NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Storm Water Management Program

City of Canton, Ohio

218 Cleveland Ave. SW
Canton, OH 44702
www.cantonohio.gov

Ohio EPA NPDES General Permit Number: OHQ000003
Storm Water Associated with: Small MS4
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Certification

In accordance with the signatory requirements of Part V.G.4. of NPDES Permit No. OHQ000003, the following certification is made:

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

_____

Signature Date

Printed Name:

Title:

List of Abbreviations

The following abbreviations may be used in this document:

BMP	Best Management Practice
CB	Catch Basin
CSD	Collection Systems (Sewer) Department
DMV	Division of Motor Vehicles
EPA	Environmental Protection Agency
GIS	Geographical Information System
HSTS	Home Sewage Treatment System
ID	Illicit Discharge
IDDE	Illicit Discharge Detection and Elimination
LTMP	Long-Term Maintenance Plan
MCM	Minimum Control Measure
MH	Manhole
MOU	Memorandum of Understanding
MSDS	Material Safety Data Sheet
MS4	Municipal Separate Storm Sewer System
N/A	Not applicable
NEOSWTC	Northeast Ohio Stormwater Training Council
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
ODNR	Ohio Department of Natural Resources
ODOT	Ohio Department of Transportation
POTW	Publicly-Owned Treatment Works
PPGHP	Pollution Prevention/Hood Housekeeping Program
SWCD	Soil & Water Conservation District
SWMP	Storm Water Management Program
SWP3	Storm Water Pollution Prevention Plan
TBD	To Be Determined
TMDL	Total Maximum Daily Load
US	United States
USEPA	United States Environmental Protection Agency
WQ	Water Quality
WRF	Water Reclamation Facility

Introduction

The National Pollutant Discharge Elimination System (NPDES) Storm Water Program is USEPA's permitting mechanism to preserve, protect, and improve the nation's water resources from polluted storm water runoff. Since 2003, Phase II of the NPDES Storm Water Program has regulated storm water discharges from "small" municipal separate storm sewer systems (MS4s) – those serving populations less than 100,000 within Census-defined urbanized areas. Storm water discharges from MS4s in urbanized areas are a concern because of the higher concentrations of pollutants found in these discharges compared to discharges from non-urbanized areas. Common pollutants from urbanized areas include pesticides, fertilizers, oils, salt, litter and other debris, and sediment. Storm water runoff picks up and transports these and other harmful pollutants then discharges them – untreated – to waterways via storm drainage systems. When left uncontrolled, these discharges can result in fish kills, the destruction of spawning and wildlife habitats, a loss in aesthetic value, and contamination of drinking water supplies and recreational waterways that can threaten public health. With a population less than 100,000 and being located within the Canton Urbanized Area, the City of Canton has been defined by EPA as a regulated "Small MS4 Operator". Accordingly, Canton is regulated by an NPDES Small MS4 Permit which is administered locally by Ohio EPA.

The NPDES Storm Water Program mandates the City of Canton to obtain NPDES permit coverage and comply with permit requirements by preparing a written Storm Water Management Program (SWMP) and implementing it over a 5-year permit term. The SWMP is required to address pollution in storm water discharges from City of Canton MS4s by satisfying the appropriate water quality requirements of Ohio Revised Code (ORC) 6111, the Clean Water Act, and other conditions of the permit related to six "Minimum Control Measures":

1. **Public Education and Outreach on Storm Water Impacts**
2. **Public Involvement/Participation**
3. **Illicit Discharge Detection and Elimination**
4. **Construction Site Storm Water Runoff Control**
5. **Post-Construction Storm Water Management in New Development and Redevelopment**
6. **Pollution Prevention/Good Housekeeping for Municipal Operations**

The ultimate hope of implementation of a SWMP is to reduce pollutants in storm water runoff from City of Canton MS4s and improve the overall health and quality of the Nimishillen Creek and other local water bodies.

Since 2003, the City of Canton has obtained permit coverage under previous versions of Ohio EPA NPDES Small MS4 general permits #OHQ000001 and #OHQ0000002. On September 11, 2014, Ohio EPA issued a new NPDES Small MS4 general permit, #OHQ000003. The City of Canton obtained coverage under this new permit on December 2, 2014. Although many requirements of the new permit remained unchanged compared to previous versions, the new permit has additional requirements for the City of Canton to update its SWMP and to submit the revised SWMP to Ohio EPA. Among other things, updates must include the selection of Best Management Practices (BMPs) to address USEPA-approved Total Maximum Daily Load (TMDL) recommendations for identified water quality problems associated with MS4 discharges within the City of Canton's impaired watersheds.

This document is the City of Canton's latest revised Storm Water Management Program as required by NPDES Small MS4 General Permit #OHQ000003.

Latest revision: 1/4/2019

Overview of City of Canton

Located in northeastern Ohio, the City of Canton provides its residents with many benefits of big-city living while maintaining its charm as a medium-sized Midwestern town. Canton is home to many well-known national landmarks like the NFL Pro Football Hall of Fame, the William McKinley Presidential Library/National Monument, and the National First Ladies Library and Research Center.

In addition to being the birthplace of American professional football and many important figures in our nation's history, Canton is also home to a vibrant arts community. The Canton Symphony Orchestra, Canton Ballet, and Canton Museum of Art give residents a place to experience art and culture from around the world, and its growing local artists' community is quickly becoming well-known as a dynamic presence in the region.

World-class hospitals and five area universities provide excellent care and an enriching learning environment while the serenity of Canton's public parks and nature preservations allow Cantonians time away from the hustle and bustle of city living. With the cost of real estate estimated at less than half of the national average, Canton is as affordable as it is enjoyable.

The City of Canton was incorporated as a city in 1838. It is the county seat of Stark County. The City's location in Stark County is approximately 58 miles southeast of Cleveland, 20 miles south of Akron, and 94 miles west of Pittsburgh, PA. The City of Canton is the 8th largest city in Ohio according to its 2010 population of 73,007. The total incorporated area is approximately 26 square miles, with most of the City being located within the Census-defined Canton Urbanized Area. The City is responsible for approximately 460 miles of public roadway within the corporation limits.

Government Structure & Legal Authority

The City of Canton is a statutory form of government made up of three branches: the Executive Branch, the Legislative Branch, and the Judicial Branch. The Executive Branch includes the Mayor and his/her administration, the Law Department, Auditor, Treasurer, and Civil Service Commission. It is the duty of the Executive Branch to administer and enforce the laws of the City. The Legislative Branch is Canton City Council. The City Council adopts ordinances and resolutions that become laws of the City. The Judicial Branch is the Canton Municipal Court District and the Clerk of Courts Office. Canton Municipal Court adjudicates misdemeanor crimes. In felony cases, Municipal Court holds preliminary hearings that bind the felony case over to the Stark County Court of Common Pleas.

Drainage & Hydrographic Information

It is estimated that there are approximately 700 miles of *public* drainage systems within the City of Canton corporation limits. Since the majority of Canton is urbanized, most storm water runoff in the City drains into public drainage systems. These public systems, or "MS4s", consist of storm sewers, culverts, roadside ditches and swales, detention and retention basins, storm water quality treatment practices, and other miscellaneous conveyances and practices. Besides City of Canton MS4s, there are also many *private* drainage systems and practices as well as various types of *waters of the state* that convey storm water runoff. Depending on topography, flow patterns, location, and respective ownership, MS4s, private drainage systems, and waters of the state may or may not be inter-connected. All drainage systems eventually discharge into one of five major drainage channels/creeks that flow through the City:

1. *West Branch Nimishillen Creek*, which generally drains western portions of the City.
2. *Middle Branch Nimishillen Creek*, which generally drains northern, central, and southeastern portions of the City.
3. *East Branch Nimishillen Creek*, which generally drains eastern portions of the City.
4. *Hurford Run*, which generally drains southwestern portions of the City.
5. *Nimishillen Creek*, which generally drains southern portions of the City.

All five of these creeks and their respective drainage areas comprise the Nimishillen Creek watershed. The Nimishillen Creek ultimately drains southerly into the Tuscarawas River, the Muskingum River, the Ohio River, the Mississippi River, and the Gulf of Mexico, respectively.

Total Maximum Daily Loads (TMDLs)

The City of Canton is located entirely within the 188-square-mile Nimishillen Creek watershed. In 2009, Ohio EPA's TMDL Report for the Nimishillen Creek Watershed was approved by USEPA. The TMDL Report specifies the maximum amounts of certain types of pollutants that can be in the Nimishillen Creek before acceptable water quality standards can no longer be met. For the Nimishillen Creek watershed, impairments were found for biological communities, phosphorus levels, and bacteria levels. Thus, TMDLs were established for habitat (biological communities), nutrients (phosphorous), and bacteria. This means that anything that is considered to be a cause or source of the specific impairments of concern needs to be a priority so that appropriate actions can be taken to reduce the associated amounts of pollutants from those sources to acceptable levels.

Nimishillen Creek Watershed TMDL Pollutant Parameters of Concern
☑ Habitat (biological communities)
☑ Nutrients (phosphorous)
☑ Bacteria

One of many requirements of the NPDES Small MS4 Permit is for the City of Canton to implement appropriate actions and BMPs to address TMDLs as part of its SWMP. The Northeast Ohio Storm Water Training Council (NEOSWTC) has recommended certain BMPs for each Minimum Control Measure to address Nimishillen Creek TMDLs (see http://neohiostormwater.com/index.htmll for details). All of the recommended BMPs are also listed in this SWMP. Some of them have already been implemented, are being implemented, will be implemented, or will only be implemented as feasible.

Storm Water Management Program Development

As mentioned in the "Introduction", the City's SWMP is mainly required to address six "Minimum Control Measures (MCMs)":

1. Public Education and Outreach on Storm Water Impacts
2. Public Involvement/Participation
3. Illicit Discharge Detection and Elimination
4. Construction Site Storm Water Runoff Control
5. Post-Construction Storm Water Management in New Development and Redevelopment
6. Pollution Prevention/Good Housekeeping for Municipal Operations

Each MCM requires the development of a respective individual program focused on a particular aspect of storm water pollution prevention. Collectively, the six individual programs form a larger comprehensive "Storm Water Management Program".

Composition of Comprehensive "Storm Water Management Program"	
Minimum Control Measure #	**MCM Program Name**
MCM#1:	"Storm Water Public Education and Outreach Program"
MCM#2:	"Storm Water Public Involvement/Participation Program"
MCM#3:	"Storm Water Illicit Discharge Detection and Elimination (IDDE) Program"
MCM#4:	"Construction Site Storm Water Control Program"
MCM#5:	"Post-Construction Storm Water Management Program"
MCM#6:	"Pollution Prevention/Good Housekeeping Program"

In general, the comprehensive SWMP must include descriptions of Best Management Practices (BMPs) that are to be implemented to satisfy each of the six MCMs, including documentation of why particular BMPs have been selected in light of local water quality issues, respective goals, schedules, responsible parties for BMP implementation, and other permit requirements.

This document *is* the City of Canton's comprehensive SWMP. It is the City's written response to the NPDES Small MS4 Permit and explains all six of the separate programs, their requirements, and the various actions – or BMPs – that the City plans to implement over the course of five years to be compliant with permit conditions.

Although the City of Canton government entity as a whole is regulated by the NPDES Small MS4 Permit, satisfying permit conditions requires varying levels of involvement by different City departments. Part of the SWMP development process includes identifying which City departments need to be involved, their respective levels of involvement, and clearly documenting expectations and responsibilities for implementation of assigned program BMPs. Department heads may end up delegating their department responsibilities internally to a designated employee. Thus, there are essentially three (3) main positions and roles of responsibility for various aspects of SWMP implementation.

Main Positions and Roles of Responsibility for SWMP Implementation		
#	**Position**	**Responsibilities**
1	Director of Public Service	Legal aspects and overall implementation of SWMP
2	Storm Water Program Coordinator	Overall coordination of SWMP and Annual Reports
3	Designated employees from various departments (typically department heads)	Implementation and documentation of assigned BMPs

Coordination is required across multiple positions, departments, and agencies in order to implement many of the MCM Programs and BMPs. When reliance on another entity is needed to implement certain BMPs, agreements such as Memorandums of Understanding (MOUs) are in place.

Summary of Decision Process/Rationale for Development of a "Storm Water Management Program"	
Step #	**Description**
1	Submit NOI to Ohio EPA and obtain coverage under NPDES Small MS4 Permit
2	Understand permit requirements including all six MCMs, performance standards, addressing TMDLs, and annual reporting
3	Identify BMPs (in place and/or needed) to satisfy permit requirements
4	Identify whether or not City has legal authority to implement requirements
5	Determine strategies to implement each MCM including specific BMPs, measurable goals, frequencies of implementation, and responsible parties (including any MOUs, as needed)
6	Prepare written SWMP including rationales for selection of BMPs and measurable goals
7	Implement program BMPs and requirements
8	Prepare and submit annual reports to Ohio EPA
9	Perform annual evaluation of program implementation and success
10	Make adjustments to program, as needed

Table of Organization & Department Involvement

The following Table of Organization shows the overall responsibility for the SWMP, the SWMP Primary Point of Contact, and responsible departments and respective positions that have definite, possible, or potential involvement in implementing various BMPs:

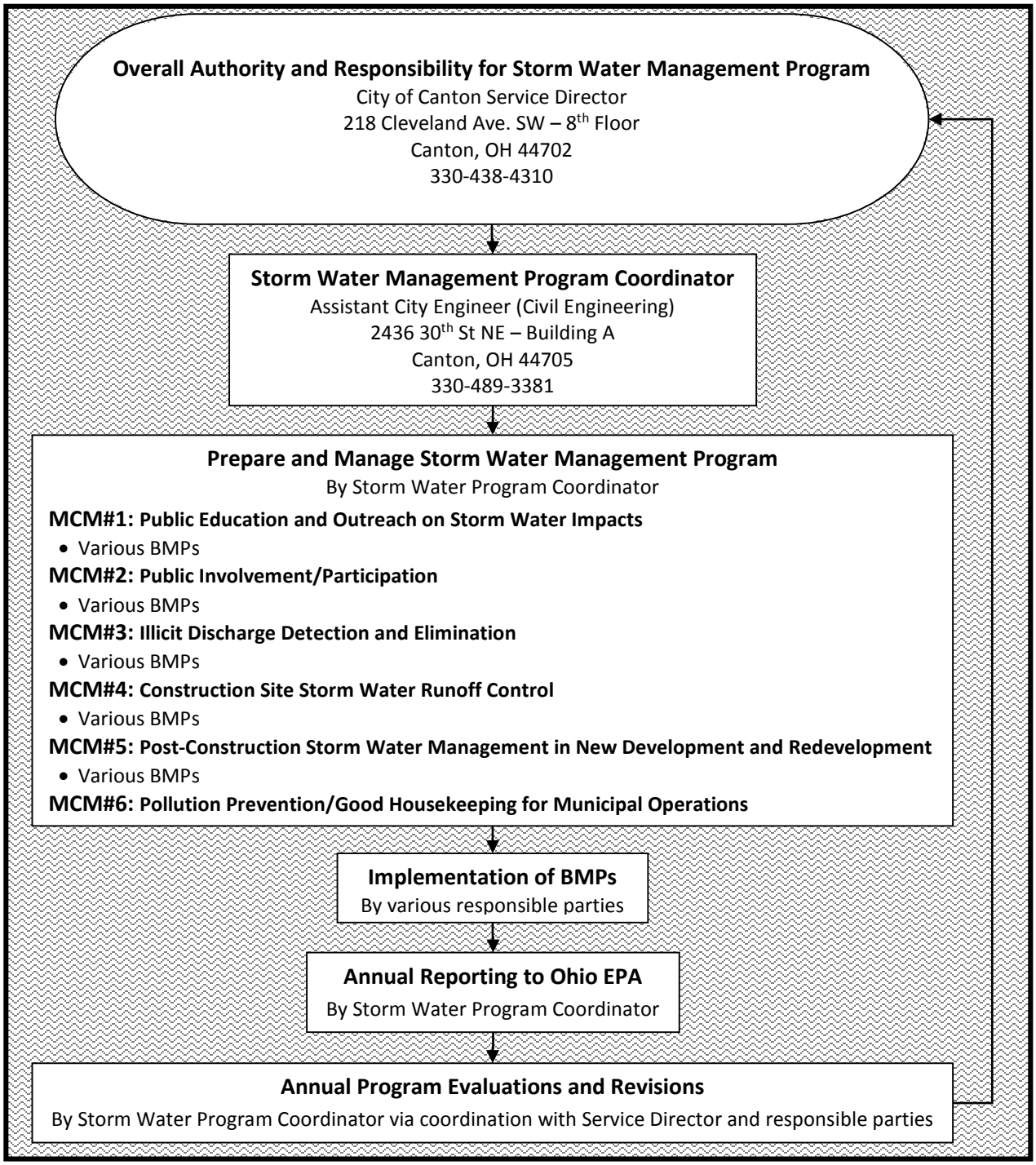
Storm Water Management Program Table of Organization							
Overall Responsibility **(Overall authority and implementation of SWMP)**							
City of Canton Service Director 218 Cleveland Ave. SW – 8th Floor Canton, OH 44702 330-438-4310							
Primary Point of Contact/Storm Water Management Program Coordinator **(Overall coordination of SWMP and Annual Reports)**							
Chris Barnes, PE, CPESC, CPSWQ, CPMSM – Asst. City Engineer City of Canton Engineering Department 2436 30th St NE – Building A Canton, Ohio 44705 330-489-3381 (Main) 330-438-6908 (Direct) chris.barnes@cantonohio.gov							
Responsible Parties **(Implementation of BMPs)**		**Minimum Control Measure**					
Department	**Position**	**MCM#1**	**MCM#2**	**MCM#3**	**MCM#4**	**MCM#5**	**MCM#6**
Building	Chief Building Official	✓	✓	✓			✓
Building Maintenance	Supervisor			✓			✓
Civil Engineering	Assistant City Engineer (Civil)	✓	✓	✓	✓	✓	✓
Collection Systems (CSD)	Superintendent	✓	✓	✓			✓
Development	Director	✓	✓	✓		✓	
Division of Motor Vehicles (DMV)	Superintendent						✓
Fire	Chief			✓			✓
Health[1]	Environmental Health Director	✓	✓	✓			✓
Judges	Community Service Director	✓	✓				
Mayor's Administration	Administrative Assistant	✓	✓				
Parks & Recreation	Director	✓	✓				✓
Planning	Director	✓	✓	✓		✓	
Police (Impound Lot)	Lieutenant						✓
Sanitation	Superintendent	✓	✓	✓			✓
Service Director	Service Director	✓	✓	✓	✓	✓	✓
Stark Soil & Water Conservation District (SWCD)[1]	Urban Resource Specialist	✓	✓	✓	✓	✓	
Street	Superintendent	✓	✓	✓			✓
Traffic: Parking	Manager						✓
Traffic: Sign & Paint	Assistant City Engineer (Traffic)						✓
Urban Forestry	City Arborist	✓	✓				✓
Water	Superintendent	✓	✓				✓
Water Reclamation Facility (WRF)	Superintendent	✓	✓				✓
Zoning	Zoning Inspector	✓	✓			✓	

✓ = Definite, possible, or potential involvement in at least one BMP. See respective MCMs for details.

[1] Memorandum of Understanding (MOU) in place to define responsibilities.

Latest revision: 1/4/2019

Storm Water Management Program Process of Implementation



MCM#1: Public Education and Outreach on Storm Water Impacts

General Requirements

As part of its overall Storm Water Management Program, the City of Canton is required to implement a "Storm Water Public Education Program" that utilizes different mechanisms to provide various storm water pollution reduction and prevention educational themes to the public. See "Further Guidance and Information for MCM#1" below for details.

Decision Process for Development of Storm Water Public Education Program

The decision process for the development of a Storm Water Public Education Program consisted of the following steps, at a minimum:

Steps to Develop and Implement a "Storm Water Public Education and Outreach Program"	
Step #	**Description**
1	Understand permit requirements
2	Identify and document the City's decision process for the development of a Storm Water Public Education and Outreach Program per permit requirements
3	Identify and implement program BMPs
4	Prepare and submit annual reports to Ohio EPA
5	Evaluate the success of the program annually and make adjustments accordingly

Additional information pertaining to the decision process is provided below.

Informing Individuals and Households about the Steps they can take to Reduce Storm Water Pollution

The City of Canton plans to inform individuals and households about the steps they can take to reduce storm water pollution through the use of various combinations of mechanisms (means to deliver a message) and themes (messages). Selected mechanisms will be based on available resources. Selected themes will mostly reflect recommendations by EPA and the Northeast Ohio Storm Water Training Council (see "Best Management Practices (BMPs)" below).

Informing Individuals and Groups on How to Become Involved in the Storm Water Management Program

Various mechanisms will be used by the City of Canton to inform individuals and groups on how to become involved in the Storm Water Management Program and related public involvement activities (see MCM#2). Public input is always welcomed through City Council meetings as well as through the Storm Water Management page of the City's website. Decisions to implement certain BMPs are often made annually and are dependent on department budgets and available resources. Therefore, upon determination that it is feasible to implement certain activities, specific details about ways to be involved in the Storm Water Management Program will be provided accordingly through respective chosen mechanisms.

Target Audiences

As of the 2010 Census, the City of Canton had a population of 73,007. It is approximately 25.5 square miles in incorporated land area. The City is mostly comprised of residential, commercial, industrial, and institutional entities. As such, these are likely to have significant impacts to storm water runoff. Therefore, the intended target audiences for the Storm Water Public Education and Outreach Program are the general public, businesses, public employees, and the development community.

MCM#1 performance standards require at least one theme or message to be targeted to the development community. Therefore, through a Memorandum of Understanding (MOU) between the City of Canton and the Stark SWCD, the Stark SWCD provides storm water education for the development community. Workshops are offered with typical themes related to construction site and post-construction storm water quality controls.

Target Pollutants and Sources

Target pollutants and sources that the City of Canton's Storm Water Public Education and Outreach Program is intended to address are those identified in the TMDL report for the Nimishillen Creek Watershed (see "Total Maximum Daily Loads (TMDLs)" above) as well as other common pollutants and sources such as: road salt, fertilizers, pesticides, unwanted vehicle fluids, unwanted household and commercial products, pet waste, car wash water, grey water, septic/sewage, yard wastes, trash/litter, construction activities, illegal discharges and connections, spills, etc. Therefore, these target pollutants and sources help shape appropriate themes chosen to be used for each public education mechanism.

Outreach Strategy

The outreach strategy to reach target audiences was to initially identify mechanisms (means to deliver a message) that were already being utilized or could be utilized to provide storm water education themes or messages. Considerations of mechanisms to be used included: availability, practicality, cost-effectiveness, and the ability of the mechanisms to satisfy the performance standards of MCM#1. Such mechanisms include, but may not be limited to:

- City's website
- City Council meetings
- Other meetings
- Local publications
- Local flyers/postings
- Social media
- Local workshops
- Storm drain markings
- Signage

Then, over the course of the five-year permit term and depending on annual budgetary and feasibility circumstances, certain mechanisms are to be selected and utilized by various departments to deliver appropriate messages. The combinations of the mechanisms and storm water education themes are the BMPs for the City's Storm Water Public Education and Outreach Program.

The ultimate goal of Canton's Storm Water Public Education and Outreach Program is to provide practical storm water education intended to result in the reduction of pollutants in storm water runoff while satisfying the MCM performance standards to use more than one mechanism and deliver at least five different storm water themes or messages over the permit term. Through implementation respective BMPs, it is the hope that the City of Canton's Storm Water Public Education and Outreach Program results in outreach approaching approximately 100% of the target audiences.

Responsible Parties for Implementing the Storm Water Public Education and Outreach Program

The City of Canton Service Director is responsible for the overall compliance of the City with the NPDES Storm Water Permit requirements. Coordination of the SWMP is delegated to the Assistant City Engineer of the Civil Engineering Department. Responsibility for implementation of *certain* BMPs has been assigned to *specific* departments. *Other* BMPs may be implemented by *any* department *as feasible*. See Best Management Practices (BMPs) below and the Table of Organization for details. As BMPs are implemented, each respective responsible position is required to maintain appropriate supporting documentation.

Best Management Practices (BMPs)

Aside from Minimum Control Measure #1 BMPs (mechanisms and themes) that may be described above, the table below also lists certain BMPs that are expected or required to be implemented by certain departments, while others are shown as recommendations for potential implementation depending on applicability and/or feasibility. Recommendations are based on USEPA and NEOSWTC recommendations:

- USEPA has prepared "BMP Fact Sheets" and other resources related to many BMPs in the City's Storm Water Management Program. They can be found on the *National Menu of Best Management Practices (BMPs) for Stormwater* webpage by clicking on the respective Minimum Control Measure tabs. The BMP Fact Sheets provide further explanation, applicability, recommendations, implementation, and effectiveness information of common

BMPs. Fact sheets and resources should be reviewed periodically by employees who are involved in respective BMP implementation. See "Further Guidance and Information for MCM#1" below.

- The Northeast Ohio Storm Water Training Council (NEOSWTC) has prepared "TMDL Fact Sheets" pertaining to respective Nimishillen Creek TMDLs and corresponding recommended BMPs to address the TMDLs. In order to meet permit requirements, appropriate BMPs must be selected to address TMDL recommendations. Therefore, some of the recommended themes are to be utilized as part of the City's Storm Water Public Education and Outreach Program.

Depending on whether or not a BMP is a requirement or recommendation, measurable goals have been written accordingly. Annual Reports will document exactly which BMPs were implemented in the previous year as well as identify possible BMPs to be implemented in the upcoming year.

Minimum Control Measure #1 Public Education and Outreach on Storm Water Impacts Best Management Practices (BMPs) See footnotes at end of table								
#	BMP			Responsible Party	Legal Authority?	Measurable Goals		Address TMDLs?
	Theme/Description	Mechanism	Justification			(Schedules, Frequency, Etc.)	Justification	
1	**Storm Water Education for the Development Community** – Through a Memorandum Of Understanding (MOU) between the City of Canton and Stark SWCD, training opportunities are provided by Stark SWCD for the development community	**Workshops**	Permit requires one theme to be targeted to the development community.	**Stark SWCD**	Yes, via MOU	• Provide workshop once per year; • **Annual Reporting requirements[6]**	Practical	[TBD[3]]
1a	**Storm Water Education for the Development Community**	**[TBD[1,2,3]]**	Permit requires one theme to be targeted to the development community	**Development; [Any Department[3]]**	[TBD[3]]	• Implement requirement[5]; • **Annual Reporting requirements[6]**	[TBD[3]]	[TBD[3]]
2	**[Various storm water themes[1,2,3]]** - The Storm Water Management page on the City Engineering Department's web page contains a lot of information of storm water education and pollution prevention.	**Website**	City Engineering Department's website is an excellent resource for information	**Civil Engineering**	Yes	• Maintain Storm Water Education page on website; update accordingly; • **Annual Reporting requirements[6]**	Web page is always available and information can be added easily	Yes
2a	**[Various storm water themes[1,2,3]]**	**Website**	Website is available	**[Any Department[3]]**	Yes	• Implement BMP[5]; • **Annual Reporting requirements[6]**	[TBD[3]]	[TBD[3]]
3	**[Various storm water themes[1,2,3]]**	**Publications[3]**	Various local publications available	**[Any Department[3]]**	Yes	• Implement BMP[5]; • **Annual Reporting requirements[6]**	[TBD[3]]	[TBD[3]]
4	**"Dump No Waste – Drains to Stream" messages on storm drain inlets** – Short but to-the-point messages that raise awareness about the connection between storm drains	**On all new City-owned storm water inlets**	Castings are required to contain messages per City Engineering	**Civil Engineering**	Yes	• Continue to require all new City-owned storm inlets to contain the messages;	Continuous/ongoing/as-needed basis	No

Minimum Control Measure #1
Public Education and Outreach on Storm Water Impacts
Best Management Practices (BMPs)
See footnotes at end of table

#	BMP			Responsible Party	Legal Authority?	Measurable Goals		Address TMDLs?
	Theme/Description	Mechanism	Justification			(Schedules, Frequency, Etc.)	Justification	
	and receiving waters in hopes to deter illicit discharges.		standards drawings			• **Annual Reporting requirements[6]**		
5	Themes such as: • **"Stormwater Outreach for Commercial Businesses"[2]** • **"Tailoring Outreach Programs to Minority and Disadvantaged Communities and Children"[2]** • **"Alternatives to Toxic Substances"[2]** • **"Chlorinated Water Discharge Options"[2]** • **"Landscaping and Lawn Care"[2]** • **"Pest Control"[2]** • **"Pet Waste Management"[2]** • **"Proper Disposal of Household Hazardous Wastes"[2]** • **"Residential Car Washing"[2]** • **"Trash and Debris Management"[2]** • **"Water Conservation Practices for Homeowners"[2]** • **"Automobile Maintenance"[2]** • **"Pollution Prevention for Businesses"[2]** • **"Promoting Low Impact Development (LID)"[2]**	Mechanisms such as: • **"Classroom Education on Stormwater"[2]** • **"Using the Media"[2]** • **"Educational Displays, Pamphlets, Booklets, and Bill Inserts"[2]** • **"Promotional Giveaways"[2]** • **"Stormwater Outreach Materials"[2]**	Recommended by USEPA[2]	**[Any Department[3]]**	[TBD[3]]	• Implement recommendations[5]; • **Annual Reporting requirements[6]**	[TBD[3]]	[TBD[3]]
6	• Protection and maintenance of natural **vegetative buffers along waterways** • Management of **manure and pet wastes** • Reduction of **impervious surfaces** and the increase of on-site **infiltration**	**[TBD[1,2,3]]**	Recommended by NEOSWTC[1]	**[Any Department[3]]**	[TBD[3]]	• Implement recommendations[5]; • **Annual Reporting requirements[6]**	[TBD[3]]	Yes

Minimum Control Measure #1 Public Education and Outreach on Storm Water Impacts Best Management Practices (BMPs) See footnotes at end of table								
#	BMP			Responsible Party	Legal Authority?	Measurable Goals		Address TMDLs?
	Theme/Description	Mechanism	Justification			(Schedules, Frequency, Etc.)	Justification	
	• **Composting** and management of **grass clippings and yard wastes** • Operation & Maintenance of discharging and non-discharging **sewage treatment systems** • **Open or illegal dumping** • Reduction and management of residential and agricultural **fertilizers** • Reduction of **soil erosion** on residential, agricultural, and construction sites • Construction site **erosion and sediment control practices** • **Pond maintenance** education (e.g. manage waterfowl, install aerators, maintain vegetative buffers, etc.) • **Riparian and wetland setbacks** • **Conservation development** practices • **USDA-Natural Resource Conservation Service (NRCS) Programs** supporting BMPs for agri-businesses (i.e. Conservation Reserve Program (CRP), Conservation Reserve Enhancement Program (CREP), and the Environmental Quality Incentives Program (EQIP))							
7	**[Other MCM#1 themes[1,2,3]]**	[TBD[3]]	[TBD[3]]	**[Any Department[3]]**	[TBD[3]]	• [TBD[3]]; • **Annual Reporting requirements[6]**	[TBD[3]]	[TBD[3]]

[1] Specific BMPs that address TMDLs are recommended by the Northeast Ohio Stormwater Training Council (NEOSWTC). See Total Maximum Daily Loads section of SWMP.

