewer connection work, or allow anyone in his or her employ to do the work unless the licensee, or one (1) of his or her regularly employed

foremen is personally at the location of the work to superintend and direct the work.

(f) If the Commissioner determines that a licensee has violated any of the provisions of this chapter or any rules, regulations or orders of the Division of Water Pollution Control or the Division of Streets, the Commissioner may revoke that person's license under Section 541.97.

(Ord. No. 2393-02. Passed 2-3-03, eff. 2-3-03)

§ 541.05 Sewer Connection Permits

(a) No person shall make any tap to any sewer, repair or remove any sewer connection, or make any excavation therefor without first obtaining from the Commissioner a separate sewer connection permit for each such tap or connection.

(b) When a sewer connection or a portion thereof is in place, and the application for a sewer connection permit contemplates installation, extension or maintenance of that portion of the sewer connection which extends from one (1) foot beyond the existing or proposed curb line of the roadway to the property line, the sewer builder may commence his or her work only after obtaining a sewer builder's license, a sewer connection permit, and the permit required by the Division of Streets pursuant to Section 3115.18.

(c) When the application for a sewer connection permit contemplates the installation of any portion of the connection which extends from the public sewer to one (1) foot beyond the existing or proposed curb line of the roadway, the sewer builder may commence his or her work only after obtaining a sewer builder's license, a sewer connection permit, and the street openings permit required by the Department of Public Service pursuant to Section 503.01.

(d) Each applicant for a sewer connection permit shall submit to the Commissioner the following:

(1) An application on the prescribed form containing:

A. A complete and intelligible sketch and specifications showing the existing or proposed sewer, sewer connection or plumbing and the location and character of the work, all in detail;

B. A schedule of all fixtures, taps, and branches for future sewer connections;

C. A statement, signed by the owner for whose benefit the sewer connection is to be made, that said owner and each succeeding owner shall, in consideration of the privilege thereby granted, hold harmless the City for any and all loss, injury or damage that may in any way result from or be caused by the work contemplated by issuance of the permit; and

D. Any other information which the City may require in order to determine the acceptability of the probable discharge from the proposed sewer connection.

(2) A sewer connection fee in an amount determined by the Director and approved by the Board of Control.

(e) Sewer connection permits shall be issued only to licensed sewer builders; shall designate the street and number of the house and subplot upon which the sewer connection is to be made; and shall include a description of the premises upon which the sewer connection is to be made sufficient to clearly define the location thereof. The sewer connection permit shall be valid for a period of thirty (30) days from the date of issuance, unless revoked prior to that date pursuant to division (j) of this section.

(f) All permits required by divisions (a), (b) and (c) of this section shall be kept at the site of the work at all times while the work is in progress.

(g) No sewer connection permit shall be issued for any sewer connection which could result in a downstream flow in excess of the capacity of the downstream facilities.

(h) Whenever a property owner proposes installation of a sewer connection which would drain more than one (1) lot, the sewer connection permit application shall give the correct dimensions and description of each of the several lots which are intended to be drained by the sewer connection. In such a case, no sewer connection permit shall be issued for any lot unless and until the property owner has paid to the City that proportion of the sewer improvement assessment which is attributable to all of the several lots.

(i) No person who has installed or performed any work on a sewer connection pursuant to division (b) of this section shall relay any sidewalk or portion thereof without first obtaining the permit required by the Department of Public Service pursuant to Section 505.04.

(j) If the Commissioner determines that a permittee has violated any of the provisions of this chapter or any rules, regulations or orders of the Division of Water Pollution Control, the Commissioner shall revoke that person's sewer connection permit pursuant to

(Ord. No. 1439-86. Passed 9-15-86, eff. 9-17-86)

§ 541.06 Sewer Construction Requirements

(a) All piping used in the installation of sewers or sewer connections shall be of the best quality socket pipe of a kind acceptable to the Commissioner. No pipe smaller than six (6) inches in diameter shall be used for any sewer connection.

(b) All sewers and sewer connections shall be designed and installed in accordance with the City Building Code and the latest edition of "Design and Construction of Sanitary and Storm Sewers," prepared by the Joint Committee of the American Society of Civil Engineers and the Water Pollution Control Federation.

(c) Each portion of a sewer connection shall be laid in as direct and straight a line as ground conditions permit from the public sewer to the property line of the premises to be drained. All pipes shall be laid by the use of a spirit level to a grade of not less than one (1) foot per one hundred (100) feet. The best Portland cement and clean sand shall be placed in and around each joint so that all joints are watertight.

(d) All openings made by a licensed sewer builder within the street for the purpose of laying sewers or sewer connections shall be done in an open trench. All paving material, flagging, curb and ballasting shall be carefully removed and preserved. After the connection is properly laid, the trench shall be backfilled in accordance with rules and regulations of the Division of Streets. Paving materials, flagging and curb shall be replaced by the City at the property owner's expense.

(e) All openings and obstructions in any street shall be carefully guarded and protected at all times, and during the night time shall be defined by colored lights. Every other precaution necessary to guard against accidents shall be taken. At all times the work shall be done in a manner that causes the least inconvenience to property owners and the general public.

(f) Whenever Council by resolution orders the paving or repaving of any street following installation of a sewer, the Director of Finance shall notify the abutting property owners, in writing, to make such sewer and water connections as he or she may designate within a time specified in the notice. If the required connections are not made within the time specified, the Director shall cause them to be made and shall obtain reimbursement through the use of a special assessment against abutting property owners. Nothing in this section shall be construed to require abutting property owners to make any payment other than the original cost of constructing sewer and water connections as provided in Section 541.03(a).

(g) Nothing in this chapter shall prevent any licensed sewer builder from installing laterals as part of any contract work approved by and being performed under the inspection of the City.

(Ord. No. 1439-86. Passed 9-15-86, eff. 9-17-86)

§ 541.07 Catch Basins

No unacceptable discharge or obstruction of any kind shall be placed, thrown or deposited in any catch basin. No person shall break, remove, or cause to be broken or removed any portion of any catch basin, manhole, sewer or appurtenance, or obstruct in any way the inlet or outlet of any public sewer.

(Ord. No. 1439-86. Passed 9-15-86, eff. 9-17-86)

§ 541.08 Clear Water Connections

(a) No person shall discharge or cause to be discharged into any sanitary sewer any storm, surface or ground water, roof runoff, subsurface drainage, cooling water or unpolluted industrial process water.

(b) Storm, surface or ground water, roof runoff and subsurface drainage shall be discharged to storm sewers or combined sewers, or when approved in writing by the Commissioner, to a natural watercourse, or as authorized in division (b) of Section 3133.05 of the Codified Ordinances.

(c) Any person who has received an NPDES permit and written approval from the Commissioner may discharge cooling water and/or unpolluted industrial process water into a storm sewer, a combined sewer or a natural watercourse.

§ 541.09 Sewer Construction Inspection

(a) A sewer inspector, designated by the Commissioner, shall inspect all new sewers and sewer connections. The sewer builder shall request such an inspection at least six (6) hours on a regular business day before the sewer inspection is desired. The sewer builder shall uncover any work that has been covered, and shall afford the inspector the opportunity to inspect both the interior and the exterior of the pipe.

(b) The Commissioner shall be the final judge of the quality and acceptability of all sewer materials, workmanship and work, and shall have the right to inspect the same at all times.

(c) The Commissioner shall have free access to all buildings and fixtures therein which are a part of the building's drainage system for the purpose of inspecting such fixtures, and may take samples of any wastes entering the building drain therefrom. The Commissioner, in his or her sole discretion, may require users to install control manholes to facilitate the sampling, measurement and observation of wastes discharged into the sewer system.

(d) The actual tapping of a sewer connection to the public sewer shall be done only in the presence of an authorized Water Pollution Control inspector.

(Ord. No. 1439-86. Passed 9-15-86, eff. 9-17-86)

§ 541.10 Guarantee

(a) Every permittee who installs, extends, maintains or repairs a sewer connection shall guarantee that the work performed by him or her will remain in good condition for a period of one (1) year following the inspection required by division (a) of Section 541.09.

(b) If at any time during the one (1) year guarantee period, the Commissioner finds defects or omissions in the permittee's work, or finds that the work is not in accordance with the provisions of this chapter or requires repairs for causes which are attributable to the permittee's work, all as determined by the Commissioner, the Commissioner shall notify the permittee to rectify the defects or omissions, or to make the necessary repairs.

(c) If the permittee fails to begin the rectification or repair within five (5) days from the date he or she receives notice pursuant to division (b) of this section, the Commissioner may cause the rectification or repair to be effected at the permittee's expense.

(Ord. No. 1439-86. Passed 9-15-86, eff. 9-17-86)

§ 541.11 Regulation of Discharges

(a) No person shall discharge or cause or allow to be discharged into the sewer system any wastewater, materials, or substances which are hereby deemed to be unacceptable, including without limitation those which have been determined by the Commissioner to:

(1) Constitute a hazard to life and limb of personnel engaged in inspection, maintenance, or operation of the system or to persons who may come in contact with discharges from the sewer system;

(2) Constitute or create a public health hazard;

(3) Contain properties which may be detrimental to the functional integrity or operation of sewers or pumping stations, or which are in any way deleterious to any part of the sewer system;

(4) Produce excessive odors or in any other way constitute or create a public nuisance;

(5) Be in violation of any rule or regulation for sewer use adopted by the NEORSD, Cuyahoga County or any other agency responsible for sewers, pumping stations, or other system components into which the wastewater is discharged;

(6) Cause the City to incur unreasonable expense in the handling or treatment thereof;

(7) Be of such a volume or be discharged at such a rate as to exceed the capacity of any part of the sewer system;

(8) Directly or indirectly cause water pollution in violation of any permit conditions or State or Federal regulations; or

(9) Contain concentrations of any toxic or deleterious material or substance which are prohibited or are in excess of limits set thereon by other provisions of this chapter.

(b) No person shall discharge or cause or allow to be discharged into the sewer system any wastewater which is hereby deemed by the Commissioner to constitute an unacceptable discharge because it contains any of the following:

(1) Liquids, solids, or gases which by reason of their nature or quantity are, or may be sufficient, either alone or by interaction with other substances to cause fire or explosion or be injurious in any other way to the sewerage facilities or to the operation of the system. Materials of this nature include, but are not limited to, gasoline, kerosene, naphtha, benzene, toluene, xylene, ethers, alcohols, ketones, aldehydes, peroxides, chlorates, perchlorates, bromates, carbides, hydrides and sulfides;

Discharges of this nature must be monitored to ensure that the Lower Explosive Limit (L.E.L.) of the explosion hazard meter located at the point of discharge into the sewer system is never exceeded by five percent (5%) in any two (2) successive readings or by ten percent (10%) in any single reading;

(2) Gaseous, liquid or solid substances which when discharged into the sewer system may alone or by interaction with other substances interfere with any wastewater treatment process, constitute a hazard to human beings or animals, inhibit aquatic life, create a hazard to recreation in the receiving waters or the effluent from the wastewater treatment plant or create a hazard as defined in the federal Clean Water Act;

(3) Construction materials, ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, asphalt, plastic, wood, paunch manure, bones, hair, hides or fleshings, grass clippings, wastepaper, or any solid or viscous substance capable of causing obstruction to the flow in sewers or of otherwise interfering with the proper operation of the sewer system;

(4) Water or waste containing fats, wax, grease or oils, whether emulsified or not, in excess of one hundred (100) mg/l or which contains substances which may solidify or become viscous at temperatures between one degree Centigrade (1°C) and sixty-five degrees Centigrade (65°C) at the point of discharge into the system;

(5) Water, waste or steam with a temperature in excess of sixty-five degrees Centigrade (65°C) (one hundred fifty degrees Fahrenheit (150°F));

(6) Water or waste having a PH lower than 5.5 or higher than 10.0 or which may cause corrosion or deterioration of the system. Materials of this nature include, but are not limited to, acids, alkalis, sulfides, concentrated chloride and fluoride compounds and substances which will react with water to form acidic products;

(7) Water or waste containing total cyanide in excess of five (5) mg/l or containing "readily releasable cyanide" (cyanide released at a temperature of sixty-five degrees Centigrade (65°C) (one hundred fifty degrees Fahrenheit (150°F)) and PH of 2.5) in excess of two (2) mg/l;

(8) Radioactive wastes or isotopes of such half-life or concentration that they violate regulations or orders issued by the authority having control over their use and/or may cause damage or hazards to the sewer system, human beings or animals;

(9) Solids, liquids, or gases which, either alone or by interaction with other substances in the sewer system, are capable of producing objectionable odors or colors or which may otherwise constitute or create a public nuisance;

(10) Garbage that has not been ground or comminuted to such a degree that all particles will be carried freely in suspension under flow conditions normally prevailing in the sewer system with no particle greater than one-half (1/2) inch in any dimension;

(11) Wastewater flow rates which exceed the design capacity of any component of the sewer system; or

(12) Water which increases the hydraulic load on the sewer system, including but not limited to cooling, storm, surface, subsurface, drainage, swimming pool or other relatively unpolluted water.

(c) Nothing in this section shall be construed to prevent any agreement or arrangement between the City or the NEORS and any user of the sewer system whereby the user may deposit unacceptable discharges into said system for special treatment subject to applicable payments or surcharges over and above any surcharges for transportation to and treatment in the NEORS system.

(Ord. No. 1439-86. Passed 9-15-86, eff. 9-17-86)

§ 541.12 Control of Unacceptable Discharges

(a) If wastewater containing any of the unacceptable substances described in Section 541.11 of this chapter is discharged or proposed to be discharged into the sewer system of the City or into any sewer system tributary thereto, the Commissioner may:

(1) Prohibit the continued or proposed discharge of such wastewater;

(2) Require the discharger to implement on-site modifications to reduce or eliminate the discharge of such substances in conformity with this chapter;

(3) Require pretreatment or the creation of storage facilities for flow equalization to render the discharge acceptable;

(4) Where applicable, require the installation of grease, oil or sand interceptors; or

(5) Take such other remedial action as the Commissioner deems desirable or necessary to achieve the purposes of this chapter.

(b) Any person whose discharge is determined to be unacceptable within the meaning of this chapter or of the NEORSD Sewer Use Code may apply to the Commissioner for permission to render such discharge acceptable by pretreatment. The Commissioner may approve pretreatment which complies with all requirements and conditions of this chapter and the NEORSD Sewer Use Code.

(c) Where the Commissioner requires pretreatment or equalization of wastewater flows:

(1) Plans, specifications and other pertinent data or information relating to pretreatment or flow equalization facilities required under division (a)(3) of this section shall be submitted to the Commissioner for review and approval prior to their implementation. No subsequent alterations or additions to such facilities shall be made without prior notice to and approval of the Commissioner. Notwithstanding any approval by the Commissioner, discharges from such facilities must comply with applicable codes, ordinances, rules, regulations or orders of all governmental authorities having jurisdiction over unacceptable discharges;

(2) Pretreatment and flow equalization facilities shall be maintained in good working order and operated efficiently by the owner at his or her own expense, and shall comply with the requirements of this chapter and all other applicable codes, ordinances, laws, rules and regulations. If for any reason, a facility does not or cannot comply with any provision of this chapter, the owner or person responsible for the facility shall immediately notify the Commissioner so that action may be taken to protect persons, property and the sewer system.

(Ord. No. 1439-86. Passed 9-15-86, eff. 9-17-86)

§ 541.13 Sewerage Test Tee Inspection, Installation and Snaking

(a) The Division of Water Pollution Control is authorized to enter upon private property, with the permission of the owner of such property, for the purpose of snaking sewer connections of six (6) inches or less in size to locate blockages within the City's sewer system. Snaking of sewer connections may be performed by the City from an existing test tee or by digging an opening one (1) foot beyond the existing or proposed curb line of the roadway.

If the blockage is in the main sewer or between the main sewer and a point one (1) foot beyond the existing or proposed curb line of the roadway, repairs shall be made by the Division of Water Pollution Control. If the blockage is between the building and such point one (1) foot beyond the existing or proposed curb line of the roadway, the Division of Water Pollution Control shall advise the owner to engage a licensed and bonded sewer builder to make the necessary repairs.

(b) Where there is no existing test tee, the Division of Water Pollution Control is authorized to install a test tee at the opening one (1) foot beyond the existing or proposed curb line of the roadway for the purpose of future inspections.

(c) The Director of Public Utilities shall make and enforce such regulations as he or she may deem necessary for the implementation and management of the work authorized by this section. Such regulations, when published in the *City Record*, shall have the same force and effect as ordinances of the City.

(d) That the Director of the Department of Public Utilities be and he or she is hereby authorized and directed to make annually a written requirement contract in accordance with the Charter and the Codified Ordinances of Cleveland, Ohio, 1976, for the requirements for the necessary items of material and labor to snake existing sewer test tees, and to install test tees where none exist, to be purchased by the Commissioner of Purchases and Supplies upon a unit basis for the Division of Water Pollution Control, Department of Public Utilities. Bids shall be taken in such manner as to permit an award to be made for all items as a single contract, or by separate contract for each or any combination of said items as the Board of Control shall determine.

The cost of said contract or contracts shall be charged against the proper appropriation account and the Director of Finance shall

certify thereon the amount of the initial purchase thereunder, which purchase, together with subsequent purchases, shall be made on order of the Commissioner of Purchases and Supplies pursuant to a requisition against such contract duly certified by the Director of Finance.

(Ord. No. 643-90. Passed 6-11-90, eff. 6-14-90)

§ 541.97 Enforcement Procedures

(a) Whenever the Commissioner finds that any person has violated or is violating any provision of this chapter concerning sewer connections, the Commissioner may issue a written order to remedy the violation. The order shall state the nature of the violation and shall provide that all work shall cease on the sewer connection which is the subject of the order until the violation has been remedied at the sewer builder's expense, which remedy must be effected within twenty-four (24) hours after receipt of the order.

(b) If a violation is not remedied within the time period specified in division (a) of this section, the Commissioner may order revocation of the sewer builder's license and the sewer connection permit of the person who is charged with the violation (the "person charged") and may cause the violation to be remedied at the expense of the person charged.

(c) In the event that a violation is remedied after the time period specified in division (a) of this section, and the person charged desires to continue his or her work, he or she must reapply for the license and permits required by Section 541.04 and Section 541.05.

(d) Appeals of persons adversely affected by the order of the Commissioner issued pursuant to division (b) of this section shall be heard and decided by the Board of Zoning Appeals in accordance with the following procedures:

(1) A notice of the hearing shall be served personally on the parties by registered or certified mail at least seven (7) days before the hearing;

(2) The Board shall commence to hear the merits of an appeal within thirty (30) days of the filing of an appeal;

(3) The Board shall render a decision within ten (10) days of the date of the hearing, which decision may affirm or disaffirm the order from which the appeal has been taken;

(4) If the Board affirms the order of the Commissioner, the person charged may reapply for the license and permits required by Section 541.04 and Section 541.05, and if the Commissioner has not caused the remedy of the violation which was the subject of his or her order under division (a) of this section, the person charged must remedy said violation before continuing any work under his or her license and permits;

(5) If the Board disaffirms the order of the Commissioner, the sewer builder's license and sewer connection permit shall be restored to the person charged.

(e) Except where the Board of Zoning Appeals has disaffirmed the order of the Commissioner, any person who violates the provisions of this chapter concerning sewer connections shall pay all expenses incurred and damages resulting from the violation.