[2] See USEPA's National Menu of Best Management Practices (BMPs) for Stormwater at: https://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater#edu.

[3] To be determined.
[4] As applicable.
[5] As feasible.
[6] See “Annual Reporting for MCM#1” below.

Evaluating the Success of MCM#1

There are various ways to measure the City of Canton's success of implementing Minimum Control Measure #1:

- Assess individual BMPs to determine if they have been implemented in accordance with measurable goals, MCM performance standards, and applicable EPA and NEOSWTC recommendations.
- Annual Reports will provide indication of the status of implementation.
- The Storm Water Program Coordinator will conduct and annual review of the program with the Service Director so that appropriate adjustments and actions can be taken.
- Ohio EPA or other entities may conduct sampling of the Nimishillen Creek to determine if corresponding pollutant levels have decreased.
- Ohio EPA may perform audits of the City's Storm Water Management Program.

Annual Reporting for MCM#1

Whenever any of the following BMPs are implemented or are planned to be implemented, the responsible party will need to track corresponding information. The Storm Water Management Program Coordinator will send out annual questionnaires to departments requesting the respective information and possibly other information as well. The information provided will then be utilized to prepare Annual Reports that will be submitted as required to Ohio EPA.

- ***Any* Public Education/Outreach BMP**:
    a. *Regarding the previous year (BMP was implemented):*
        i. Mechanism (means by which education was provided):
        ii. Responsible Party:
        iii. Measurable Goal:
        iv. Theme or Message:
        v. Target Audience:
        vi. % of Target Audience Reached:
        vii. Description/Summary of Results:
        viii. Was it Effective (Yes or No)?
        ix. You are required to maintain supporting documentation. What do you have?
    b. *Regarding this year (BMP is planned to be implemented):*
        i. Mechanism (means by which education will be provided):
        ii. Responsible Party:
        iii. Measurable Goal:
        iv. Theme or Message:
        v. Target Audience:
        vi. % of Target Audience to be Reached:
        vii. Description/Summary of Planned Activities:
        viii. Proposed Schedule:

Further Guidance and Information for MCM#1

See the "Additional Information" section of this Storm Water Management Program.

MCM#2: Public Involvement/Participation

General Requirements

As part of its overall Storm Water Management Program, the City of Canton is required to implement a "Storm Water Public Involvement/Participation Program" that involves the public in activities related to storm water pollution reduction and prevention. See "Further Guidance and Information for MCM#2" below for details.

Decision Process for Development of "Storm Water Public Involvement/Participation Program"

The decision process for the development of a Storm Water Public Involvement/Participation Program consisted of the following steps, at a minimum:

Steps to Develop and Implement a "Storm Water Public Involvement/Participation Program"	
Step #	**Description**
1	Understand permit requirements
2	Identify and document the City's decision process for the development of a Storm Water Public Involvement/Participation Program per permit requirements
3	Identify and implement program BMPs
4	Prepare and submit annual reports to Ohio EPA
5	Evaluate the success of the program annually and make adjustments accordingly

Additional information pertaining to the decision process is provided below.

Involving the Public in the Initial Development of the Storm Water Management Program

Throughout the planning stages of preparing for the NPDES Phase II Storm Water Program under the initial 2003 permit, the City of Canton was part of a consortium with other regulated communities in Stark County, led by the Stark County Regional Planning Commission. Regular meetings occurred with consortium members to specifically discuss the NPDES Phase II program requirements and Storm Water Management Program preparation strategies. Public meetings were held in which NPDES Phase II updates were provided and public input was welcomed. Also, NPDES Phase II plan preparation strategy and partnership with Stark RPC was discussed at City Council meetings in which public input was welcomed. However, no significant public input was received and therefore the general public was not a major factor in the development and submittal of the City's Notice Of Intent (NOI) and SWMP. However, the "Storm Water Management" page on the City's website has a message that welcomes public input on the Storm Water Management Program.

Involving the Public in the Implementation of the Program

Since 2003, opportunities to be involved in activities related to the City's SWMP have been subjects on the City's website, through publications, announcements, public meetings, and other means of communication. In addition, the general public also has the ability to obtain information, report concerns, and provide comments on various issues to the City in person, by phone, mail, email, or other means. Public involvement in the implementation of the SWMP has been mainly limited to public involvement activities. The City will continue to offer various public involvement activities as indicated in "Best Management Practices (BMPs)" below.

Target Audiences

The general public, which is made up of various types of ethnic and economic groups, is the overall target audience for the City of Canton's Storm Water Public Involvement/Participation Program. However, each BMP listed below describes the specific target audience it is intended to reach.

Public Involvement Activities

A key component to developing a Storm Water Public Involvement/Participation Program was to identify public involvement activities that were already being implemented by the City that could best be used to satisfy permit requirements and the likelihood of those activities to continue to be available to be implemented. As such, public

involvement activities that are most likely to be implemented are mainly in the form of street, neighborhood, and park cleanups. However, there are others that could also end up being implemented, depending on feasibility. There is also local watershed group comprised of various volunteer representatives and other watershed constituents that meets regularly to discuss watershed issues and organize watershed-related activities. Public involvement activities are the BMPs for the City's Storm Water Public Involvement/Participation Program. See BMPs below for further information.

The ultimate goal of Canton's Storm Water Public Involvement/Participation Program is to provide practical public involvement activities intended to directly or indirectly result in the reduction of pollutants in storm water runoff while satisfying the MCM performance standards to conduct at least five public involvement activities over the permit term.

Responsible Parties for Implementing the Storm Water Public Involvement/Participation Program

The City of Canton Service Director is responsible for the overall compliance of the City with the NPDES Storm Water Permit requirements. Coordination of the SWMP is delegated to the Assistant City Engineer of the Civil Engineering Department. Responsibility for implementation of *certain* BMPs has been assigned to *specific* departments. *Other* BMPs may be implemented by *any* department *as feasible*. See Best Management Practices (BMPs) below and the Table of Organization for details. As BMPs are implemented, each respective responsible position is required to maintain appropriate supporting documentation.

Best Management Practices (BMPs)

Aside from Minimum Control Measure #2 BMPs (activities) that may be described above, the table below also lists certain BMPs that are expected or required to be implemented by certain departments, while others are shown as recommendations for potential implementation depending on applicability and/or feasibility. Recommendations are based on USEPA and NEOSWTC recommendations:

- USEPA has prepared "BMP Fact Sheets" and other resources related to many BMPs in the City's Storm Water Management Program. They can be found on the *National Menu of Best Management Practices (BMPs) for Stormwater* webpage by clicking on the respective Minimum Control Measure tabs. The BMP Fact Sheets provide further explanation, applicability, recommendations, implementation, and effectiveness information of common BMPs. Fact sheets and resources should be reviewed periodically by employees who are involved in respective BMP implementation. See "Further Guidance and Information for MCM#2" below.

- The Northeast Ohio Storm Water Training Council (NEOSWTC) has prepared "TMDL Fact Sheets" pertaining to respective Nimishillen Creek TMDLs and corresponding recommended BMPs to address the TMDLs. In order to meet permit requirements, appropriate BMPs must be selected to address TMDL recommendations. Therefore, some of the recommended activities are to be utilized as part of the City's Storm Water Public Involvement/Participation Program.

Depending on whether or not a BMP is a requirement or recommendation, measurable goals have been written accordingly. Annual Reports will document exactly which BMPs were implemented in the previous year as well as identify possible BMPs to be implemented in the upcoming year.

Minimum Control Measure #2 Public Involvement/Participation Best Management Practices (BMPs) See footnotes at end of table							
#	BMP		Responsible Party	Legal Authority ?	Measurable Goals		Address TMDLs?
	Activity	Justification			(Schedules, Frequency, Etc.)	Justification	
1	**Canton Parks Cleanups** - Various cleanup and beautification activities take place within Canton Parks throughout the year with assistance from the general public. Many of these parks have streams, ponds, lakes, or wetlands located within them.	Cleanups prevent litter and trash from washing into the City's MS4 and polluting local water bodies.	**Parks & Recreation**	Yes	• Once per year[5]; • **Annual Reporting requirements[6]**	Practical	Yes
2	**"Beautify-A-Neighborhood (BAN) Program"** - In 2006, the City of Canton Street Department introduced the BAN Program with the objective of fostering neighborhood beautification through a dedication of public resources to those neighborhood groups willing to assist the City in the process. Street Department employees assist residents with neighborhood cleanup projects. The BAN Program establishes scheduled dates for the City and neighborhood groups to partner up for neighborhood cleanups, one neighborhood at a time. Up to nine (9) days are scheduled between April 1st and October 31st of each year. Any individual or organization within the City can apply for one of the available dates.	Cleanups prevent litter and trash from washing into the City's MS4 and polluting local water bodies.	**Street and/or Health**	Yes	• Utilize up to 9 days per year for neighborhood cleanups[5]; • **Annual Reporting requirements[6]**	Per BAN Program	[TBD[3]]
3	**Community Cleanups via Grant Program** - The City of Canton's Development Department issues grants to certain non-profit agencies in which funds are provided to conduct various activities including community cleanups.	Cleanups prevent litter and trash from washing into the City's MS4 and polluting local water bodies.	**Development**	Yes	• [TBD[3]]; • **Annual Reporting requirements[6]**	[TBD[3]]	[TBD[3]]
4	**Community Service Cleanups** - When the Canton Municipal Court sentences people to perform community service, some of the service workers are assigned to the Road Crew. The Canton Municipal Court's Road Crew picks up litter and trash from the streets of Canton as well as cleaning up nuisance properties for the City of Canton's Code Enforcement and Health Department. Certain areas are targeted based on complaints received.	Cleanups prevent litter and trash from washing into the City's MS4 and polluting	**Judges**	Yes	• Conduct community service cleanups throughout the year; • **Annual Reporting requirements[6]**	Continuous/on going/as-needed basis	[TBD[3]]

Minimum Control Measure #2 Public Involvement/Participation Best Management Practices (BMPs) See footnotes at end of table							
#	BMP		Responsible Party	Legal Authority ?	Measurable Goals		Address TMDLs?
	Activity	Justification			(Schedules, Frequency, Etc.)	Justification	
		local water bodies.					
5	Public involvement activities such as: • **Citizen representatives on a storm water management panel** • **Public hearings** • Working with **citizen volunteers** willing to **educate** others **about the program** • **Volunteer monitoring** • **Stream cleanup activities**	Recommended by Ohio EPA	**[Any Department[3]]**	[TBD[3]]	• Implement recommendations [5]; • **Annual Reporting requirements[6]**	[TBD[3]]	[TBD[3]]
6	Public involvement activities such as: • **"Adopt-A-Stream Programs"[2]** • **"Reforestation Programs"[2]** • **"Storm Drain Marking"[2]** • **"Stream Cleanup and Monitoring"[2]** • **"Volunteer Monitoring"[2]** • **"Wetland Plantings"[2]** • **"Attitude Surveys"[2]** • **"Stakeholder Meetings"[2]** • **"Watershed Organizations"[2]**	Recommended by USEPA[2]	**[Any Department[3]]**	[TBD[3]]	• Implement recommendations [5]; • **Annual Reporting requirements[6]**	[TBD[3]]	[TBD[3]]
7	Any of the following public involvement activities: • **Streamside plantings and cleanups** • **Stream or wetland restoration projects** • Construct a **rain garden** with assistance from the public • Allow residents to provide input on new **proposed codes (i.e. downspout disconnection, conservation development, riparian and wetland setbacks, etc.)** • **Tree plantings**, achieve **"Tree City" status** • Conduct a **charity car wash** that implements best management practices and promotes environmental responsibility • Establish **public reporting mechanism** (complaint hotline, webpage, etc.) to identify non-compliance from construction sites	Recommended by NEOSWTC[1]	**[Any Department[3]]**	[TBD[3]]	• Implement recommendations [5]; • **Annual Reporting requirements[6]**	[TBD[3]]	Yes

Minimum Control Measure #2 Public Involvement/Participation Best Management Practices (BMPs) See footnotes at end of table							
#	BMP		Responsible Party	Legal Authority ?	Measurable Goals		Address TMDLs?
	Activity	Justification			(Schedules, Frequency, Etc.)	Justification	
	• Have residents pledge a **"no-fertilizer" lawn program** • **"Green" workshops** in which residents make environmentally-friendly lawn care and cleaning supplies • Identify locations of **riparian restoration activities**, engage the public in the planting of native vegetation • **Storm drain stenciling** • Establish **"pick-up pet waste" stations** for residents on public property, parks, city buildings, cemeteries, etc. • Host **agricultural best management practices workshops** for manure management and application • Work with local health department to **educate property owners on sewage treatment system operation and maintenance** • Address **open or illegal dumping with public involvement**						
8	**[Other MCM#2 activities[3]]**	[TBD[1,2]]	**[Any Department[3]]**	[TBD[3]]	• [TBD[3]]; • **Annual Reporting requirements[6]**	[TBD[3]]	[TBD[3]]

[1] Specific BMPs that address TMDLs are recommended by the Northeast Ohio Stormwater Training Council (NEOSWTC). See Total Maximum Daily Loads section of SWMP.
[2] See USEPA's National Menu of Best Management Practices (BMPs) for Stormwater at: https://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater#inv.
[3] To be determined.
[4] As applicable.
[5] As feasible.
[6] See "Annual Reporting for MCM#2" below.