(Ord. No. 1439-86. Passed 9-15-86, eff. 9-17-86)

§ 541.98 Administration

(a) For the purpose of administration of this chapter, the Commissioner shall, at all times, have free access to the premises of any user of the sewer system, and to the premises of any person reasonably believed by the Commissioner to be a user or potential user of the sewer system. Such access may be for the purpose of inspection, observation, measurement and/or testing. The Commissioner shall reasonably protect and treat as confidential any trade secrets or proprietary information which it obtains from such entry.

(b) Nothing in this chapter shall be construed to restrict or in any way limit the jurisdiction of the NEORSD or any other governmental authority having jurisdiction over sewers, sewer connections or unacceptable discharges.

(Ord. No. 1439-86. Passed 9-15-86, eff. 9-17-86)

§ 541.99 Penalty

(a) Whenever the Commissioner finds that any person has violated or is violating any provision of this chapter concerning

unacceptable discharges, he or she shall order in writing that the violation cease immediately, shall terminate water service to the premises where the violation occurred, and shall fine the person charged five hundred dollars (\$500.00) for each offense plus all expenses incurred and damages resulting from the violation.

(b) Each day or portion thereof on or during which a violation occurs or continues shall constitute a separate offense.

(Ord. No. 1439-86. Passed 9-15-86, eff. 9-17-86)

APPENDIX E

CITY OF CLEVELAND DIVISION OF WATER POLLUTION CONTROL'S ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM MANUAL

**CITY OF CLEVELAND
DIVISION OF WATER POLLUTION
CONTROL**



**ILLICIT DISCHARGE DETECTION AND
ELIMINATION PROGRAM MANUAL**

2016

<u>TABLE OF CONTENTS</u>	<u>Page</u>
1.0 INTRODUCTION AND PURPOSE	p. 1
2.0 IDDE TRAINING PROGRAM	p. 2
3.0 DOCUMENTATION	p. 3
3.1 Annual Reporting to OEPA	p. 3
3.2 IDDE Program Updates and Modifications	p. 4
4.0 IDENTIFICATION OF AN ILLICIT DISCHARGE	p. 5
4.1 Defining an Illicit Discharge	p. 5
4.2 WPC's Stormwater Outfall Mapping/Inventory	p. 6
4.3 Special Local Water Quality Concerns	p. 7
4.4 Reporting Procedures	p. 8
5.0 OUTFALL SCREENING	p. 9
5.1 Dry-Weather Outfall Screening	p. 9
5.2 Wet-Weather Screening	p.10
6.0 INVESTIGATING ILLICIT DISCHARGE	p. 11
6.1 Investigation Triggers and Prioritization	p. 11
6.2 Investigation Protocol	p. 12
6.3 Timeframes for Performing Investigations	p. 13
7.0 ELIMINATING VERIFIED ILLICIT DISCHARGES	p. 14
7.1 Source Elimination	p. 14
7.2 Follow-up on Source Elimination	p. 14
7.3 Administrative Action, Enforcement and Penalties	p. 15
 APPENDICES	
A City of Cleveland – WPC Points of Contact	
B WPC Outfall Visual Inspection Form	
C WPC Outfall Inventory	
D WPC IDDE Tracking Form	
E Knowledge Check Quiz	

1.0 INTRODUCTION AND PURPOSE

An illicit discharge is generally any discharge, release, or pumping of a pollutant or polluted water into the stormwater system. The National Pollutant Discharge Elimination System (NPDES) regulates the discharge of stormwater under the authority of the Federal Clean Water Act. The Ohio Environmental Protection Agency (OEPA) has the designated authority to administer NPDES permits regulating the discharge of stormwater. The City of Cleveland is under the regulation of the Phase II Small Municipal Separate Storm Sewer System (MS4). One of the six (6) minimum control measures under the NPDES Phase II is Illicit Discharge Detection and Elimination. The City of Cleveland, Division of Water Pollution Control has been implementing measures for years to detect and eliminate illicit discharges but this updated plan will document the process and serve as a program guide.

The Phase II permit mandates permittees to prepare and implement an Illicit Discharge Detection and Elimination (IDDE) program. This plan and its implementation satisfies this requirement. This manual presents the standard protocol which Water Pollution Control (WPC) will utilize to implement its IDDE Program. The manual provides written procedures to detect, identify, and address unauthorized non-stormwater discharges, including illegal dumping to WPC's small municipal separate storm sewer system. Examples of illicit discharges include:

- Direct or indirect sanitary wastewater discharges to the storm sewer or watercourse, such as a shop floor drain connected to a storm drain, a cross-connection between the municipal sanitary sewer and storm sewer systems, a damaged sanitary sewer line that is leaking sewage into a cracked storm sewer line, or a failing septic system that is leaking into a water course
- Material (e.g., used motor oil) that have been dumped illegally into a storm drain catch basin
- Improper home or business owner activities such as washing paint brushes into a catch basin, washing new textured concrete driveways into a storm drain, draining swimming pools to the storm system

WPC's IDDE program includes five distinct components:

- **Training** – procedures to train applicable field personnel related to the IDDE program are discussed in Section 2.0 of this manual
- **Tracking** – Procedures to track and document all efforts related to the IDDE process are outlined in Section 6.2 of this manual
- **Identification of an illicit discharge** – Procedures to screen, identify and report questionable illicit discharges are outlined in Section 4.0 of this manual
- **Investigating the source of an illicit Discharge** – Procedures to investigate questionable illicit discharges that have been reported are outlined in Section 5.0 of this manual

- **Elimination of an illicit discharge** – Procedures to eliminate illicit discharges that have been confirmed through the investigation efforts are outlined in Section 7.1 of this manual.

For WPC to demonstrate compliance to the conditions of the MS4 permit, documentation of IDDE activities performed is paramount. Section 3.0 describes the appropriate documentation procedures for activities in the manual.

2.0 IDDE TRAINING PROGRAM

This plan will provide annual training (once per year) to applicable field personnel in recognition and reporting of illicit discharges. As part of WPC's program, this manual serves as the annual training material to meet the permit requirement. Note that training is also required for Good Housekeeping/Pollution Prevention practices to applicable employees. Training for this minimum control measure is provided under a separate manual.

The written procedures herein serve as the foundation of a successful IDDE program however the program relies on supplemental materials to assist with implementation and documentation. Field personnel who are identified for IDDE training should be familiar with each section of this manual and the supplemental materials provided in the Appendices of this manual, which include:

- **WPC IDDE Point of Contact for Reporting** – Provides a list of contact information dependent on the type of potential illicit discharge identified or potential source of the discharge. The guide is located in Appendix A.
- **Outfall Visual Inspection Form** – This form is used for outfall screening to assist in determining the potential of an illicit discharge. The guide is located in Appendix B.
- **IDDE Tracking Form** – Provides for the inclusion of documentation required by the MS4 permit for each investigation conducted of any suspected illicit discharge. This form will be completed by the WPC MS4 Program Manager, but required information should be obtained by field staff to assist with the completion of the form. The guide is located in Appendix D.
- **IDDE Training** – For the applicable field personnel, the following training is required to be completed each year:
 - Attend training session. The session will be scheduled by the WPC MS4 Program Manager with proper notice provided to each applicable field personnel.
 - Completion of the "Knowledge Check" quiz in Appendix E, at the completion of the training session

- **Support Mapping** – Provides mapping that identifies the locations of all outfalls that are required to be screened. This mapping is intended to be used by field personnel when completing the screening and tracking of outfalls.

Upon completion of the annual training session and “Knowledge Check” quiz, the MS4 Program Manager should complete the information required in Appendix E of this manual and obtain trainee signatures. Compile any supplemental training material and keep it on record with this form for documentation purposes.

3.0 DOCUMENTATION

As highlighted throughout this manual, documentation of illicit discharge reports, investigations, and elimination actions is critical for demonstrating compliance to the MS4 permit. In the case of an illicit discharge, WPC’s MS4 permit requires, at a minimum, the following information:

- ✓ The date or dates that the illicit discharge was observed/reported;
- ✓ The results of the investigation;
- ✓ Any follow up of the investigation;
- ✓ Resolution of the investigation; and
- ✓ The date that the investigation was closed

The resolution of a discharge may be a referral to and acceptance by OEPA or the City of Cleveland for action, however, this action must be properly documented by WPC. If the discharge is determined to be a permitted or allowable discharge, then the final action will be documented and the information will be included on the corresponding WPC Illicit Discharge Tracking Inventory Form. This will enable WPC to access this information if future requests for information are received concerning the discharge in question.

3.1 Annual reporting to OEPA

WPC must annually report to OEPA information pertaining to its IDDE efforts. The information is included in the overall Stormwater Management Program report due April 1st of each year. Information required for reporting includes:

- A list of any written notifications of physical interconnection given by the operator to other MS4s;
- The total number of outfalls screened during the reporting period, the screening results, and detail of any necessary follow-up action;
- A summary of each investigation conducted by WPC of any suspected illicit discharge. The summary must include:
 - The date the suspected discharge was observed, reported, or both;
 - How the investigation was resolved, including any follow-up; and

- Resolution of the investigation and the dates the investigation was closed.

3.2 IDDE Program Updates and Modifications

Modifications to the IDDE program may occur as part of an iterative process to protect water quality. Updates and modifications to the program may be made in accordance with the following procedures:

- Adding (but not eliminating or replacing) practices to the IDDE program outlined in this manual may be made by WPC at any time. Additions shall be reported as part of the annual report.
- Updates and modifications to the IDDE program described in this manual are permitted provided that the updates and modifications are done in a manner that:
 - Is consistent with the conditions of the General Permit;
 - Follow any public notice and participation requirements established in the General Permit; and
 - Are documented in the annual report
- Replacing, or eliminating without replacement, any ineffective or infeasible strategies, policies, and practices described in this manual with alternate strategies, policies, and BMPs may be requested at any time. Such requests must include the following:
 - An analysis of how or why the practices, strategies, or policies are ineffective or infeasible, including cost prohibitive;
 - Expectations on the effectiveness of the replacement practices, strategies, or policies;
 - An analysis of how the replacement BMPs are expected to achieve the goals of the practices to be replaced;
 - A schedule for implementing the replacement practices, strategies, and policies;
 - An analysis of how the replacement strategies and policies are expected to improve WPC's ability to meet the goals of the strategies and policies being replaced; and
 - Requests or notifications must be made in writing to WPC
- WPC may also collaborate with other agencies or contractors under an agreement to perform IDDE work. If so, the agency will comply with the requirements of this program.

4.0 IDENTIFICATION OF AN ILLICIT DISCHARGE

The municipal separate storm sewer system (MS4) means a conveyance, or system of conveyances that discharge into surface waters and wetlands. That is, any system of drainages from roads, parking lots, catch basins, curbs, gutter, ditches, man-made channels or storm drains that direct stormwater into a stream, pond, wetland or other similar feature is part of the MS4 for WPC. These conveyance systems are vulnerable to pollution, which can then travel alone or carried with stormwater to the receiving waters. Substances other than stormwater that enter receiving waters may be considered an illicit discharge and are the focus of this manual.

An illicit discharge can be: 1) a measurable flow from a storm drain during dry weather that contains pollutants or pathogens; 2) have a unique frequency, composition, and mode of entry in the storm drain system; 3) caused when the sewage disposal system interacts with the storm drain system; or 4) discharges from pollutants from specific source areas and operations known as "generating sites."

4.1 Defining an Illicit Discharge

For the purposes of WPC's IDDE program, the OEPA regulation definition for an illicit discharge is generalized as:

Illicit Discharge – any discharge to an MS4 that is not composed entirely of stormwater, except discharges specifically identified in the OEPA General Permit.

Table 1, provides source a list of sources pollutants that could result from daily practices or from a specific incident.

Table 1. Examples of source pollutants of an illicit discharge

• Automotive fluids (e.g. oil, fuel, antifreeze)	• Landscape waste (grass clippings, etc.)
• Cooking oil and grease	• Sediment
• Solvents	• Vehicle wash water
• Paints	• Sanitary sewer wastewater
• Chemical cleansers (detergents, soaps)	• Dumpster leachate
• Improperly applied pesticides/herbicides	• Trash
• Improperly managed salts	• Improperly applied fertilizer

The regulations do have exemptions for some non-stormwater discharges that would not be considered an illicit discharge if not a significant contributor of pollutants to the City's MS4.

Table 2, includes discharges relevant to WPC that are not significant contributors of pollutants and are not considered illicit discharges. If there is uncertainty of the source or constituents within an observed discharge, WPC MS4 program administrator should be contacted immediately so a determination can be made. Contact information is provided in Appendix A.

Table 2. Examples of sources that are not an illicit discharge

<ul style="list-style-type: none"> • Fire-fighting activities • Water line flushing • Landscape/lawn irrigation • Diverted stream flows • Rising groundwater 	<ul style="list-style-type: none"> • Air condition condensate • Footing or foundation drains • Springs • Water from crawl space pumps • Dechlorinated swimming pool wastewater
<ul style="list-style-type: none"> • Uncontaminated groundwater infiltration • Uncontaminated pumped groundwater 	<ul style="list-style-type: none"> • Discharges from potable water sources • Flows from riparian habitats and wetlands

Additional detail for identification of an illicit discharge is provided in the *WPC Instructions for Completion of the Outfall Visual Inspection Form*.

4.2 WPC's Stormwater Outfall Mapping/Inventory

An outfall can be considered a point where WPC's MS4 discharges concentrated flow to surface waters or wetlands, such as at the end of a pipe or open drainage channel. The MS4 permit requires WPC to maintain a storm sewer map as part of the IDDE program that includes the location and information on the outfalls, including the drainage area to the outfall and the receiving water body. Mapping is a critical component of the required outfall screening and serves as a tool to identify potential sites, the conveyance system adjacent to them, and the locations where they discharge. Outfall locations are indicated with a pink circle and outfall number, as seen in Figure 1 below.

Figure 1. Example indication of a stormwater conveyance with an outfall location.



The WPC Outfall Inventory is provided in Appendix C. The MS4 Program Manager should maintain a copy of both the mapping and Outfall Inventory Form for review upon request by the public or OEPA.

4.3 Special Local Water Quality Concerns

WPC's MS4 ultimately discharges to receiving waters that have been identified by the OEPA to not meet water quality standards. Subsequent studies, called Total Maximum Daily Load (TMDL) studies, have been performed by OEPA. The TMDL studies identify specific pollutants causing the impairments to the receiving waters and designate the amount of the pollutant the receiving water can assimilate to achieve water quality standards. A required reduction of the pollutants is typically assigned to the MS4s that drain to the impaired segment of the water body. A list of the impaired waterbodies and their respective pollutants of concern are shown in Table 3.

Table 3. Special pollutants of concern

Watershed	Sub-watershed	TMDL Load
Lower Cuyahoga River	Big Creek	Phosphorus, Nitrogen, Habitat, Bacteria, Dissolved Oxygen (DO)
Lower Cuyahoga River	Cuyahoga River (within City of Cleveland)	Phosphorus, Nitrogen, Habitat, Bacteria, Dissolved Oxygen (DO)
Lower Cuyahoga River	Mill Creek	Phosphorus, Nitrogen, Habitat, Bacteria, Dissolved Oxygen (DO)
Euclid Creek	Euclid Creek	Phosphorus, Habitat, Total Suspended Solids (TSS)

4.4 Reporting Procedures

WPC maintenance and operations employees are the first line of defense for preventing sources that could contribute to an illicit discharge. Actions that are taken to remove potential sources of an illicit discharge do not need to be reported unless it is suspected an illicit discharge has previously occurred, in this case, the employee needs to report the concern to the MS4 Program Manager, within 1 business day, who will then document the report in the tracking form provided in Appendix D.

An illicit discharge or potential source for an illicit discharge may also be reported by other individuals that are not trained or authorized to perform necessary actions, such as reports from students, faculty, staff or contractors. These individuals may recognize a potential illicit discharge after learning about pollution in stormwater runoff through WPC's public education and outreach efforts. The WPC webpage directs these individuals to contact the MS4 Program Manager, who will subsequently perform the appropriate follow-up action and documentation in accordance with Section 7.2 of this manual. If an employee is otherwise notified, the appropriate action should be taken, and if an illicit discharge is potentially occurring, the MS4 Program Manager shall be notified.

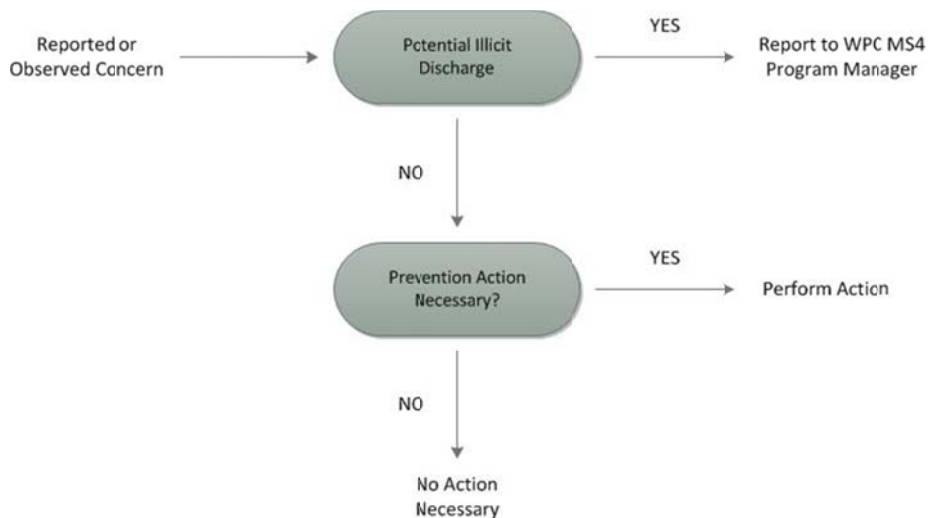


Figure 2. Reporting procedures for WPC field staff

5.0 OUTFALL SCREENING

As a minimum effort to identify illicit discharge occurrences from the City's MS4, annual outfall screenings will be performed on all known stormwater outfalls. In the case that potential illicit discharges are observed at specific outfalls, subsequent screening at a higher frequency may be necessary if the source is not identified and eliminated. Screening will be performed by an individual(s) designated by the Commissioner of Water Pollution Control.

5.1 Dry-Weather Outfall Screening

Outfall screening shall be performed during dry weather using the Outfall Visual Inspection Form (OVI) form provided in Appendix B. Completion of the form serves as the appropriate documentation that the required outfall screening has been performed and should be retained on file for a minimum of 3 years. Outfalls that are flowing during dry weather may indicate an active pollution issue, depending on if rain has occurred during the last 24 to 48 hours. When the screening of an outfall indicates a potential illicit discharge, the WPC MS4 Program Manager shall be notified within one business day so an investigation, as described in Section 6.0, can be performed.

The OVI Form includes the following sections, which are to be completed with each annual outfall screening:

Section 1: General Information – Requires general information regarding when and where the screening was performed, weather conditions at the time of the screening, reference to photos taken. Tips for completing Section 1 include:

- The Outfall ID can be found on the Outfall Inventory in Appendix C. The map may be updated from time to time to reflect new outfalls.
- Take at least 1 photo of the outfall for documentation purposes

Section 2: Outfall Description – Requires a description of basic outfall characteristics, including:

- Material
- Pipe diameter
- Presence of flow – this is important since flow during dry weather would indicate a nonstormwater discharge. If no flow is observed at the outfall, skip to Section 4.
- If submerged with sediment, attempt measure or estimate the depth of sediment

Section 3: Physical Indicators for Flowing Outfalls Only – Requires the observance of physical indicators in the flow, such as odor, color, turbidity, and

floatables, to assist with identifying the source of the discharge. Tips for completing Section 3 include:

- Take photos of visible indicators

Section 4: Physical Indicators for Both Flowing and Non-flowing Outfalls – Requires physical indicators be noted that are not related to flow, such as outfall damage, abnormal vegetation, outfall deposits or stains. Tips for completing Section 3 include:

- Take photos of visible indicators.