Latest revision: 1/4/2019

Evaluating the Success of MCM#2

There are various ways to measure the City of Canton's success of implementing Minimum Control Measure #2:

- Assess individual BMPs to determine if they have been implemented in accordance with measurable goals, MCM performance standards, and applicable EPA and NEOSWTC recommendations.
- Annual Reports will provide indication of the status of implementation.
- The Storm Water Program Coordinator will conduct and annual review of the program with the Service Director so that appropriate adjustments and actions can be taken.
- Ohio EPA or other entities may conduct sampling of the Nimishillen Creek to determine if corresponding pollutant levels have decreased.
- Ohio EPA may perform audits of the City's Storm Water Management Program.

Annual Reporting for MCM#2

Whenever any of the following BMPs are implemented or are planned to be implemented, the responsible party will need to track corresponding information. The Storm Water Management Program Coordinator will send out annual questionnaires to departments requesting the respective information and possibly other information as well. The information provided will then be utilized to prepare Annual Reports that will be submitted as required to Ohio EPA.

- ***Any* Public Involvement/Participation BMP**:
    a. *Regarding the previous year (BMP was implemented):*
        i. Activity:
        ii. Responsible Party:
        iii. Measurable Goal:
        iv. Theme or Message:
        v. Target Audience:
        vi. Estimate of # of Participants:
        vii. Description/Summary of Results:
        viii. Was it Effective (Yes or No)?
        ix. You are required to maintain supporting documentation. What do you have?
    b. *Regarding this year (BMP is planned to be implemented):*
        i. Activity:
        ii. Responsible Party:
        iii. Measurable Goal:
        iv. Theme or Message:
        v. Target Audience:
        vi. Estimate of # of Participants:
        vii. Description/Summary of Planned Activities:
        viii. Proposed Schedule:

Further Guidance and Information for MCM#2

See the "Additional Information" section of this Storm Water Management Program.

MCM#3: Illicit Discharge Detection and Elimination

General Requirements

As part of its overall Storm Water Management Program, the City of Canton is required to implement a "Storm Water Illicit Discharge Detection and Elimination (IDDE) Program" to detect and eliminate illicit discharges in the City's storm water drainage system. See "Further Guidance and Information for MCM#3" below for details.

Decision Process for Development of "Illicit Discharge Detection and Elimination (IDDE) Program"

The decision process for the development of an Illicit Discharge Detection and Elimination Program consisted of the following steps, at a minimum:

Steps to Develop and Implement a "Storm Water Public Involvement/Participation Program"	
Step #	**Description**
1	Understand permit requirements
2	Identify and document the City's decision process for the development of an Illicit Discharge Detection and Elimination Program per permit requirements
3	Identify and implement program BMPs
4	Prepare and submit annual reports to Ohio EPA
5	Evaluate the success of the program annually and make adjustments accordingly

Additional information pertaining to the decision process is provided below.

Development of Comprehensive Storm Sewer Map

A comprehensive storm system map allows for effective investigations of potential pollution sources as well as providing potential containment and outfall locations for illicit discharges in the MS4. For many years, the City Engineering Department maintained records of City storm and sanitary sewers on hard-copy maps based on plans and as-built information. In 2010, the City completed a base model GIS which incorporated the storm and sanitary sewer information as well as many other attributes such as contours, streets, properties, hydrography, aerial photography, etc. Since then, regular updates to the GIS occur, including information required to satisfy permit requirements. The GIS continues to evolve. Collaboration with Stark County also occurs to share information and avoid duplication of efforts.

Ordinance to Prohibit Illicit Discharges

The City of Canton utilizes an ordinance as the regulatory mechanism to prohibit illicit discharges into the MS4. Ordinances are the typical legislative mechanisms for cities to utilize to formally adopt and meet state and federal regulations and to establish local law.

For many years, various City ordinances were used as appropriate to regulate illicit discharges in the City's storm water drainage system. However, in 2009, the City adopted a codified "Storm Water Management" ordinance (Chapter 961 of Part Nine - Streets, Utilities, and Public Services Code) which includes prohibitions of illicit discharges into the MS4, violations, enforcement, penalties, etc. Refer to Chapter 961 "Storm Water Management" ordinance for further details.

Parts of the following codified ordinances also assist in the regulation of illicit discharges:

- Chapters 221 "Health Hazards", 223 "Private Water Systems", and 225 "Household Sewage Disposal Systems" of Title Three - Environmental Health - of the Canton City Health Code
- Part Five "General Offenses Code", Part Seven "Business Regulation Code", Part Nine "Streets, Utilities, and Public Services Code", and Part Thirteen "Building Code"

Enforcement Procedures

Chapter 961 "Storm Water Management" of the City of Canton codified ordinances includes prohibitions and enforcement mechanisms and procedures to ensure compliance with illicit discharge prohibitions. The ordinance provides for plan denials, Notices Of Violations, Stop Work Orders, injunctive relief, civil proceedings, fines, etc. to be utilized accordingly.

Through a Memorandum of Understanding (MOU) between the City of Canton and the City of Canton Health Department, the Health Department assists in enforcement of violations of Chapter 961 with respect to illicit discharges.

Plan to Detect and Address Illicit Discharges

The City of Canton has its own Health Department. The Ohio Administrative Code and Ohio Revised Code contain provisions for health departments to investigate and abate certain aspects of illicit discharges. In addition, the Canton City Health Department has its own Health Code that regulates certain NPDES storm water-related issues such as household sewage disposal systems (home sewage treatment systems), illegal dumping, various environmental health topics, etc. The City also has existing codified ordinances in place that pertain to illicit/illegal discharges into drainage systems. When necessary, for corresponding violations, appropriate enforcement actions are taken by the City Health Commissioner and/or the City Law Department. All of the City of Canton's codified ordinances can be viewed online at http://www.conwaygreene.com/canton.htm.

Most areas within the City of Canton are serviced by sanitary sewer. The City does not have combined sanitary/storm sewers. Sanitary sewer mains within corporate limits are typically owned and maintained by the City, while most of the remaining public sewer mains are owned and maintained by the Stark County Metropolitan Sewer District. However, there are certain addresses within the City where it has been determined that, even though the property is identified as paying for water, it is not identified as paying for sewer. In these "priority areas" areas, homeowners likely maintain private septic systems. Records of these septic systems are maintained by the Stark County and Canton City Health Departments. The Canton City Health Department responds to complaints involving HSTSs and takes the appropriate actions to ensure their proper function.

The City of Canton's plan to detect and address illicit discharges to its MS4 is essentially through the cumulative use of the following:

- ***Illicit discharge prohibition ordinance and enforcement procedures*** – See Chapter 961 "Storm Water Management" of the City of Canton codified ordinances.
- ***IDDE Response Protocol*** - The City of Canton has developed Illicit Discharge Detection and Elimination (IDDE) Response Protocol to establish who to contact and the respective response procedures. The protocol covers illicit discharges ranging from emergencies requiring immediate containment to residential, commercial, or industrial sources, to illegal open dumping, to construction activities, to maintenance responsibilities. The Fire Department, Health Department, and Stark SWCD are the primary respondents to illicit discharges, depending on the sources and types of discharges. Representatives from the Collection Systems Department and/or City Engineering are available to assist as well, especially in utilizing City maps or the GIS to help identify potential drainage paths and outlet points of storm sewers. The Fire Department communicates and coordinates as appropriate with Stark County HazMat and Emergency Preparedness. Provisions are also provided to contact Ohio EPA if an illicit discharge has entered a water of the state or to notify owners of other affected drainage systems. Current IDDE Response Protocol is provided on the City website at: http://cantonohio.gov/engineering/?pg=510.
- ***Procedures for locating priority areas with higher likelihood of illicit connections*** *include*:
    - *Identifying properties with Home Sewage Treatment Systems (HSTSs)* - The City Health Department has identified all properties in the City with HSTSs. These are considered priority areas because effluent from failing HSTSs often contain pollutant concentrations that exceed established water quality standards, thus becoming illicit discharges. A number of factors can cause on-lot HSTSs to fail, including unsuitable soil conditions, improper design and installation, and inadequate maintenance practices. Chapter 225 of the Canton City Health Code regulates Household Sewage Disposal Systems. The regulations reference Chapter 3701-29 of the Ohio Administrative Code as the minimum compliance standard for enforcement by the City Health Department. Chapter 225 of the Canton City Health Code also prohibits the installation,

maintenance, or operation of HSTSs on property within the City provided a public sanitary sewer is within 200 feet of such property. Registration of HSTS installers and sewage tank cleaners is required with the Health Department. Specific maintenance requirements also apply per Chapter 225. The Health Department has the authority to inspect HSTSs, sample the effluent, or take any other steps deemed necessary to insure proper compliance with OAC 3701-29-01 to 3701-29-21. Chapter 209 of the City Health Code provides for any necessary enforcement, inspection, and penalty. The Health Department maintains all HSTS records for HSTS properties in the City. Due to the availability of sanitary sewer, new applications for HSTS installations are typically denied. According to the Health Department, there are less than 100 HSTS properties in the City, and all of them are "on-lot HSTSs" (there are no "off-lot HSTSs" in the City). This information has been compiled in an HSTS List and Map as required per permit conditions. The City Health Department performs inspections of HSTSs and works with property owners to rectify problematic HSTSs.

- *Monitoring storm and sanitary sewer connections* – All connections to City-owned storm or sanitary sewers are considered priorities because of the potential for cross-connections and illicit discharges. City ordinance Chapters 909 and 961 contain provisions for required permits, fees, and inspections for excavations within City right-of-way as well as for connections to City-owned storm and sanitary sewers. Only sewer contractors licensed by the City are permitting to make connections. Inspections are performed by City inspectors to ensure proper connectivity. Permit and inspection records are maintained by the Civil Engineering Department.
- *Identifying areas with sanitary sewers having high levels of inflow and infiltration (I&I)* – These are considered priorities because they can result in sanitary sewer overflows (SSOs) which could then result in illicit discharges to the MS4. The Collection Systems Department performs routine inspections of sanitary sewers and identifies high I&I areas. Appropriate measures are taken to alleviate I&I as feasible.
- *Addressing illegal dumping* – Illegal dumping is prohibited by Codified Ordinance Chapter 521.08 and is addressed through the City Health Department. Any illegal dumping that results in an illicit discharge to the City's MS4 is handled as such.
- *Follow-up inspections of areas with previous illicit discharges* – Sometimes the City Health Department or Civil Engineering Department will conduct inspections of areas that have had previous illicit discharge incidents.

- ***Procedures for tracing the source of an illicit discharge*** include:
  - *Using IDDE Response Protocol* – Depending on the type of illicit discharge, appropriate first responders (Fire Department, Health Department, or Stark SWCD) are contacted to perform a field investigation. Secondary responders (Collection Systems Department, Civil Engineering, etc.) are sometimes utilized to provide assistance.
  - *Using MS4 maps* - Hard-copy maps of the City's MS4 are utilized, when necessary, by responders to help identify drainage patterns and MS4 connectivity so that discharges can be traced to potential downstream locations as well as source locations. The City's GIS may be utilized when needed and is also available for field-responders through smartphone applications.
  - *Using specific techniques for identifying system connectivity* – Various techniques utilized may include, as appropriate: visual inspection, dye-testing, smoke testing, sewer cameras, line-flushing, etc.
- ***Procedures for removing the source of an illicit discharge*** – Once illicit discharge sources are traced, procedures for source removal are utilized, as appropriate. Many illicit discharges are attributed to accidents (i.e. traffic accidents, accidental spills, etc.) in which dry-absorb materials are typically utilized by first responders. Storm inlet protection or other in-system practices may also be utilized. Illicit discharges that are attributed to improper connections or routine, deliberate occurrences are the ones that require more involved removal procedures. Provisions in City codified ordinance Chapter 961 allow for the issuance of a Notice of Violation to the responsible party. The Notice of Violation sets forth a deadline within which such remediation (removal) or restoration must be completed. The notice further advises that, should the responsible party fail to remediate (remove) or restore within the established deadline, the City has the right to perform said remediation (removal) or restoration, assess

the costs of such work to the responsible person, party, or entity, and initiate any other legal action and administrative penalty for enforcement in accordance with the provisions of Chapter 961. Inspections occur to ensure compliance.

- ***Procedures for program evaluation and assessment*** – Meetings are held periodically between City departments that are involved in various aspects of the IDDE Plan. Concerns and ideas are discussed and appropriate actions are taken to try to improve the program and meet permit requirements and expectations.
- ***Routine televising of sewer lines*** – The Collection Systems Department has a sewer-camera truck and a crew. Storm and sanitary sewers are televised to identify conditions and connectivity of sewers so that appropriate decisions can be made and actions taken to address any issues discovered.
- ***Inspections of drainage systems*** – Drainage systems are often inspected by the Collection Systems Department or Civil Engineering Department.
- ***Training of employees to identify illicit discharges*** – Part of the employee training materials purchased by the City include an IDDE training kit which includes a video, quizzes, trainer's guide, pocket references, and other resources. Certain departments that have employees that may be more likely to identify illicit discharges are expected to train their employees accordingly.
- ***Dry-weather field screenings of storm water outfalls*** – All storm water outfalls from City MS4s have been inspected during dry weather in accordance with permit requirements. Dry weather flows have been evaluated accordingly. Most are attributed to ground water flow. Others have been attributed to illicit discharges that have since been corrected. When additional screenings occur, special attention will be paid to outfalls that have had previously-identified dry weather flows so that appropriate actions can be taken to address any newly-found or suspected illicit discharges.

Through Memorandums of Understanding (MOUs):

- The City Health Department assists in response, investigation, and enforcement of non-emergency illicit discharges in the City's MS4 from residential, commercial, or industrial sources and illegal open dumping;
- Stark SWCD assists in response and investigation of non-emergency illicit discharges in the City's MS4 from construction activities regulated by NPDES Construction Storm Water Permits.

Informing Public Employees, Businesses, and the General Public of Hazards Associated with Illegal Discharges and Improper Disposal of Waste

A variety of mechanisms have been used and are available for use to provide trash management education and warnings about the improper disposal of waste:

- "Stark County Recycling News" is a publication that is sent annually to every household in the Stark-Tuscarawas-Wayne counties Recycling District, which includes the City of Canton. This publication is a household guide to recycling and proper waste disposal and provides other valuable information such as details about the City of Canton's Recycling Center which is the district's year-round, no-cost household hazardous waste collection site.
- The City's Sanitation Department distributes trash management educational flyers to all new sanitation customers and upon request.
- A variety of information and links are provided on the Sanitation department's webpage regarding trash management.
- City Engineering's Storm Water Education webpage contains information pertaining to hazards associated with the improper disposal of waste.
- Other mechanisms and similar themes may be used. See Minimum Control Measure #1 for details.

Since this requirement is of a "public education" nature, themes used to satisfy MCM#1 will also include hazards associated with illegal discharges and improper disposal of waste. Training materials used to satisfy MCM#6 employee training requirements include this theme as well.