Section 5: Overall Outfall Characterization – This section is where the inspector designates the illicit discharge severity of the outfall and recommends appropriate management and monitoring actions, if necessary. Tips for completing Section 5 include:

- The severity of concern at an outfall is best judged by the outfall inspector. The rating system provided on the form is intended to provide consistency and guidance; but the intuition of the inspector overrides the scoring rules.

5.2 Wet-Weather Screening

While dry-weather screening events can identify possible illicit interconnections that are continuous, wet weather screening events may identify discharges that are temporary and/or likely to result from improper storage of polluting materials or inadequate cleanup of off-site pollutant releases. Wet weather screening may be appropriate if dry weather screening identifies physical indicators from Sections 3 and 4 of the OVI form.

6.0 INVESTIGATING ILLICIT DISCHARGE

In the case of the identification of an illicit discharge, it is necessary to conduct an investigation to identify and eliminate the source of the discharge. An investigation may result from:

- A report of WPC staff from the general public;
- A report from an interconnected MS4; or
- Results of outfall screening

The determination of an occurrence of illicit discharge will be made by the WPC MS4 Program Manager. **In all cases of an illicit discharge, the WPC Discharge Tracking Form must be completed for MS4 annual reporting documentation purposes.**

An investigation of an illicit discharge may result in the source being easily identified or may be complex and should utilize instruction in this manual and may require coordination with administrators of interconnected MS4s.

The following sections outline the methodologies that shall be followed in the investigation of an illicit discharge.

6.1 Investigation Triggers and Prioritization

Upon the identification of an illicit discharge, the date, location, and description must be reported on the WPC Illicit Discharge Tracking Form. Note that Section 5 of the OVI form should be referenced to estimate a severity index classification. The following shall trigger an investigation:

- The determination of the occurrence of an illicit discharge by the MS4 Program Manager based on an observed illicit discharge by WPC staff or administrators of interconnected MS4s, such as during daily activities, or a follow-up from a reported observation.
- A severity index classification of either potential, suspect, or obvious. If more than one outfall screenings produces one these classifications, investigation efforts shall be prioritized as:
 - Obvious – Illicit discharge(s) suspected of being sanitary sewer discharges or significantly contaminated would have this classification
 - Suspect – Numerous physical indicators result in this classification
 - Potential – These discharges should not be expected to be hazardous to human health and safety

The start date of the investigation is required to be provided on the WPC Illicit Discharge Tracking Form.

6.2 Investigation Protocol

An investigation of an illicit discharge may result in the source being easily identified or may be complex and should utilize instruction in this manual and may require coordination with administrators of interconnected MS4s.

An initial field evaluation may easily identify the source of an illicit discharge. Once found, the source should be documented on the WPC Illicit Discharge Tracking Form. The remainder of the form shall be completed as appropriate to indicate the source has been eliminated, if applicable, and provide an ending date for the investigation. **It is critical that documentation on the WPC Illicit Discharge Tracking Form is complete to demonstrate illicit discharges have been addressed.**

If the source of an illicit discharge is not easily identified, further investigation is necessary and should be guided by the following procedure:

1. Track the illicit discharge to its point of entry into the storm sewer system. Tracking can be supplemented with review of the WPC sewer system mapping to identify the drainage area of the illicit discharge.
2. Conduct a field inspection near the point of entry to identify the potential pollutant source. Document potential sources with photos, ensuring the photos give the appropriate context to the location of the source.

WPC staff will primarily rely upon visual inspections of the areas in the storm sewer system above the outfall at which an illicit discharge is detected. Improper connections and unpermitted cross-connections to the storm sewer system can be detected by utilizing a combination of methods to investigate non-stormwater discharges, such as visual/closed circuit television (CCTV) inspections and dye testing.

If the illicit discharge is determined to originate outside the City of Cleveland, then the appropriate locality and/or MS4 Program authority will be contacted by WPC staff and the request made to eliminate the discharge. The interconnected MS4 should initiate corrective action per their prescribed process. WPC staff will follow up with the responsible entity to verify the corrective action has been successfully implemented, and the final action will be documented and tracked on the WPC Illicit Discharge Tracking Form.

6.3 Timeframes for Performing Investigations

In general, the timeframe for initiation of an investigation should be prioritized with first priority given to illicit discharges suspected of being sanitary sewage or otherwise significantly contaminated. More specifically, timeframes for initiating an investigation are established as follows:

- Obvious – First priority, begin inspection within 2 business days of identification of an illicit discharge
- Suspect – Second priority, begin inspection within 1 week of the report of a suspected illicit discharge
- Potential – Third priority, begin inspection within 2 weeks of the report of a potential illicit discharge

If, after performing an investigation of an observed or reported illicit discharge, the source of the discharge has not been identified and the non-stormwater discharge has not been detected again after 6 months, efforts will be documented and the discharge identified as “non-recurring” with “source not found” on the WPC Illicit Discharge Tracking Form. At that time, no further action is necessary. However, investigatory due diligence should include (with documentation):

- The tracking and field inspection methods described in the previous Section should be performed;
- At least one additional dry-weather screening during the 6 month time period; and
- At least one wet-weather screening

If an observed discharge is intermittent, WPC staff will perform three separate investigations attempting to observe the discharge when it is flowing. If these attempts are unsuccessful, WPC staff will also document the occurrence and process and no further action is necessary.

7.0 ELIMINATING VERIFIED ILLICIT DISCHARGES

The ultimate goal of the IDDE program is to eliminate illicit discharges from the MS4. Once an illicit discharge has been identified and an investigation has determined the source of the discharge, the appropriate actions need to be taken and documented to eliminate the discharge.

7.1 Source Elimination

The City prohibits illicit discharge into its MS4 through language provided within the City of Cleveland Codified Ordinances (CCO) 541. Prohibition is also addressed through contract language with contractors performing work within the City of Cleveland. Further, the City's daily operations intend to prevent illicit discharges through Good Housekeeping and Pollution Prevention practices. Through these mechanisms, the City can eliminate illicit discharges.

Once discovered and the source determined, WPC staff will take the necessary corrective action to eliminate the discharge. A notice of violation is sent certified mail to the responsible party, informing them of the violation and that they have 24 hours from receipt of the notice to respond to the allegation and submit to the Stormwater Program Manager or the Commissioner of Water Pollution Control, a corrective action plan to remedy the problem. Failure to adhere to the approved corrective action plan and/or the timetable for the termination of the illicit discharge will result in enforcement escalation, which per CCO 541 may result in a fine of \$500/day for each day the illicit discharge is not eliminated and/or interruption of water service.

Reports of illicit discharge to an outside agency should be maintained on file and include all information related to the case including dates, locations, photos, results of screenings and investigations, and identified sources. The report should also request confirmation from the locality that the case has been resolved.

7.2 Follow-up on Source Elimination

Prior to closure of an illicit discharge investigation, WPC is required to conduct or a follow-up investigation to ensure the illicit discharge has been eliminated. Follow-up should include CCTV inspection, dye testing, or both. Documentation is also required on the WPC Illicit Discharge Tracking Form.

7.3 Administrative Action, Enforcement and Penalties

The City of Cleveland prohibits illicit discharge into its MS4 through language provided within CCO 541, which provide methods and procedures for reporting and corrective disciplinary action. Prohibition is also addressed through contract language with contractors performing work within the City of Cleveland.

Administrative action is the least desirable outcome of the WPC IDDE program; however, it may be necessary in the following situations:

- Recurring or egregious illicit discharge incidents;
- Failure of a person knowingly responsible for an illicit discharge to notify WPC; or
- Refusal by the responsible party to voluntarily take corrective action on an illicit discharge, once it is brought to their attention.

Failure to comply with the guidelines set forth for the termination of the illicit discharge will result in enforcement escalation, which per CCO 541 may result in a fine of \$500/day for each day the illicit discharge is not eliminated and/or interruption of water service. CCO 541 is currently under review and maybe updated to include more stringent actions to enforce correction of illicit discharges.

APPENDIX A: City of Cleveland – WPC Points of Contact

WPC POINTS OF CONTACT

Below is a table of points of contacts that can be useful throughout the various components of the program.

Water Pollution Control – Points of Contact		
Rachid Zoghaib - Commissioner		216.664.2750
Jennifer Heard – Chief Civil Engineer (MS4 Program Manager)		216.664.3400
NEORSD - Points of Contact		
Seth Hothem	Senior Investigator, WQIS	216.641.6000, ext. 2015
Scott Broski	Manager, WQIS	216.641.6000, ext. 2201
Ohio Environmental Protection Agency – Point of Contact		
Dan Bogoevski	Division of Surface Water	330.963.1145
Emergency Notification		911

APPENDIX B: WPC Outfall Visual Inspection Form



**DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF WATER POLLUTION CONTROL
OUTFALL VISUAL INSPECTION FORM**

SECTION 1 - GENERAL INFORMATION

Today's Date:		Outfall ID/Location:	
Form completed by:			Time:
Temperature:	How long since last rainfall? <input type="checkbox"/> Raining now; <input type="checkbox"/> 0-2 Days; <input type="checkbox"/> 3 or more Days; <input type="checkbox"/> Unknown		
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial	<input type="checkbox"/> Open Space		
<input type="checkbox"/> Residential	<input type="checkbox"/> Commercial		
Other: _____			
Notes:			

SECTION 2 – OUTFALL DESCRIPTION

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> VCP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input type="checkbox"/> Circular <input type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple Other: _____	Diameter/Dimensions: _____	In Water:
				<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Partially
<input type="checkbox"/> Open Drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-Rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____		With Sediment
				<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Partially
Flow Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <i>If "No," skip to Section 4</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

SECTION 3 – PHYSICAL INDICATORS FOR FLOWING OUTFALLS ONLY

Are Any Physical Indicators Present in the Flow? Yes No (If "No," Skip to Section 4)

INDICATOR	PRESENT	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/Sour <input type="checkbox"/> Petroleum <input type="checkbox"/> Sulfide <input type="checkbox"/> Other: _____	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 – Easily Detected	<input type="checkbox"/> 3 – Noticeable from a Distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other			
Turbidity	<input type="checkbox"/>	See Severity	<input type="checkbox"/> 1 – Slight cloudiness	<input type="checkbox"/> 2 – Cloudy	<input type="checkbox"/> 3 – Opaque
Floatables (Does Not Include Trash)	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (Oil Sheen) <input type="checkbox"/> Other _____			

SECTION 4 – PHYSICAL INDICATORS FOR BOTH FLOWING AND NON-FLOWING OUTFALLS

Are Physical Indicators That are Not Related To Flow Present? Yes No (If "No," Skip to Section 5)

INDICATOR	PRESENT	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Corrosion <input type="checkbox"/> Other: _____	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Other: _____	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor Pool Quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other: _____	

SECTION 5 – OVERALL OUTFALL CHARACTERIZATION

<input type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (Presence of two or more indicators)	<input type="checkbox"/> Suspect (One or more indicators with severity of 3)	<input type="checkbox"/> Obvious
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APPENDIX C: WPC Outfall Inventory

WPC OUTFALL INVENTORY

Location ID	Ward	Outfall Location
1	11	Outlet to Lake Erie behind 17808 Rosecliff Road
2	11	Outlet to Lake Erie - North end of Windward Road
3	11	Outlet to Lake Erie (?) across from 16926 East Park Drive
4	11	Outlet to Lake Erie - North end of Neff Road
5	11	Outlet to Euclid Creek - southwest end of Hoover Avenue
6	11	Outlet to Euclid Creek - southwest end of Lakeport Avenue
7	11	Outlet to Euclid Creek - near 17530 Marcella Road
8	11	Outlet to Euclid Creek - near 17805 East 178 Street
50	11	Outlet to Lake Erie behind 17903 Dorchester Drive
51	11	Outlet to Euclid Creek - behind 1000 East 185 Street
52	11	Outlet to Euclid Creek - near 18901 St. Clair Avenue (under Euclid Creek bridge)
21	1	Near I-480 W to Lee Road Ramp & Kollin Avenue
55	1	Southern end of East 176 Street (Kerruish Park)
20	2	Off Brooks Road - behind 4393

WPC OUTFALL INVENTORY

Location ID	Ward	Outfall Location
45	12	Behind 4763 Marcie Drive near SR 176
47	12	West end of Spring Road (near SR 176)
56	12	Off Pallister Drive
57	12	East end of Skyview Road & Bradley Road
38	12	Berger Avenue storm sewer outlet to Stickney Creek
41	12	Wetzel Avenue storm sewer outlet to Stickney Creek
33	12	Archmere Avenue storm sewer outlet to Stickney Creek
40	12	Bader Avenue storm sewer outlet to Stickney Creek
35	12	Bader Avenue storm sewer outlet to Stickney Creek
36	13	West side of State Road near I-480 Exit Ramp
17	16	Near west end of parking lot on Maplewood Avenue & W. 191st Street
18	16	East end of Coe Avenue behind 4593 West 145th Street
14	17	Behind 42299 Ridgeland Circle
15	17	Near 4304 West 197th Street near Harsax Avenue
16	17	Near 4292 West 197th Street near Harsax Avenue

WPC OUTFALL INVENTORY

Location ID	Ward	Outfall Location
13	17	Near 19901 Golf View Drive
12	17	Near 19901 Metropolitan Drive
11	17	Behind 18008 Norwell Avenue
53	17	Behind 4130 Rustic Road
10	17	Behind 18200 Lorain Avenue
9	17	Outlet to Rocky River near 17228 Erndale Avenue

APPENDIX D: WPC IDDE Tracking Form



**DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF WATER POLLUTION CONTROL
IDDE TRACKING FORM**

Date Illicit Discharge Observed/Reported:	Outfall ID# (if applicable):
Description of IDDE:	
Date of Investigation:	
Was the source found? <input type="checkbox"/> Yes <input type="checkbox"/> No	
If "Yes," please describe:	
Was IDDE Resolved: <input type="checkbox"/> Yes <input type="checkbox"/> No	
If "Yes," please explain how it was resolved (Please include any personnel or outside parties contacted or involved):	
If "No," please explain why it was not resolved:	
Is any follow-up action required? <input type="checkbox"/> Yes <input type="checkbox"/> No	
If "Yes," please explain:	
Date investigation closed:	
Attach photos to this form and retain for records.	

APPENDIX E: WPC Knowledge Check Quiz



**DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF WATER POLLUTION CONTROL
IDDE KNOWLEDGE CHECK QUIZ**

Name: _____

Date: _____

1. IDDE stands for:
 - a. Illegal Dormant Discharge and Experiment
 - b. Illicit Discharge Detection and Elimination
 - c. Important Discovery Development and Explosion
 - d. Impulsive Document Disposal and Exposure

2. An illicit discharge is defined as:
 - a. Wearing away of soils by wind, air, and rain.
 - b. A discharge from a harmful chemical reaction.
 - c. Discharges from permitted industrial operations.
 - d. Any discharge that is not composed entirely of stormwater.

3. The IDDE program outlines actions to eliminate illicit discharges including all of the following except:
 - a. Identify the source
 - b. Ignore the complaint
 - c. Investigate the discharge
 - d. Document activities

4. The severity index classifications to prioritize illicit discharges do NOT include:
 - a. Obvious
 - b. Preventative
 - c. Potential
 - d. Suspect

5. If the source of an illicit discharge is not easily identifiable you should:
 - a. Leave the site
 - b. Come back next year
 - c. Call the police department
 - d. Track the discharge to its point of entry into the drainage system and document conditions

6. If the illicit discharge originates outside of the City, the proper action is to:
 - a. Contact the adjacent locality/authority and request the elimination of

- the discharge
 - b. File charges in court
 - c. Ignore it because you aren't causing it
 - d. Re-inspect at a later date
7. The goal of the IDDE program is to:
- a. Eliminate non-stormwater discharges
 - b. Prevent erosion
 - c. Prevent overuse of fertilizers
 - d. Protect animal welfare
8. True or False: To qualify as an illicit discharge it must occur continuously, and one Time episodes do not qualify.
9. Which of these sources is an illicit discharge:
- a. Waterline flushing
 - b. Air conditioning condensate
 - c. Automotive fluids
 - d. Fire-fighting activities
10. An outfall can be defined as:
- a. A drop inlet in the parking lot
 - b. A filter that separates oil and water
 - c. A location where concentrated flow discharges to surface waters
 - d. A low lying wet area commonly filled with cattails

APPENDIX F

OHIO ENVIRONMENTAL PROTECTION AGENCY'S STORMWATER POLLUTION PREVENTION PLAN (SWP3) CHECKLIST FOR CONSTRUCTION ACTIVITIES (OHC000004)



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 Craig W. Butler, Director

Storm Water Pollution Prevention Plan (SWP3) Checklist for Construction Activities (OHC000004)

Facility Name:	Date SWP3 Received:
SWP3 Reviewer:	Date SWP3 Reviewed:

Part III.G.1 - Site Description

Does the SWP3.....	Y	N	N/A	Comments
(a) describe the nature and type of construction activity (e.g., low density residential, shopping mall, highway, etc.)?				
(b) describe the total area of the site that is expected to be disturbed (i.e., the area of grubbing, clearing, excavating, filling, or grading including off-site borrow areas)?				
(c) include a calculation of the runoff coefficients for both the pre-construction and post-construction site conditions?				
(d) include an estimation of the impervious area and percent imperviousness as a result of the construction activity?				
(e) include any existing data describing the soil? <i>NOTE: If this data is not available, it does not need to be included.</i>				
provide any information on the quality of the storm water discharge from the construction site? <i>NOTE: If this data is not available, it does not need to be included.</i>				
(f) include any information about prior land uses at the site (e.g., was the property used to manage solid or hazardous waste)?				
(g) include an implementation schedule which describes the sequence of major construction operations (i.e., grubbing, excavating, grading, utilities and infrastructure installation) and the implementation of erosion, sediment and storm water management practices or facilities to be employed during each operation of the sequence?				
(h) include the name(s) or location(s) of the initial and subsequent surface water bodies receiving the storm water discharge?				
include the areal extent and description of the wetland or other special aquatic sites which will be disturbed and/or will receive the storm water discharges?				
(i) include a detail drawing of a typical individual lot with shown sediment and erosion controls for construction sites with no centralized sediment controls (e.g., a sediment settling pond or inlet protection), which receives drainage from multiple lots?				
(j) include the location and description of storm water discharges associated with dedicated asphalt and/or concrete batch plants covered by the NPDES construction storm water general permit?				
(k) include a copy of the NPDES construction storm water general permit?				
(l) include a cover page identifying the name and location of the site, the name and contact information for site operators and SWP3 authorization agents as well as preparation date, start date, and completion date?				