Responsible Parties for Implementing the Storm Water Illicit Discharge Detection and Elimination Program

The City of Canton Service Director is responsible for the overall compliance of the City with the NPDES Storm Water Permit requirements. Coordination of the SWMP is delegated to the Assistant City Engineer of the Civil Engineering

Department. Responsibility for implementation of *certain* BMPs has been assigned to *specific* departments. *Other* BMPs may be implemented by *any* department *as feasible*. See Best Management Practices (BMPs) below and the Table of Organization for details. As BMPs are implemented, each respective responsible position is required to maintain appropriate supporting documentation.

Best Management Practices (BMPs)

Aside from Minimum Control Measure #3 BMPs that may be described above, the table below also lists certain BMPs that are expected or required to be implemented by certain departments, while others are shown as recommendations for potential implementation depending on applicability and/or feasibility. Recommendations are based on USEPA and NEOSWTC recommendations:

- USEPA has prepared "BMP Fact Sheets" and other resources related to many BMPs in the City's Storm Water Management Program. They can be found on the *National Menu of Best Management Practices (BMPs) for Stormwater* webpage by clicking on the respective Minimum Control Measure tabs. The BMP Fact Sheets provide further explanation, applicability, recommendations, implementation, and effectiveness information of common BMPs. Fact sheets and resources should be reviewed periodically by employees who are involved in respective BMP implementation. See "Further Guidance and Information for MCM#3" below.

- The Northeast Ohio Storm Water Training Council (NEOSWTC) has prepared "TMDL Fact Sheets" pertaining to respective Nimishillen Creek TMDLs and corresponding recommended BMPs to address the TMDLs. In order to meet permit requirements, appropriate BMPs must be selected to address TMDL recommendations. Therefore, some of the recommended BMPs are to be utilized as part of the City's Illicit Discharge Detection and Elimination Program.

Depending on whether or not a BMP is a requirement or recommendation, measurable goals have been written accordingly. Annual Reports will document exactly which BMPs were implemented in the previous year as well as identify possible BMPs to be implemented in the upcoming year.

Minimum Control Measure #3 Illicit Discharge Detection and Elimination Best Management Practices (BMPs) See footnotes at end of table							
#	BMP		Responsible Party	Legal Authority ?	Measurable Goals		Address TMDLs?
	Name	Justification			(Schedules, Frequency, Etc.)	Justification	
1	**Storm Sewer System Map** showing the location of all outfalls and the names and location of all surface waters of the state that receive discharges from the outfalls. Include all MS4 components: catch basins, pipes, detention/retention facilities, post-construction BMPs, etc.	Required by permit	**Civil Engineering**	Yes	• Maintain and update map as needed to meet permit requirements; • **Annual Reporting requirements[7]**	Required	Yes
1a	**Maintain and continue updating the MS4 map** on an annual basis…	Recommended by NEOSWTC[1]	**Civil Engineering**	Yes	Implement recommendation	Continuous/on going/as-needed basis	Yes
2	**HSTS List** of HSTSs connected to discharge to the City's MS4, including addresses	Required by permit	**Health**	Yes	• Maintain and update list as needed to meet permit requirements; • Provide list and updates to Civil Engineering; • **Annual Reporting requirements[7]**	Required	Yes
2a	Develop and **maintain a list of STSs** that discharge to your MS4;	Recommended by NEOSWTC[1]	**Health**	Yes	Implement recommendation	Continuous/on going/as-needed basis	Yes
3	**HSTS Map** showing the locations of all HSTSs connected to the City's MS4, including details on the type and size of receiving systems - Based on the HSTS List provided by the City Health Department, HSTSs have been added to the City's GIS. There are only "on-lot HSTSs" in the City of Canton.	Required by permit	**Civil Engineering**	Yes	• Maintain and update map as needed to meet permit requirements; • **Annual Reporting requirements[7]**	Required	Yes
3a	Develop and **maintain a map of STSs** that discharge to your MS4	Recommended by NEOSWTC[1]	**Civil Engineering**	Yes	Implement recommendation	Continuous/on going/as-needed basis	Yes
4	**Illicit Discharge Ordinance** that effectively prohibits illicit discharges into the City's storm sewer system	Required by permit	**Civil Engineering**	Yes	• Update ordinance as needed to meet permit requirements; • **Annual Reporting requirements[7]**	Required	No
5	**IDDE Plan** to detect and eliminate non-storm water discharges, including illegal	Required by permit	**Civil Engineering; CSD; Development;**	Yes	• Implement requirement; • **Annual Reporting requirements[7]**	Continuous/on going/as-needed basis	Yes

Minimum Control Measure #3 Illicit Discharge Detection and Elimination Best Management Practices (BMPs) See footnotes at end of table							
#	BMP		Responsible Party	Legal Authority ?	Measurable Goals		Address TMDLs?
	Name	Justification			(Schedules, Frequency, Etc.)	Justification	
	dumping, to the City's MS4. Involvement in this BMP may include, but is not limited to: • Inspection, management, or elimination of **Home Sewage Treatment Systems (HSTSs/septic systems)** • **Expansion of sanitary sewer systems** to areas not served by sanitary sewers • **Informing** public employees, businesses, and/or the general public **of hazards associated with illegal discharges and improper disposal of waste** • **Inspection** of commercial or industrial facilities **to identify potential sources of illicit discharges** • **Identifying and/or investigating illicit discharges** into the City's MS4 • **Addressing illegal dumping** into the City's storm water drainage systems • **Enforcement** of violations of illicit discharges into the City's storm water drainage systems		**Fire; Health; Planning; Service Director; Stark SWCD; [Any other applicable department]**				
5a	Work with local health department to **routinely inspect Sewage Treatment Systems (STSs)** to ensure proper operation and maintenance	Recommended by NEOSWTC[1]	**Health**	Yes	Implement requirement	Continuous/on going/as-needed basis	Yes
5b	Work with local health department to eliminate illicit discharges from **failing STSs** (i.e. installation of sanitary sewer; convert to on-lot STS (non-discharging); or replacement	Recommended by NEOSWTC[1]	**Health**	Yes	Implement requirement	Continuous/on going/as-needed basis	Yes

Minimum Control Measure #3 Illicit Discharge Detection and Elimination Best Management Practices (BMPs) See footnotes at end of table							
#	BMP		Responsible Party	Legal Authority ?	Measurable Goals		Address TMDLs?
	Name	Justification			(Schedules, Frequency, Etc.)	Justification	
	of STSs with coverage under residential NPDES permit (discharging))						
5c	Work with local health department to **identify and prioritize solutions to failing STSs**	Recommended by NEOSWTC[1]	**Health; [All other applicable departments]**	Yes	Implement recommendation	Continuous/on going/as-needed basis	Yes
5d	**"Preventing septic system failure"[2]**	Recommended by USEPA[2]	**Health**	Yes	Implement recommendation	Continuous/on going/as-needed basis	Yes
5e	Develop and implement measures to eliminate confirmed **cross-connections** that are contributing to illicit discharges	Recommended by NEOSWTC[1]	**Civil Engineering; CSD; Health**	Yes	Implement recommendation	Continuous/on going/as-needed basis	Yes
5f	Develop an IDDE Plan that clearly defines the **department(s) and/or agency(s) responsible** for investigating and resolving confirmed sources of illicit discharges	Recommended by NEOSWTC[1]	**Civil Engineering; CSD Fire; Health; Service Director; Stark SWCD**	Yes	Implement recommendation	Continuous/on going/as-needed basis	Yes
5g	Develop an **enforcement escalation plan** that outlines how your community will address illicit discharges: • Clearly define escalation **enforcement roles** between affected agencies; • Work with local health department to **identify and eliminate failing STSs**; • Establish **timeframes for investigation and elimination**	Recommended by NEOSWTC[1]	**Civil Engineering; Health; Service Director**	Yes	Implement recommendation	Continuous/on going/as-needed basis	Yes
5h	Establish an **IDDE surveillance plan** focused on sources of bacteria, nutrients, or habitat such as: • **Sewage Treatment Systems**; • **Cross-connections**; • **Infiltration and Inflow (I&I)**; • **Animal waste** (agricultural and pet);	Recommended by NEOSWTC[1]	**Civil Engineering; CSD; Health; Stark SWCD**	Yes	Implement recommendation[5]	Continuous/on going/as-needed basis	Yes

Minimum Control Measure #3 Illicit Discharge Detection and Elimination Best Management Practices (BMPs) See footnotes at end of table							
#	BMP		Responsible Party	Legal Authority ?	Measurable Goals		Address TMDLs?
	Name	Justification			(Schedules, Frequency, Etc.)	Justification	
	• **Grass clippings and yard waste**; • **Construction sites**						
5i	**"Reducing the occurrence of Sanitary Sewer Overflows (SSOs)"[2]**	Recommended by USEPA[2]	**CSD**	Yes	Implement recommendation[5]	Continuous/on going/as-needed basis	No
5j	**"Illegal dumping control"[2]**	Recommended by USEPA[2]	**Health**	Yes	Implement recommendation[5]	Continuous/on going/as-needed basis	Yes
5k	**"Trash and debris management"[2]**	Recommended by USEPA[2]	**Health; Sanitation**	Yes	Implement recommendation[5]	Continuous/on going/as-needed basis	Yes
5l	**"Sewage from recreational activities"[2]**	Recommended by USEPA[2]	**Health**	Yes	Implement recommendation[5]	Continuous/on going/as-needed basis	Yes
6	**Inform public employees** on hazards associated with **illegal discharges and improper disposal of waste**	Required by permit	**Building; Building Maintenance; Civil Engineering; CSD; DMV; Fire; Health; Parks & Recreation; Police (Impound Lot); Sanitation; Street; Traffic: Sign & Paint; Water; WRF**	Yes	Implement requirement in conjunction with required employee training (MCM#6)	Continuous/on going/as-needed basis	Possibly[6]
7	**Inform businesses and the general public** of hazards associated with **illegal discharges and improper disposal of waste**	Required by permit	**[Any Department]**	Yes	[TBD[3]]; Coordinate with MCM#1[4,5]	Pending	Possibly[6]

Minimum Control Measure #3 Illicit Discharge Detection and Elimination Best Management Practices (BMPs) See footnotes at end of table							
#	BMP		Responsible Party	Legal Authority ?	Measurable Goals		Address TMDLs?
	Name	Justification			(Schedules, Frequency, Etc.)	Justification	
8	Address **specifically-identified non-storm water discharges of concern**	Required by permit *only if* identified as significant contributors of pollutants to MS4	**Service Director**	Yes	Implement only as needed per permit	Pending	[TBD[3]]
9	List of **allowable non-storm water discharges**	*Optional* per permit	**Service Director**	Yes	Implement only as needed per permit	Continuous/on going/as-needed basis	No
10	Initial **dry-weather screening of outfalls** over the permit term	Required by permit	**Civil Engineering**	Yes	• Perform initial screening as required; • **Annual Reporting requirements[7]**	Required	Yes
10a	Based on data collected from previous screenings, establish a **prioritization schedule for ongoing dry-weather screening of outfalls**	Recommended by NEOSWTC[1]	**Civil Engineering**	Yes	Implement recommendation[5]	Pending	Yes
10b	Ensure that IDDE surveillance program includes commitments to perform **annual dry weather screening in areas where at least one previous test indicated elevated bacteria levels**	Recommended by NEOSWTC[1]	**Civil Engineering**	Yes	Implement recommendation[5]	Pending	Yes
10c	Perform **at least one screening of all outfalls per permit term**	Recommended by NEOSWTC[1]	**Civil Engineering**	Yes	Implement recommendation	Required	Yes
11	**Document in the SWMP how community emergency spill response and cleanup plans are communicated and coordinated** between applicable agencies and/or departments	Recommended by NEOSWTC[1]	**Civil Engineering**	Yes	Recommendation implemented		Yes
12	**Train** street, service, public works, building, and parks and recreation staff **to identify sources of illicit discharges**	Recommended by NEOSWTC[1]	**Building; CSD; Parks & Recreation; Sanitation;**	Yes	Implement recommendation in conjunction with required employee training (MCM#6)	Continuous/on going/as-needed basis	Yes

Minimum Control Measure #3 Illicit Discharge Detection and Elimination Best Management Practices (BMPs) See footnotes at end of table							
#	BMP		Responsible Party	Legal Authority ?	Measurable Goals		Address TMDLs?
	Name	Justification			(Schedules, Frequency, Etc.)	Justification	
			Street				
13	Establish a schedule for **regular meetings or other communications between third party service providers** (e.g. health department, SWCD, etc.) and the MS4 manager	Recommended by NEOSWTC[1]	**Civil Engineering**	Yes	Implement recommendation	Continuous/on going/as-needed basis	Yes
14	**"Developing a Used Oil Recycling Program"[2]**	Recommended by USEPA[2]	**Service Director**	[TBD[3]]	Implement recommendation[5]	[TBD[3]]	[TBD[3]]
15	**"Community hotlines"[2]**	Recommended by USEPA[2]	**Service Director**	[TBD[3]]	Implement recommendation[5]	[TBD[3]]	[TBD[3]]
16	**[Other MCM#3 BMPs[1,2,3,4,5]]**	[TBD[3]]	**[Any Department[3]]**	[TBD[3]]	[TBD[3]]	[TBD[3]]	[TBD[3]]

[1] Specific BMPs that address TMDLs are recommended by the Northeast Ohio Stormwater Training Council (NEOSWTC). See Total Maximum Daily Loads section of SWMP.
[2] See USEPA's National Menu of Best Management Practices (BMPs) for Stormwater at: https://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater#ill.
[3] To be determined.
[4] As applicable.
[5] As feasible.
[6] TMDLs may be addressed if specific themes are included per MCM#1 that address TMDLs.
[7] See "Annual Reporting for MCM#3" below.

Evaluating the Success of MCM#3

There are various ways to measure the City of Canton's success of implementing Minimum Control Measure #3:

- Assess individual BMPs to determine if they have been implemented in accordance with measurable goals, MCM performance standards, and applicable EPA and NEOSWTC recommendations.
- Annual Reports will provide indication of the status of implementation.
- The Storm Water Program Coordinator will conduct and annual review of the program with the Service Director so that appropriate adjustments and actions can be taken.
- Ohio EPA or other entities may conduct sampling of the Nimishillen Creek to determine if corresponding pollutant levels have decreased.
- Ohio EPA may perform audits of the City's Storm Water Management Program.

Annual Reporting for MCM#3

Whenever any of the following BMPs are implemented or are planned to be implemented, the responsible party will need to track corresponding information. The Storm Water Management Program Coordinator will send out annual questionnaires to departments requesting the respective information and possibly other information as well. The information provided will then be utilized to prepare Annual Reports that will be submitted as required to Ohio EPA.

- **Illicit Discharge Ordinance:**
    a. *Regarding the previous year (BMP was implemented):*
        i. Responsible Party:
        ii. Measurable Goal:
        iii. Completed (Yes or No)?
        iv. Cite Local Code(s) Being Used (If available, web link for code(s)):
        v. Summary of Results or Activities:
        vi. Was it Effective (Yes or No)?
        vii. You are required to maintain supporting documentation. What do you have?
    b. *Regarding this year (BMP is planned to be implemented):*
        i. Responsible Party:
        ii. Measurable Goal:
        iii. Summary of Planned Activities:
        iv. Proposed Schedule:

- **Storm Sewer System Map:**
    a. *Regarding the previous year (BMP was implemented):*
        i. Responsible Party:
        ii. Measurable Goal:
        iii. Completed (Yes or No)?
        iv. Summary of Activities or Updates:
        v. Was it Effective (Yes or No)?
        vi. You are required to maintain supporting documentation. What do you have?
    b. *Regarding this year (BMP is planned to be implemented):*
        i. Responsible Party:
        ii. Measurable Goal:
        iii. Summary of Planned Activities:
        iv. Proposed Schedule:

- **HSTS List and Map:**
    a. *Regarding the previous year (BMP was implemented):*
        i. **HSTS List:**
            1. Responsible Party:
            2. Measurable Goal:
            3. Completed (Yes or No)?

4. Summary of Activities or Updates:
5. Was it Effective (Yes or No)?
6. You are required to maintain supporting information. What do you have?

ii. **HSTS Map:**

1. Responsible Party:
2. Measurable Goal:
3. Completed (Yes or No)?
4. Summary of Activities or Updates:
5. Was it Effective (Yes or No)?
6. You are required to maintain supporting information. What do you have?

b. *Regarding this year (BMP is planned to be implemented):*

i. **HSTS List:**

1. Responsible Party:
2. Measurable Goal:
3. Summary of Planned Activities:
4. Proposed Schedule:

ii. **HSTS Map:**

1. Responsible Party:
2. Measurable Goal:
3. Summary of Planned Activities:
4. Proposed Schedule:

- **IDDE Plan:**
  a. *Regarding the previous year (BMP was implemented):*
     i. Describe your department's involvement:
     ii. Responsible Party:
     iii. Measurable Goal:
     iv. Completed (Yes or No)?
     v. Summary of Activities or Updates:
     vi. Was it Effective (Yes or No)?
     vii. You are required to maintain supporting documentation. What do you have?
  b. *Regarding this year (BMP is planned to be implemented):*
     i. Responsible Party:
     ii. Measurable Goal:
     iii. Summary of Planned Activities:
     iv. Proposed Schedule:

- **Dry-Weather Screening of Outfalls:**
  a. *Regarding the previous year (BMP was implemented):*
     i. Total # of Outfalls:
     ii. Responsible Party:
     iii. Measurable Goal:
     iv. Completed (Yes or No)?
     v. # of Outfalls Screened:
     vi. # of Dry-Weather Flows Identified:
     vii. # of Illicit Discharges Identified:
     viii. # of Illicit Discharges Eliminated:
     ix. Was it Effective (Yes or No)?
     x. You are required to maintain supporting documentation. What do you have?
  b. *Regarding this year (BMP is planned to be implemented):*
     i. Responsible Party:
     ii. Measurable Goal:
     iii. Summary of Planned Activities:

iv. Proposed Schedule:

Further Guidance and Information for MCM#3

See the “Additional Information” section of this Storm Water Management Program.

MCM#4: Construction Site Storm Water Runoff Control

General Requirements

As part of its overall Storm Water Management Program, the City of Canton is required to implement a "Construction Site Storm Water Control Program" to reduce pollutants in storm water runoff to the City's storm water drainage system from construction activities that result in land disturbances of one or more acres. See "Further Guidance and Information for MCM#4" below for details.

Decision Process for Development of "Construction Site Storm Water Control Program"

The decision process for the development of a Construction Site Storm Water Control Program consisted of the following steps, at a minimum:

Steps to Develop and Implement a "Construction Site Storm Water Control Program"	
Step #	**Description**
1	Understand permit requirements
2	Identify and document the City's decision process for the development of a Construction Site Storm Water Control Program per permit requirements
3	Identify and implement program BMPs
4	Prepare and submit annual reports to Ohio EPA
5	Evaluate the success of the program annually and make adjustments accordingly

Additional information pertaining to the decision process is provided below.

Ordinance to Require Erosion and Sediment Controls

The City of Canton utilizes an ordinance as the regulatory mechanism to require erosion and sediment controls at construction sites that disturb one or more total acres of land. Ordinances are the typical legislative mechanisms for cities to utilize to formally adopt and meet state and federal regulations and to establish local law.

In 2009, the City adopted a codified "Storm Water Management" ordinance (Chapter 961 of Part Nine - Streets, Utilities, and Public Services Code) which included the adoption of a "City of Canton Storm Water Management Manual". The Storm Water Management Manual provides policy, standards, applicability, criteria, requirements, recommendations, and guidance for general storm water drainage, storm water quantity management, and storm water quality management. It was prepared and is maintained by the City Engineering Department. The storm water quality management requirements - which include erosion and sediment controls - are based on the current Ohio EPA NPDES Construction Storm Water Permit requirements. The current version of the City of Canton Storm Water Management Manual is available on the Storm Water Management page of City Engineering's website at: http://cantonohio.gov/engineering/?pg=510.

Ensuring Compliance with the Erosion and Sediment Control Ordinance

All construction activities that disturb one or more total acres of land in the City of Canton subject to the storm water quality requirements of the City of Canton Storm Water Management Manual. Through a Memorandum Of Understanding (MOU), Stark SWCD review Storm Water Pollution Prevention Plans and conducts inspections of applicable sites for compliance with requirements. The Storm Water Management Ordinance includes sanctions and enforcement mechanisms to ensure compliance. The ordinance provides for plan denials, Notices Of Violations (NOVs), Stop Work Orders, injunctive relief, civil proceedings, fines, etc. to be utilized accordingly. Stark SWCD is authorized through the MOU to issue NOVs. For sites that do not comply with NOV conditions, Stark SWCD notifies the City so that further actions can occur accordingly.

Requirements for Erosion and Sediment Control BMPs

Storm water quality management requirements of the City of Canton Storm Water Management Manual are based, at a minimum, of the technical requirements of the current Ohio EPA NPDES Construction Storm Water Permit requirements.

Requirements for construction site operators to implement appropriate erosion and sediment control BMPs and control waste (discarded building materials, concrete truck washouts, chemicals, litter, sanitary waste, etc.) are included. BMPs are required to comply with provisions of ODNR's Rainwater and Land Development Manual, at a minimum. See the City of Canton Storm Water Management Manual for additional information.

Procedures for Storm Water Pollution Prevention Plan Reviews

All construction activities that disturb one or more total acres of land in the City of Canton are required by the Planning and Zoning Code to have a site plan submitted for review by several City departments that make up the City's Site Plan Review Committee. The City of Canton Storm Water Management Manual requires site plans to include a Storm Water Pollution Prevention Plan (SWP3) for applicable sites. Thus, 100% of sites in the City that will disturb one or more total acres of land are required to have site plans and SWP3s reviewed prior to construction. Through a Memorandum Of Understanding (MOU), Stark SWCD is considered a member of the City's Site Plan Review Committee. Stark SWCD reviews SWP3s for compliance with the storm water quality management requirements of the City of Canton Storm Water Management Manual. Site plans are not approved by the City unless Stark SWCD has approved of respective SWP3s. See the City of Canton Storm Water Management Manual for additional information.

A "City of Canton Site Plan Review Process" flowchart is available on the Engineering Department's website at: http://cantonohio.gov/engineering/.

Latest revision: 1/4/2019

Procedures for Receipt and Consideration of Information Submitted by the Public

The public is welcomed to attend regular City Council meetings, contact any City department or Stark SWCD as necessary to relay questions and concerns about current or proposed construction activities within the City. The City does its best to answer questions and consider information submitted by the public regarding proposed development. Through an MOU, Stark SWCD addresses complaints related to construction activities by site investigation with an appropriate letter, email, meeting, or phone call to follow-up the investigation. If Stark SWCD is unable to address the issue, an appropriate City representative becomes involved.

A "City of Canton Drainage Complaint General Guidance" table is available on the Storm Water Management page of the Engineering Department's website at: http://cantonohio.gov/engineering/?pg=510.

Procedures for Site Inspection and Enforcement

Through an MOU, Stark SWCD conducts routine inspections of sites that are subject to storm water quality management requirements to ensure SWP3s are implemented as approved. Monthly inspections of active sites (those that have ongoing construction activities) are conducted, at a minimum. All active sites are considered priorities. Once construction activities are completed and the sites are stabilized, a final inspection by Stark SWCD occurs. See the City of Canton Storm Water Management Manual for additional information.

The Storm Water Management Ordinance includes sanctions and enforcement mechanisms to ensure compliance. The ordinance provides for plan denials, Notices Of Violations (NOVs), Stop Work Orders, injunctive relief, civil proceedings, fines, etc. to be utilized accordingly. Stark SWCD is authorized through the MOU to issue NOVs. For sites that do not comply with NOV conditions, Stark SWCD notifies the City so that further actions can occur accordingly.

Responsible Parties for Implementing the Construction Site Storm Water Control Program

The City of Canton Service Director is responsible for the overall compliance of the City with the NPDES Storm Water Permit requirements. Coordination of the SWMP is delegated to the Assistant City Engineer of the Civil Engineering Department. Responsibility for implementation of *certain* BMPs has been assigned to *specific* departments. *Other* BMPs may be implemented by *any* department *as feasible*. See Best Management Practices (BMPs) below and the Table of Organization for details. As BMPs are implemented, each respective responsible position is required to maintain appropriate supporting documentation.

Best Management Practices (BMPs)

Aside from Minimum Control Measure #4 BMPs that may be described above, the table below also lists certain BMPs that are expected or required to be implemented by certain departments, while others are shown as recommendations for potential implementation depending on applicability and/or feasibility. Recommendations are based on USEPA and NEOSWTC recommendations:

- USEPA has prepared "BMP Fact Sheets" and other resources related to many BMPs in the City's Storm Water Management Program. They can be found on the *National Menu of Best Management Practices (BMPs) for Stormwater* webpage by clicking on the respective Minimum Control Measure tabs. The BMP Fact Sheets provide further explanation, applicability, recommendations, implementation, and effectiveness information of common BMPs. Fact sheets and resources should be reviewed periodically by employees who are involved in respective BMP implementation. See "Further Guidance and Information for MCM#4" below.

- The Northeast Ohio Storm Water Training Council (NEOSWTC) has prepared "TMDL Fact Sheets" pertaining to respective Nimishillen Creek TMDLs and corresponding recommended BMPs to address the TMDLs. In order to meet permit requirements, appropriate BMPs must be selected to address TMDL recommendations. Therefore, some of the recommended BMPs are to be utilized as part of the City's Construction Site Storm Water Control Program.

Depending on whether or not a BMP is a requirement or recommendation, measurable goals have been written accordingly. Annual Reports will document exactly which BMPs were implemented in the previous year as well as identify possible BMPs to be implemented in the upcoming year.

Minimum Control Measure #4 Construction Site Storm Water Runoff Control Best Management Practices (BMPs) See footnotes at end of table							
#	BMP		Responsible Party	Legal Authority?	Measurable Goals		Address TMDLs?
	Name	Justification			(Schedules, Frequency, Etc.)	Justification	
1	**Construction Site Runoff Ordinance**	Required by permit	**Civil Engineering**	Yes	• Update ordinance as needed to meet permit requirements; implement recommendations[4,5]; • **Annual Reporting requirements[6]**	Required	Yes
1a	**Update existing construction runoff control code** to meet or exceed the requirements of the NPDES Construction General Permit (OHC000004), including the federal effluent limitations in Part II	Recommended by NEOSWTC[1]	**Civil Engineering**	Yes	Recommendation implemented		Yes
1b	Include the following in your code: • **Require on-site protected areas** (i.e. wetlands, riparian areas, other valuable resources) **to be physically marked in the field** prior to commencement of earth-disturbing activities	Recommended by NEOSWTC[1]	**Civil Engineering**	Yes	Implement recommendation[5]	Pending	Yes
1c	Include the following in your code: • **Require 50-ft natural vegetative buffers** to be maintained between the limits of disturbance and water resources	Recommended by NEOSWTC[1]	**Civil Engineering**	Yes	Implement recommendation[5]	Pending	Yes
1d	Include the following in your code: • **Maintain wetlands in their natural states** wherever feasible	Recommended by NEOSWTC[1]	**Civil Engineering**	Yes	Implement recommendation[5]	Pending	Yes
2	**Construction Site Storm Water Quality Requirements**	Required by permit	**Civil Engineering**	Yes	• Update requirements as needed to meet permit requirements; implement recommendations[4,5]; • **Annual Reporting requirements[6]**	Required	Yes

Minimum Control Measure #4 Construction Site Storm Water Runoff Control Best Management Practices (BMPs) See footnotes at end of table							
#	BMP		Responsible Party	Legal Authority?	Measurable Goals		Address TMDLs?
	Name	Justification			(Schedules, Frequency, Etc.)	Justification	
2a	Ensure most current erosion, sediment, and non-sediment control BMP standards are required to be utilized (e.g. **Rainwater & Land Development Manual**)	Recommended by NEOSWTC[1]	**Civil Engineering**	Yes	Recommendation implemented		Yes
3	**SWP3 Reviews** (for construction site storm water quality management)	Required by permit	**Stark SWCD**	Yes, via MOU	Continue to implement requirement	Required	Yes
3a	Complete Storm Water Pollution Prevention Plan **(SWP3) reviews** and approvals **prior to construction commencement**	Recommended by NEOSWTC[1]	**Stark SWCD**	Yes, via MOU	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Yes
4	**Complaint Process**	Required by permit	**Stark SWCD**	Yes, via MOU	• Receive and consider information submitted by the public; • **Annual Reporting requirements[6]**	Required	Yes
4a	Establish a **standard operating procedure** to respond to complaints	Recommended by NEOSWTC[1]	**Stark SWCD**	Yes, via MOU	Recommendation implemented		Yes
5	**Site Inspection Procedures** (for construction site storm water BMPs)[2]	Required by permit	**Stark SWCD**	Yes, via MOU	• Conduct monthly site inspections, at a minimum, on applicable construction sites; • **Annual Reporting requirements[6]**	Required	Yes
5a	Conduct **site inspections** to ensure SWP3 implementation	Recommended by NEOSWTC[1]	**Stark SWCD**	Yes, via MOU	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Yes
5b	Require MS4 compliance inspectors to provide a **written report** of findings to	Recommended by NEOSWTC[1]	**Stark SWCD**	Yes, via MOU	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Yes