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(m) include a modification log to be updated in the field?				
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Part III.G.1.n - Site Map Requirements				
Does the SWP3 site map.....	Y	N	N/A	Comments
(i) describe the limits of earth-disturbing activity of the site including associated off-site borrow or spoil areas that are not addressed by a separate NOI and associated SWP3?				
(ii) describe the soils types depicted for all areas of the site, including locations of unstable or highly erodible soils?				
(iii) show existing and proposed contours to delineate drainage watersheds expected during and after major grading activities as well as the size of each drainage watershed, in acres?				
(iv) show surface water locations including springs, wetlands, streams, lakes, water wells, etc., on or within 200 feet of the site, including the boundaries of wetlands or stream channels and first subsequent named receiving water(s) the permittee intends to fill or relocate for which the permittee is seeking approval from the Army Corps of Engineers and/or Ohio EPA?				
(v) include the location of existing and planned buildings, roads, parking facilities, and utilities?				
(vi) include the location of all erosion and sediment control practices, including the location of areas likely to require temporary stabilization during the course of site development?				
(vii) include the location of sediment and storm water management basins noting their sediment settling volume and contributing drainage area?				
(viii) include the location of permanent storm water management practices to be used to control pollutants in storm water after construction operations have been completed?				
(ix) include areas designated for the storage or disposal of solid, sanitary, and toxic wastes (including dumpster areas), areas designated for cement truck washout, and areas for vehicle fueling?				
(x) include the location of designated construction entrances where the vehicles will access the construction site?				
(xi) include the location of any in-stream activities including stream crossings?				

Part III.G.2 - Sediment & Erosion Controls				
(a) Non-Structural Preservation Methods	Y	N	N/A	Comments
(1) Has every effort been made to preserve the natural riparian setback adjacent to streams or other surface water bodies?				
(2) Have efforts been made to phase in construction activities in order to minimize the amount of land disturbance at one time?				
(3) Will any portions of the site be left undisturbed (e.g., tree preservation areas)?				
(b) Erosion Controls	Y	N	N/A	Comments
(1) Does the SWP3 describe the control practices used to restabilize areas after grubbing or construction?				



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(2) Does the SWP3 specify the types of stabilization measures to be employed for any time of the year?				
(b)(2)(i) Temporary Stabilization	Y	N	N/A	Comments
For disturbed areas within 50 feet of a stream remaining dormant for over 14 days, will temporary erosion controls be applied within 2 days?				
For disturbed areas over 50 feet away from a stream remaining dormant for over 14 days, will temporary erosion controls be applied within 7 days?				
For disturbed areas that will be left idle over winter, will temporary erosion controls be applied prior to onset of winter weather?				
(b)(2)(i) Permanent Stabilization	Y	N	N/A	Comments
For disturbed areas within 50 feet of a stream at final grade, will permanent erosion controls be applied within 2 days of reaching final grade?				
For disturbed areas remaining dormant for over 1 year or at final grade, will permanent erosion controls be applied within 7 days?				
(c) Runoff Control Practices	Y	N	N/A	Comments
(1) Does the SWP3 incorporate measures to reduce flow rates (e.g., riprap, ditch check dams)?				
(2) Does the SWP3 incorporate measures to divert concentrated flow (e.g., pipe slope drains)?				
(d) Sediment Control Practices	Y	N	N/A	Comments
(1) Will sediment control devices be implemented for all areas remaining disturbed for over 14 days?				
(2) Are detail drawings of the sediment controls to be used included in the SWP3?				
(d)(i) Timing of Installing Sediment Controls	Y	N	N/A	Comments
Does the SWP3 specify that sediment controls will be installed/implemented within 7 days of grubbing activities?				
Does the SWP3 propose alternate sediment controls for the changing slopes and topography?				
(d)(ii) Sediment Settling Ponds	Y	N	N/A	Comments
Does the SWP3 include the installation and use of a sediment settling pond? <i>NOTE: Sediment settling ponds are required for all drainage areas of 10 or more acres of land disturbed at one time, when there is concentrated runoff (storm sewer or ditch), or when the design capacity of silt fence or inlet protection has been exceeded.</i>				
For construction activities that require sediment settling pond(s), does the SWP3 propose to implement alternative controls to sediment settling ponds? <i>NOTE: Alternative controls must be equivalent in effectiveness to a sediment settling pond.</i>				
Is the dewatering volume of the sediment settling pond sized to receive at least 67 cubic yards (1800 cubic feet) of storm water per acre of total drainage area?				



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Is the depth of the dewatering volume for each sediment settling pond less than or equal to 5 feet? <i>NOTE: The base of the dewatering volume is where the skimmer is connected to the outlet.</i>				
Will the dewatering volume drain down time in between 48 hours and 72 hours?				
Does the dewatering device (e.g., a skimmer) meet the design standards of Ohio's Rainwater and Land Development Manual?				
Is the sediment storage zone volume of the pond at least 1000 cubic feet per disturbed acre (Method 1)?				
If not, was RUSLE method (Method 2) used to calculate the sediment storage zone volume?				
Is the length to width ratio of the sediment settling pond at least two units of length for every one unit of width (> 2:1 length to width)? <i>NOTE: The greater the distance from the storm water inlet into the pond to the storm water outlet, the greater likelihood of sediment settlement. This prevents short-circuiting of the pond.</i>				
Will the sediment storage zone of the pond be cleaned out when the silt occupies 40 percent of the sediment storage zone (approximately one-half of the sediment storage zone depth)?				
Is the sediment settling pond designed to consider public (i.e., child) safety where site limitations preclude a safe design?				
(d)(iii) Silt Fence & Other Diversions	Y	N	N/A	Comments
Will silt fence or other diversions be used to control sheet flow?				
Will silt fence be used in areas of steep slopes or concentrated flow? <i>NOTE: Silt fence is not permitted to be used for controlling high velocity storm water flow (only sheet flow).</i>				

Design Capacity of Silt Fence

Maximum drainage area (in acres) to 100 linear feet of silt fence	Range of slope for a particular drainage area (in percent)
0.5	< 2%
0.25	≥ 2% but < 20%
0.125	≥ 20% but < 50%

(d)(iv) Inlet Protection	Y	N	N/A	Comments
Will the field drain inlets and/or the street curb inlets drain into a sediment settling pond or directly to surface waters of the state? <i>NOTE: Inlet protection is mandatory where sediment settling ponds will not be implemented.</i>				
Do any inlets not connected to a sediment settling pond receive runoff from one or more acres?				
Does the inlet protection meet the standards of Ohio's Rainwater and Land Development Manual?				



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(d)(v) Stream Protection	Y	N	N/A	Comments
Does the SWP3 propose to use any structural sediment controls in a stream? <i>NOTE: Use of structural sediment controls in-stream is prohibited in accordance with Part III.G.2.d.v.</i>				
For construction activities that are on the stream bank or will involve stream crossing, does the SWP3 include measures to minimize the number of stream crossings and/or the width of disturbance? <i>NOTE: If work along a stream bank is necessary, a non-erodible pad or non-erodible stream diversion dams (sand bags) must be installed. If stream crossings are necessary, a non-erodible stream crossing must be installed.</i>				

Part III.G.2.e – Post-Construction Storm Water Management				
	Y	N	N/A	Comments
Does the SWP3 include the installation of a structural post-construction best management practice (BMP) to manage storm water runoff once construction activities have been completed?				
Will the construction activity result in the installation of any impervious surface? <i>NOTE: Projects that do not result in the installation of impervious surface do not require the installation of post-construction BMPs.</i>				
Has a long-term maintenance plan been developed or included in the SWP3 for maintenance of the structural post-construction BMP? <i>NOTE: The long-term maintenance plan must be developed and provided to the post-construction site operator, but does not need to be implemented as required by this permit. Local municipalities may require maintenance plan implementation.</i>				
Is the construction activity a linear project (e.g., pipeline or utility line installation) that does not result in the installation of impervious surface? <i>NOTE: Linear projects that don't result in the installation of impervious surface do not need the installation of structural post-construction BMPs.</i>				
Large Construction Activities (≥ 5 Acres)	Y	N	N/A	Comments
Does the SWP3 include a structural post-construction BMP with a specified volume and drain time?				
If so, was one of the two methods proposed in the NPDES construction storm water general permit (CGP) used to determine the water quality volume (WQv) and drain time?				
If the formula described in the CGP was used to calculate the WQv, were the correct values used for:				
(a) runoff coefficient (C)?				
(b) precipitation depth (P = 0.75-inches)?				
(c) and the drainage area (A) to the BMP?				
If the structural post-construction BMP will be used for sediment storage and/or has a reduced infiltration capacity, was the WQv increased by an additional 20 percent (“fudge factor”)?				



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Does the drain time in the SWP3 for the proposed structural post-construction BMP match the drain time for the selected BMP in the table below?			
Does the outlet structure of the post-construction BMP allow the discharge of half or more of the WQv or EDv in less than 1/3 rd of the drain time?			

Target Drain Times for Structural Post-Construction BMPs

Best Management Practice	Drain Time of WQv
Infiltration Basin or Trench ¹	48 hours
Permeable Pavement - Infiltration ¹	48 hours
Permeable Pavement – Extended Detention	24 hours
Dry Extended Detention Basin ²	48 hours
Wet Extended Detention Basin ³	24 hours
Constructed Wetland (above permanent pool) ⁴	24 hours
Sand & Other Media Filtration ⁵	24 hours
Bioretention Cell ^{5,6}	24 hours
Pocket Wetland ⁷	24 hours

- 1 Practices that are designed to fully infiltrate the WQv (basin, trench, permeable pavement) shall empty within 48 hours to provide storage for the subsequent storm events.
- 2 Dry basins must include forebay and micropool each sized at 10% of the WQv.
- 3 Provide both a permanent pool and an EDv above the permanent pool, each sized at 0.75 WQv.
- 4 Extended detention shall be provided for the WQv above the permanent water pool.
- 5 The surface ponding area (WQv) shall completely empty within 24 hours so that there is no standing water. Shorter drawdown times are acceptable as long as design criteria in Ohio’s Rainwater and Land Development manual have been met.
- 6 This would include Grassed Linear Bioretention which was previously called Enhanced Water Quality Swale.
- 7 Pocket wetlands must have a wet pool equal to the WQv, with 25% of the WQv in a pool and 75% in marshes. The EDv above the permanent pool must be equal to the WQv.