Minimum Control Measure #4 Construction Site Storm Water Runoff Control Best Management Practices (BMPs) See footnotes at end of table							
#	BMP		Responsible Party	Legal Authority?	Measurable Goals		Address TMDLs?
	Name	Justification			(Schedules, Frequency, Etc.)	Justification	
	construction site operators for every site inspection; the report would summarize compliance and non-compliance matters and establish deadlines for corrective action						
6	**Compliance and Enforcement Procedures**	Required by permit	**Stark SWCD; Civil Engineering**	Stark SWCD: Yes, via MOU; Civil Engineering: Yes	• Enforce ordinance accordingly; • **Annual Reporting requirements**[6]	Required	Yes
6a	Establish a protocol for **enforcement escalation** of your community's construction runoff control code	Recommended by NEOSWTC[1]	**Civil Engineering**	Yes	Recommendation implemented		Yes
6b	Develop an **enforcement escalation plan** that outlines how and when your community will address non-compliance with approved erosion, sediment, and non-sediment control plans	Recommended by NEOSWTC[1]	**Civil Engineering**	Yes	Recommendation implemented		Yes
7	**Protect and maintain wetlands in their natural states** – wetlands filter nitrogen as well as other nutrients and pollutants[2]	Recommended by NEOSWTC[1]	**[All applicable departments]**	Yes	Implement recommendation	Continuous/ongoing/as-needed basis	Yes
8	**Protect and maintain natural vegetative buffers** to filter storm water runoff[2]	Recommended by NEOSWTC[1]	**[All applicable departments]**	Yes	Implement recommendation	Continuous/ongoing/as-needed basis	Yes
9	Ensure **portable toilets** are maintained and emptied without spills	Recommended by NEOSWTC[1]	**[All applicable departments]**	Yes	Implement recommendation	Continuous/ongoing/as-needed basis	Yes
10	Maintain a **map of active construction sites** to more easily identify watersheds being impacted by construction site runoff and prioritize sites in those watersheds for	Recommended by NEOSWTC[1]	**Stark SWCD**	Yes	Implement recommendation[5]	Pending	Yes

Minimum Control Measure #4 Construction Site Storm Water Runoff Control Best Management Practices (BMPs) See footnotes at end of table							
#	BMP		Responsible Party	Legal Authority?	Measurable Goals		Address TMDLs?
	Name	Justification			(Schedules, Frequency, Etc.)	Justification	
	inspections more frequently than once a month						
11	Establish a **Sediment and Erosion Control Bond** equivalent to the cost to stabilize (vegetate) disturbed areas of respective sites in case of non-performance (i.e. developer foreclosure/bankruptcy)	Recommended by NEOSWTC[1]	**[All applicable departments]**	[TBD[3]]	Implement recommendation[5]	Pending	Yes
12	Establish a **schedule for regular meetings** or other communications between third-party service providers (e.g. health department, SWCD, etc.) and the MS4 manager	Recommended by NEOSWTC[1]	**Civil Engineering; Stark SWCD**	Yes	Implement recommendation	Continuous/ongoing/as-needed basis	Yes
13	Ensure **proper storage of landscape materials** on construction sites	Recommended by NEOSWTC[1]	**[All applicable departments]**	Yes	Implement recommendation	Continuous/ongoing/as-needed basis	Yes
14	**[Any construction site runoff control BMPs as recommended by USEPA[2]]**	Recommended by USEPA[2]	**[All applicable departments]**	[TBD[3,4,5]]	Implement recommendations[5]	Pending	[TBD[3]]
15	**[Other MCM#4 BMPs[1,2,3,4,5]]**	[TBD[3,4,5]]	**[Any Department[3,4,5]]**	[TBD[3]]	[TBD[3]]	[TBD[3]]	[TBD[3]]

[1] Specific BMPs that address TMDLs are recommended by the Northeast Ohio Stormwater Training Council (NEOSWTC). See Total Maximum Daily Loads section of SWMP.
[2] See USEPA's National Menu of Best Management Practices (BMPs) for Stormwater at: https://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater#constr.
[3] To be determined.
[4] As applicable.
[5] As feasible.
[6] See "Annual Reporting for MCM#4" below.

Evaluating the Success of MCM#4

There are various ways to measure the City of Canton's success of implementing Minimum Control Measure #4:

- Assess individual BMPs to determine if they have been implemented in accordance with measurable goals, MCM performance standards, and applicable EPA and NEOSWTC recommendations.
- Annual Reports will provide indication of the status of implementation.
- The Storm Water Program Coordinator will conduct and annual review of the program with the Service Director so that appropriate adjustments and actions can be taken.
- Ohio EPA or other entities may conduct sampling of the Nimishillen Creek to determine if corresponding pollutant levels have decreased.
- Ohio EPA may perform audits of the City's Storm Water Management Program.

Annual Reporting for MCM#4

Whenever any of the following BMPs are implemented or are planned to be implemented, the responsible party will need to track corresponding information. The Storm Water Management Program Coordinator will send out annual questionnaires to departments requesting the respective information and possibly other information as well. The information provided will then be utilized to prepare Annual Reports that will be submitted as required to Ohio EPA.

- **Construction Site Runoff Ordinance:**
    a. *Regarding the previous year (BMP was implemented):*
        i. Responsible Party:
        ii. Measurable Goal:
        iii. Completed (Yes or No)?
        iv. Cite Local Code(s) Being Used (If available, web link for code(s)):
        v. Summary of Results or Activities:
        vi. Was it Effective (Yes or No)?
        vii. You are required to maintain supporting documentation. What do you have?
    b. *Regarding this year (BMP is planned to be implemented):*
        i. Responsible Party:
        ii. Measurable Goal:
        iii. Summary of Planned Activities:
        iv. Proposed Schedule:

- **Sediment and Erosion Control Requirements:**
    a. *Regarding the previous year (BMP was implemented):*
        i. Responsible Party:
        ii. Measurable Goal:
        iii. Completed (Yes or No)?
        iv. Standards Being Used:
        v. Summary of Results or Activities:
        vi. Were they Effective (Yes or No)?
        vii. You are required to maintain supporting documentation. What do you have?
    b. *Regarding this year (BMP is planned to be implemented):*
        i. Responsible Party:
        ii. Measurable Goal:
        iii. Summary of Planned Activities:
        iv. Proposed Schedule:

- **Complaint Process:**
    a. *Regarding the previous year (BMP was implemented):*
        i. Describe your department's involvement:
        ii. Responsible Party:
        iii. Measurable Goal:

iv. Completed (Yes or No)?
v. # of Complaints Received:
vi. # of Complaints Responded to:
vii. Summary of Results or Activities:
viii. Was it Effective (Yes or No)?
ix. You are required to maintain supporting documentation. What do you have?

b. *Regarding this year (BMP is planned to be implemented):*
i. Responsible Party:
ii. Measurable Goal:
iii. Summary of Planned Activities:
iv. Proposed Schedule:

- **Site Plan Review Procedures:**
  a. *Regarding the previous year (BMP was implemented):*
     i. Responsible Party:
     ii. Measurable Goal:
     iii. Completed (Yes or No)?
     iv. # of Applicable Sites Requiring Plans:
     v. # of Plans Reviewed:
     vi. Summary of Results or Activities:
     vii. Were they Effective (Yes or No)?
     viii. You are required to maintain supporting documentation. What do you have?
  b. *Regarding this year (BMP is planned to be implemented):*
     i. Responsible Party:
     ii. Measurable Goal:
     iii. Summary of Planned Activities:
     iv. Proposed Schedule:

- **Site Inspection Procedures:**
  a. *Regarding the previous year (BMP was implemented):*
     i. Responsible Party:
     ii. Measurable Goal:
     iii. Completed (Yes or No)?
     iv. # of Applicable Sites:
     v. # of Site Inspections Performed:
     vi. Average Frequency of Inspections:
     vii. Summary of Results or Activities:
     viii. Were they Effective (Yes or No)?
     ix. You are required to maintain supporting documentation. What do you have?
  b. *Regarding this year (BMP is planned to be implemented):*
     i. Responsible Party:
     ii. Measurable Goal:
     iii. Summary of Planned Activities:
     iv. Proposed Schedule:

- **Enforcement Procedures:**
  a. *Regarding the previous year (BMP was implemented):*
     i. Responsible Party:
     ii. Measurable Goal:
     iii. Completed (Yes or No)?
     iv. # of Violation Letters:
     v. # of Enforcement Actions:
     vi. Summary of Results or Activities:

vii. Were they Effective (Yes or No)?
viii. You are required to maintain supporting documentation. What do you have?

b. *Regarding this year (BMP is planned to be implemented):*
   - **i.** Responsible Party:
   - **ii.** Measurable Goal:
   - **iii.** Summary of Planned Activities:
   - **iv.** Proposed Schedule:

Further Guidance and Information for MCM#4

See the "Additional Information" section of this Storm Water Management Program.

MCM#5: Post-Construction Storm Water Management in New Development and Redevelopment

General Requirements

As part of its overall Storm Water Management Program, the City of Canton is required to implement a "Post-Construction Storm Water Management Program" to address storm water runoff to the City's storm water drainage system from new development and redevelopment projects that disturb one or more acres. See "Further Guidance and Information for MCM#5" below for details.

Decision Process for the Development of "Post-Construction Storm Water Management Program"

The decision process for the development of a Construction Site Storm Water Control Program consisted of the following steps, at a minimum:

Steps to Develop and Implement a "Post-Construction Storm Water Management Program"	
Step #	**Description**
1	Understand permit requirements
2	Identify and document the City's decision process for the development of a Post-Construction Storm Water Management Program per permit requirements
3	Identify and implement program BMPs
4	Prepare and submit annual reports to Ohio EPA
5	Evaluate the success of the program annually and make adjustments accordingly

Additional information pertaining to the decision process is provided below.

Addressing Storm Water Runoff from New Development and Redevelopment

The City of Canton's program to address storm water runoff from new development and redevelopment applies to all projects that disturb one or more total acres of land within the City of Canton. Post-construction storm water quality management (pollution control) as well as post-construction storm water quantity management (flood control) are required in accordance with provisions of the City of Canton Storm Water Management Manual. The City of Canton and Stark SWCD have a Memorandum Of Understanding (MOU) which details Stark SWCD's responsibilities to review Storm Water Pollution Prevention Plans (SWP3s), inspections applicable projects, provide certain enforcement actions, and perform other functions pertaining to post-construction storm water management in the City of Canton.

How the Program is Specifically Tailored for the City of Canton

The City of Canton is required by Ohio EPA to implement a Post-Construction Storm Water Management Program in accordance with NPDES Small MS4 Permit requirements. The program has been and is being implemented to address permit requirements. Ways in which the program is specifically tailored for the City of Canton to minimize water quality impacts include, but are not limited to:

- *Implementation of BMPs to address TMDLs* – The permit requires the implementation of BMPs to address applicable TMDLs. Since the City of Canton is located within the Nimishillen Creek watershed, recommended BMPs to address Nimishillen Creek watershed TMDLs have been included to be implemented as part of the program.
- *The use of applicable local master plans and comprehensive plans, planning and zoning ordinances, local storm water management regulations, etc.*
- *The use of Stark SWCD* (see above).
- *The review of site plans in accordance with City of Canton requirements*. A "City of Canton Site Plan Review Process" flowchart is available on the Engineering Department's website at: http://cantonohio.gov/engineering/.

Ways in which the program is specifically tailored to the City of Canton to attempt to maintain pre-development runoff conditions include, but are not limited to:

- *Post-construction storm water quantity (i.e. detention) requirements* - Detention criteria in many communities limits post-developed discharges from a site to not exceed pre-developed discharges for the 2-, 5-, 10-, 25-, 50-, and 100-year storm events. However, in the City of Canton, detention criterion is different in that it typically does not allow post-developed discharges to exceed the minimum capacity of the downstream receiving system. This also helps to control flooding and downstream erosion. Detailed criterion is provided in the City of Canton Storm Water Management Manual.

Latest revision: 1/4/2019

Structural and Non-Structural BMPs

According to the Ohio EPA Post-Construction Q&A Document, post-construction BMPs fall into one of two categories: structural or non-structural BMPs. Structural BMPs are practices that must be built to provide treatment of storm water either through storage, filtration, or infiltration. Non-structural BMPs generally consist of preservation, planning, or procedures that direct development away from water resources or limit the creation of impervious surfaces. The City of Canton's Post-Construction Storm Water Management Program encourages a mixture of structural and non-structural BMPs but essentially allows and encourages a*ny* non-structural BMPs found in ODNR's Rainwater and Land Development Manual, Ohio EPA's Construction Storm Water Permit, Ohio EPA's Post-Construction Q&A Document, or as recommended by the NEOSWTC - as long as they are in conformance with local laws and regulations. See Best Management Practices (BMPs) below for details.

Ordinance Addressing Post-Construction Runoff

The City of Canton utilizes an ordinance as the regulatory mechanism to address post-construction runoff from new development and redevelopment projects that disturb one or more total acres of land. Ordinances are the typical legislative mechanisms for cities to utilize to formally adopt and meet state and federal regulations and to establish local law.

In 2009, the City adopted a codified "Storm Water Management" ordinance (Chapter 961 of Part Nine - Streets, Utilities, and Public Services Code) which included the adoption of a "City of Canton Storm Water Management Manual". The Storm Water Management Manual provides policy, standards, applicability, criteria, requirements, recommendations, and guidance for general storm water drainage, storm water quantity management, and storm water quality management. It was prepared and is maintained by the City Engineering Department. The storm water quality management requirements – which include post-construction storm water management - are primarily based on the current Ohio EPA NPDES Construction Storm Water Permit requirements. The current version of the City of Canton Storm Water Management Manual is available on the Storm Water Management page of City Engineering's website at: http://cantonohio.gov/engineering/?pg=510.

Ensuring Long-Term Operation and Maintenance of Post-Construction BMPs

All permanent post-construction BMPs required to be installed per the City of Canton Storm Water Management Manual are also required to have a Long-Term Maintenance Plan (LTMP). The LTMP is required to be prepared by the regulated party, contain various contents pertaining to responsibilities, BMP maintenance information, and other information, and signed by the responsible party. Through an MOU between the City of Canton and Stark SWCD, Stark SWCD reviews LTMPs, performs annual inspections of post-construction BMPs (except for alternative BMPs), and provides inspections letters to the responsible party and the City of Canton. Inspection letters detail any maintenance needs or other issues and an associated timeline for completion. See the City of Canton Storm Water Management Manual for details. If the maintenance items or other issues are not addressed by the responsible party in the timeline given, Stark SWCD will notify the City of Canton so that the City can take the appropriate actions in accordance with provisions of Chapter 961 "Storm Water Management". Post-construction BMPs that release illicit discharges to the City's MS4 are also subject to enforcement via Chapter 961.

Responsible Parties for Implementing the Post-Construction Storm Water Management Program

The City of Canton Service Director is responsible for the overall compliance of the City with the NPDES Storm Water Permit requirements. Coordination of the SWMP is delegated to the Assistant City Engineer of the Civil Engineering

Department. Responsibility for implementation of *certain* BMPs has been assigned to *specific* departments. *Other* BMPs may be implemented by *any* department *as feasible*. See Best Management Practices (BMPs) below and the Table of Organization for details. As BMPs are implemented, each respective responsible position is required to maintain appropriate supporting documentation.