Large Construction Activities (Continued)	Y	N	N/A	Comments
If the SWP3 proposes to use an alternative BMP instead of one of the BMPs listed in the table above, is the alternative BMP equivalent in effectiveness to the BMPs listed above?				
Is there a pre-existing drainage basin or other BMP that will receive the storm water drainage from the construction site, is it sized appropriately to treat the WQv?				
For public road construction activities, are the post-construction BMPs designed consistent with the Ohio Department of Transportation’s “Location and Design Manual, Volume Two?”				
For construction activities where a post-construction BMP cannot be placed onsite and will require an offsite post-construction BMP, has the offsite mitigation proposal been authorized by Ohio EPA? <i>NOTE: Offsite BMPs must have a long-term maintenance agreement, be within the same HUC, and be at least 1.5 times the size of an onsite BMP.</i>				



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For redevelopment projects which disturb 5 or more acres of land, was one of the following options used to as a post-construction practice:				
(a) 20% reduction in impervious area?				
(b) a BMP sized to treat 20% of the WQv?				
(c) or a combination of (a) and (b) above?				
For construction activities where non-structural post-construction BMPs are proposed, has the substitution of structural BMPs with non-structural BMPs been authorized?				
For construction activities where alternative post-construction BMPs are proposed, has the alternative BMP been authorized by Ohio EPA? <i>NOTE: Alternative BMPs must have TARP Tier II acceptance, be able to remove 80% of total suspended solids (TSS) in the runoff, and be able to treat the WQv unless hydrologic impacts are not necessary.</i>				
Has the local municipality authorized the use of an alternative post-construction BMP?				
Small Construction Activities (≥ 1 Acre, but < 5 Acres)	Y	N	N/A	Comments
Does the SWP3 include a structural post-construction BMP? <i>NOTE: A structural post-construction BMP is required for small construction activities, but the design standards have not been specified in the CGP.</i>				
(i) If so, does the SWP3 explain the technical basis used to select the BMPs chosen where flows exceed pre-development levels?				
(ii) Does the SWP3 include the installation of velocity dissipation devices at discharge locations and outfall channels?				

Part III.G.2.f - Surface Water Protection				
	Y	N	N/A	Comments
Does the construction site contain any streams, rivers, lakes, or wetlands?				
If so, has the U.S. Army Corps of Engineers been contacted for a determination of impacts requiring Clean Water Act 401 or 404 permitting?				
For storm water discharges from BMPs into wetlands, have BMPs (e.g., level spreaders, buffers, or infiltration basins) been proposed to diffuse the concentrated flow into non-erosive flow?				

Part III.G.2.g - Non-Sediment Pollutant Controls				
Handling of Toxic or Hazardous Materials	Y	N	N/A	Comments
(1) Does the SWP3 provide directions on how to dispose toxic or hazardous wastes properly?				
(2) Does the SWP3 provide areas for recycling of used or unused hazardous materials? <i>NOTE: No toxic or hazardous wastes shall be disposed into storm drains, septic tanks, or by burying, burning, or mixing the wastes.</i>				



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Waste Disposal	Y	N	N/A	Comments
Will containers (e.g., dumpsters, drums) be available for disposal of debris, trash, hazardous or petroleum wastes? <i>NOTE: All containers must be covered and leak-proof.</i>				
Clean Hard Fill	Y	N	N/A	Comments
(1) Are bricks, hardened concrete, and soil waste free from contamination which may leach constituents to waters of the state?				
(2) If clean construction wastes will be disposed into the property, are there any local prohibitions from this type of disposal?				
Construction & Demolition Debris	Y	N	N/A	Comments
Does the SWP3 state that all construction & demolition debris (C&DD) waste will be disposed of in an Ohio EPA approved C&DD landfill as required by Ohio Revised Code (ORC) 3714? <i>NOTE: Construction debris may be disposed of on-site, but demolition debris must be disposed in an Ohio EPA approved landfill. Materials which contain asbestos must comply with air pollution regulations (see Ohio Administrative Code 3745-20).</i>				
Construction Chemical Compounds	Y	N	N/A	Comments
(1) Does the SWP3 designate areas used for mixing or storage of compounds such as fertilizers, lime, asphalt, or concrete?				
(2) If so, are these areas located away from watercourses, drainage ditches, field drains, or other storm water drainage areas?				
Equipment Fueling & Maintenance	Y	N	N/A	Comments
(1) Does the SWP3 designate areas used for fueling or performing vehicle maintenance?				
(2) If so, are these areas located away from watercourses, drainage ditches, field drains, or other storm water drainage areas?				
(3) Has a spill prevention control and countermeasures (SPCC) plan been developed? <i>NOTE: A SPCC plan must be developed for sites with one above ground storage tank (AST) of 660 gallons or more, total above ground tank storage of 1330 gallons, or below ground storage of 42,000 gallons of fuel.</i>				
Concrete Wash Waters	Y	N	N/A	Comments
(1) Does the SWP3 designate areas used for receiving concrete chute or other concrete wash waters?				
(2) If so, are these areas located away from watercourses, drainage ditches, field drains, or other drainage areas?				
Trench & Ground Water Control	Y	N	N/A	Comments
Does the construction site have an onsite trench or pond that must be dewatered?				
If so, does the SWP3 call for the discharge of potentially turbid water through a filter bag, sump pit, or other sediment removal device?				
Contaminated Soils	Y	N	N/A	Comments



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Does the SWP3 address proper handling and disposal of soils contaminated by petroleum or other chemical spills? <i>NOTE: All contaminated soils must be treated and/or disposed in Ohio EPA approved solid waste management facilities or hazardous waste treatment, storage or disposal facilities (TSDFs).</i>				
If the facility contains contaminated soil, which of the following practices will be used to prevent contamination from being released?				
(1) The use of berms, trenches, and pits to collect contaminated runoff and prevent discharges				
(2) Pumping runoff into a sanitary sewer (with prior approval of the sanitary sewer operator) or into a container for transport to an appropriate treatment/disposal facility				
(3) Covering areas of contamination with tarps or other methods that prevent storm water from coming into contact with the material				
Spill Reporting Requirements	Y	N	N/A	Comments
(1) Does the SWP3 describe what to do in the event of a small release (less than 25 gallons) of petroleum waste? <i>NOTE: Petroleum based and concrete curing compounds must have special handling procedures.</i>				
(2) Does the SWP3 describe what to do in the event of a larger release (25 or more gallons) of petroleum waste? <i>NOTE: You must contact, Ohio EPA (at 1-800-282-9378), the local fire department, and the local emergency planning committee (LEPC) within 30 minutes of a spill of 25 or more gallons.</i>				
Open Burning	Y	N	N/A	Comments
(1) Is open burning performed in a restricted area (as defined in OAC 3745-19)? <i>NOTE: Open burning is permitted in restricted areas for barbeques, heating, and certain occupational purposes.</i>				
(2) Is open burning performed in a non-restricted area, but within 1,000 feet of an inhabited building away from the property? <i>NOTE: Open burning in an unrestricted area is limited to scrap lumber, wooden fence posts, agricultural, land-clearing, or landscape wastes.</i>				
Dust Controls/Suppressants	Y	N	N/A	Comments
(1) Are dust suppressants proposed to be used in the SWP3?				
(2) If so, are the areas which the dust suppressant will be applied located near catch basins for storm sewers or other drainage ways? <i>NOTE: Used oil may not be used as a dust suppressant.</i>				
Air Permitting Requirements	Y	N	N/A	Comments
(1) Have appropriate measures been taken to ensure that all air pollution permits have been obtained? <i>NOTE: Air pollution permits may be required for activities including, but not limited to, mobile concrete batch plants, mobile asphalt plants, concrete crushers, and large generators.</i>				
(2) For restoration or demolition projects, will a notification be submitted to Ohio EPA, Division of Air Pollution Control to determine if asbestos corrective actions are required?				



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 Craig W. Butler, Director

Process Wastewater/Leachate Management	Y	N	N/A	Comments
Will all process wastewaters (e.g., equipment washing, leachate associated with on-site waste disposal, and concrete wash-outs) be collected and disposed of properly (e.g., to a publicly-owned treatment works)? <i>NOTE: The NPDES construction storm water general permit only authorizes the discharge of storm water and certain uncontaminated non-storm waters. The discharge of non-storm waters to waters of the state may be in violation of local, state, and federal laws or regulations.</i>				
Additional Concerns	Y	N	N/A	Comments
For construction activities involving the installation and/or replacement of a centralized sanitary system, (including sewer extensions) or a sewerage system (except those serving one, two, and three family dwellings) and potable water lines, was a PTI application submitted to Ohio EPA? <i>NOTE: Coverage under the NPDES construction storm water general permit does not alone authorize the installation of such sanitary sewerage systems or potable water lines.</i>				
Does the SWP3 include measures for implementing good housekeeping practices?				
Does the SWP3 promote the use of protected storage areas for industrial or construction materials to minimize exposure of such materials to storm water?				

Part III.G.2.i - Inspections				
	Y	N	N/A	Comments
Does the SWP3 require weekly inspections of BMPs and an inspection within 24 hours after every rain event of 0.5 inches within a 24 hour period?				
If the site will be dormant for a long period, it's stabilized, and less frequent inspections are desired, does the SWP3 call for a waiver request to be submitted to OEPA for a reduction to monthly inspections?				
Does the SWP3 state that only "qualified inspection personnel" will perform the inspections?				
Does the SWP3 state that an inspection checklist will be completed and signed by the inspector after every inspection?				
Does the SWP3 state that inspection records will be kept for 3 years after termination of construction activities?				
For BMPS that require repair or maintenance, does the SWP3 specify non-sediment pond BMPs to be repaired within 3 days of inspection and sediment ponds to be repaired or cleaned out within 10 days of inspection?				
For BMPs not meeting the intended function, does the SWP3 state that a new BMP will be installed within 10 days of the inspection?				
For missing BMPs required for installation by the SWP3, does the SWP3 state that the missing BMPs will be installed within 10 days of the inspection?				