Best Management Practices (BMPs):

Aside from Minimum Control Measure #5 BMPs that may be described above, the table below also lists certain BMPs that are expected or required to be implemented by certain departments, while others are shown as recommendations for potential implementation depending on applicability and/or feasibility. Recommendations are based on USEPA, NEOSWTC, and permit recommendations:

- USEPA has prepared "BMP Fact Sheets" and other resources related to many BMPs in the City's Storm Water Management Program. They can be found on the *National Menu of Best Management Practices (BMPs) for Stormwater* webpage by clicking on the respective Minimum Control Measure tabs. The BMP Fact Sheets provide further explanation, applicability, recommendations, implementation, and effectiveness information of common BMPs. Fact sheets and resources should be reviewed periodically by employees who are involved in respective BMP implementation. See "Further Guidance and Information for MCM#5" below.

- The Northeast Ohio Storm Water Training Council (NEOSWTC) has prepared "TMDL Fact Sheets" pertaining to respective Nimishillen Creek TMDLs and corresponding recommended BMPs to address the TMDLs. In order to meet permit requirements, appropriate BMPs must be selected to address TMDL recommendations. Therefore, some of the recommended BMPs are to be utilized as part of the City's Post-Construction Storm Water Management Program.

Depending on whether or not a BMP is a requirement or recommendation, measurable goals have been written accordingly. Annual Reports will document exactly which BMPs were implemented in the previous year as well as identify possible BMPs to be implemented in the upcoming year.

Minimum Control Measure #5 Post-Construction Storm Water Management in New Development and Redevelopment Best Management Practices (BMPs) See footnotes at end of table							
#	BMP		Responsible Party	Legal Authority ?	Measurable Goals		Address TMDLs?
	Name	Justification			(Schedules, Frequency, Etc.)	Justification	
1	**Post-Construction Storm Water Management Ordinance**	Required by permit	**Civil Engineering**	Yes	• Update ordinance as needed to meet permit requirements; • **Annual Reporting requirements**[6]	Required	Yes
1a	**Update existing storm water management code** to meet or exceed the requirements of NPDES OHC000004, including the federal effluent limitations in Part II	Recommended by NEOSWTC[1]	**Civil Engineering**	Yes	Recommendation implemented		Yes

1b	Include at least one of the following in your storm water management code:
	• **Require on-site protected areas** (i.e. wetlands, riparian areas, other valuable resources) **to be physically marked in the field** prior to commencement of earth-disturbing activities
	• Prioritize and incentivize the following types of post-construction BMPs:
	  • **Infiltration basins and trenches** with appropriate pretreatment, e.g. vegetated swales, filter strips, etc.
	  • **Wet extended detention basins**
	  • **Dry extended detention basins** with forebays and micropools
	  • **Bioretention** areas with internal water storage
	  • **Constructed wetlands** that provide extended detention of the water quality volume (WQv)
	  • **Permeable pavement** with internal water storage
	  • **Tree box filters**
		Recommended by NEOSWTC[1]	**Civil Engineering**	Yes	Recommendation implemented – the City of Canton Storm Water Management Manual requires post-construction BMPs in accordance with NPDES Construction Storm Water Permit requirements		Yes

2	**Post-Construction Requirements**[2]	Required by permit	**Civil Engineering**	Yes	• Update requirements as needed to meet permit requirements; • **Annual Reporting requirements**[6]	Required	Yes

Minimum Control Measure #5 Post-Construction Storm Water Management in New Development and Redevelopment Best Management Practices (BMPs) See footnotes at end of table							
#	BMP		Responsible Party	Legal Authority ?	Measurable Goals		Address TMDLs?
	Name	Justification			(Schedules, Frequency, Etc.)	Justification	
2a	Ensure the most current post-construction BMP standards are required to be utilized (e.g. **Rainwater & Land Development Manual**)	Recommended by NEOSWTC[1]	**Civil Engineering**	Yes	Continue to implement recommendation	Continuous/on going/as-needed basis	Yes
2b	Update the **design specification for bioretention** to require internal water storage whenever feasible for additional nitrogen treatment (as recommended by ODNR's Rainwater & Land Development Manual)	Recommended by NEOSWTC[1]	**Civil Engineering**	Yes	Implement recommendation[5]	Pending	Yes
2c	Select post-construction **BMPs that eliminate or minimize bacteria**, such as bioretention and constructed wetlands (as recommended by ODNR's Rainwater & Land Development Manual)	Recommended by NEOSWTC[1]	**Civil Engineering**	Yes	Continue to implement recommendation	Continuous/on going/as-needed basis	Yes
2d	Allow or require **vegetative practices** (taller native grasses, etc.) around storm water management ponds that discourage waterfowl	Recommended by NEOSWTC[1]	**Civil Engineering; [Other applicable departments]**	Yes	Continue to allow vegetative practices around storm water management ponds	Continuous/on going/as-needed basis	Yes
2e	Require or allow **non-structural BMPs** such as: • **Conservation easements**	Recommended by Ohio EPA's Post-Construction Q&A Document	**Development; Civil Engineering; Planning; Zoning**	[TBD[3]]	Implement recommendations[5]	Pending	[TBD[3]]
2f	Require or allow **non-structural BMPs** such as: • **Riparian and wetland setbacks**	Recommended by Ohio EPA's Post-Construction Q&A Document	**Development; Civil Engineering; Planning; Zoning**	[TBD[3]]	Implement recommendations[5]	Pending	[TBD[3]]
2g	Require or allow **non-structural BMPs** such as: • **Rain barrels** to capture and reuse storm water	Recommended by Ohio EPA's Post-Construction Q&A Document	**Development; Civil Engineering; Planning; Zoning**	[TBD[3]]	Implement recommendations[5]	Pending	[TBD[3]]

Minimum Control Measure #5 Post-Construction Storm Water Management in New Development and Redevelopment Best Management Practices (BMPs) See footnotes at end of table							
#	BMP		Responsible Party	Legal Authority ?	Measurable Goals		Address TMDLs?
	Name	Justification			(Schedules, Frequency, Etc.)	Justification	
2h	Require or allow **non-structural BMPs** such as: • **Breaking up the connectivity between impervious surfaces**	Recommended by Ohio EPA's Post-Construction Q&A Document	**Development; Civil Engineering; Planning; Zoning**	[TBD[3]]	Implement recommendations[5]	Pending	[TBD[3]]
2i	Require or allow **non-structural BMPs** such as: • Use of **permeable pavements**	Recommended by Ohio EPA's Post-Construction Q&A Document	**Development; Civil Engineering; Planning; Zoning**	[TBD[3]]	Implement recommendations[5]	Pending	[TBD[3]]
2j	Require or allow **non-structural BMPs** such as: • **Conservation subdivision design** (subdivisions which leave 40-50% of the land in open space and place developed areas away from important water resources, yet still allow the same lot yield as traditional subdivision design)	Recommended by Ohio EPA's Post-Construction Q&A Document	**Development; Planning; Zoning**	[TBD[3]]	Implement recommendations[5]	Pending	[TBD[3]]
2k	Require or allow **non-structural BMPs** such as: • **Green infrastructure** storm water management techniques	Recommended by permit	**Development; Civil Engineering; Planning; Zoning**	[TBD[3]]	Implement recommendations[5]	Pending	[TBD[3]]
2l	Adopt **Non-structural BMPs** such as: • **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**	Recommended by permit	**Development; Civil Engineering; Planning; Zoning**	[TBD[3]]	Implement recommendations[5]; Planning and zoning ordinances implemented - The City's Planning & Zoning Code regulates development within all areas of the City in accordance with respective zone classifications. • Chapter 1132 "Flood Hazard District" generally restricts development adjacent to certain water bodies within the City.	Pending; Some implemented	[TBD[3]]

Minimum Control Measure #5
Post-Construction Storm Water Management in New Development and Redevelopment
Best Management Practices (BMPs)
See footnotes at end of table

#	BMP		Responsible Party	Legal Authority ?	Measurable Goals		Address TMDLs?
	Name	Justification			(Schedules, Frequency, Etc.)	Justification	
					• Chapter 1133 "Open Space District" reserves areas for public parks and recreation, and promotes the conservation of natural resources including land and water conservation and wildlife refuges, and agricultural areas. • Other chapters regulate residential, business, and industrial districts, with certain requirements for building setbacks, maximum % of lot coverage, and minimum percent of lot landscaping, as applicable. • Chapter 1143 "Planned Unit Development Districts" promotes "low impact development" philosophy such as the preservation and utilization of natural topography, geologic features, scenic vistas, green areas, requiring open spaces, minimizing impervious areas, preventing the disruption of natural drainage patterns, etc.		
2m	Adopt **Non-structural BMPs** such as: • **Policies and ordinances** that **encourage infill development** in higher density urban areas, and areas with existing storm sewer infrastructure	Recommended by permit	**Development; Planning; Zoning**	Yes	Infill Residential Development Ordinance (#217-2005) implemented - The ordinance provides that lots created prior to 1979 and held in separate ownership from adjoining and/or abutting property and less than the required lot area and width requirements of the applicable zoning district shall be deemed buildable lots if all of the following apply: the lot frontage is not less than 45 feet; the total area of the lot is not less than 4,500 square feet; and over 65% of the properties within 300 feet of the same street frontage of the lot are the same or less than the lot in question and are developed with a permitted residential structure. Any		Possibly[1]

Minimum Control Measure #5 Post-Construction Storm Water Management in New Development and Redevelopment Best Management Practices (BMPs) See footnotes at end of table							
#	BMP		Responsible Party	Legal Authority ?	Measurable Goals		Address TMDLs?
	Name	Justification			(Schedules, Frequency, Etc.)	Justification	
					lot not meeting current zoning requirements for the district in which it is located and not meeting the requirements of the ordinance are deemed non-buildable unless granted a variance by the Board of Zoning Appeals. Most City streets serving higher density urban areas have existing storm sewers.		
2n	Provide **Non-structural BMPs** such as: • **Education programs for developers and the public** about project designs that minimize water quality impacts	Recommended by permit	**[Any applicable department]**	Yes	Implement recommendation[5]	Pending	[TBD[3]]
			Stark SWCD	Yes, via MOU	As described in MCM#1, Stark SWCD provides training and education for the development community, typically through annual workshops. These could be considered education programs for developers about project designs that minimize water quality impacts.		Possibly[1]
2o	Require or allow **non-structural BMPs** such as: • Other measures such as **minimization of the percentage of impervious area after development**, use of measures to **minimize directly-connected impervious areas**, and source control measures such as **good housekeeping**, **preventative maintenance**, and **spill prevention**	Recommended by permit	**Development; Civil Engineering; Planning; Zoning; [Any other applicable department]**	[TBD[3]]	Implement recommendations[5]	Pending	[TBD[3]]
2p	Require or allow **structural BMPs** such as: • **Extended detention basins** • **Bioretention cells** • **Sand filters** • **Vegetated filter strips** • **Water quality swales** • **Infiltration trenches**	Recommended by Ohio EPA's Post-Construction Q&A Document	**Civil Engineering**	Yes	Continue to implement recommendations	Continuous/on going/as-needed basis	Possibly[1]
2q	Require or allow **structural BMPs** such as: • **Green infrastructure** storm water management techniques	Recommended by permit	**Development; Civil Engineering; Planning;**		Implement recommendations[5]	Pending	[TBD[3]]

Minimum Control Measure #5 Post-Construction Storm Water Management in New Development and Redevelopment Best Management Practices (BMPs) See footnotes at end of table							
#	BMP		Responsible Party	Legal Authority ?	Measurable Goals		Address TMDLs?
	Name	Justification			(Schedules, Frequency, Etc.)	Justification	
			Zoning				
2r	Require or allow **structural BMPs** such as: • Storage practices such as **wet ponds and extended detention structures** • Filtration practices such as **grassed swales, bioretention cells, sand filters and filter strips** • Infiltration practices such as **infiltration basins and infiltration trenches**	Recommended by permit	**Civil Engineering**	Yes	Continue to implement recommendations	Continuous/on going/as-needed basis	Possibly[1]
3	**SWP3 Reviews** (for post-construction storm water quality management)[2]	Required by permit	**Stark SWCD**	Yes, via MOU	• Conduct SWP3 reviews for applicable sites; • **Annual Reporting requirements[6]**	Required	Yes
3a	Complete Storm Water Pollution Prevention Plan (SWP3) reviews and approvals **prior to construction commencement**	Recommended by NEOSWTC[1]	**Stark SWCD**	Yes, via MOU	Continue to implement recommendation	Continuous/on going/as-needed basis	Yes
3b	Review 100% of SWP3s where the **larger common plan of development disturbs one or more acres**	Recommended by NEOSWTC[1]	**Stark SWCD**	Yes, via MOU	Continue to implement recommendation	Continuous/on going/as-needed basis	Yes
4	**Site Inspection Procedures** (for post-construction site storm water BMPs)[2]	Required by permit	**Stark SWCD**	Yes, via MOU	• Conduct inspections of applicable construction sites to ensure post-construction BMPs are installed per requirements; • **Annual Reporting requirements[6]**	Required	Yes
4a	Conduct **monthly site inspections** throughout construction, as well as **a final site inspection** to ensure implementation of post-construction BMPs in the approved SWP3	Recommended by NEOSWTC[1]	**Stark SWCD**	Yes, via MOU	Continue to implement recommendation	Continuous/on going/as-needed basis	Yes
4b	Require MS4 compliance inspectors to provide a **written report of findings** to construction site operators for every site inspection; the report would summarize compliance and non-compliance matters and establish a deadline for corrective action	Recommended by NEOSWTC[1]	**Stark SWCD**	Yes, via MOU	Continue to implement recommendation	Continuous/on going/as-needed basis	Yes

Minimum Control Measure #5 Post-Construction Storm Water Management in New Development and Redevelopment Best Management Practices (BMPs) See footnotes at end of table							
#	BMP		Responsible Party	Legal Authority ?	Measurable Goals		Address TMDLs?
	Name	Justification			(Schedules, Frequency, Etc.)	Justification	
5	**Compliance and Enforcement Procedures[2]**	Required by permit	**Stark SWCD**	Yes	• Enforce ordinance accordingly; • **Annual Reporting requirements[6]**	Required	Yes
5a	Develop an **enforcement escalation plan** that outlines how and when your community will address non-compliance with approved storm water management plans	Recommended by NEOSWTC[1]	**Civil Engineering**	Yes	Recommendation implemented		Yes
6	Ensure adequate **long-term operation and maintenance of post-construction BMPs[2]**	Required by permit	**Stark SWCD**	Yes, via MOU	• Ensure Long-Term O&M Plans are in place and conduct annual inspections of applicable BMPs; • **Annual Reporting requirements[6]**	Required	Yes
6a	Ensure SWP3 includes an executed Maintenance Agreement and **Long-Term Maintenance Plan** for post-construction BMPs	Recommended by NEOSWTC[1]	**Stark SWCD**	Yes, via MOU	Continue to implement recommendation	Continuous/on going/as-needed basis	Yes
6b	Establish a program to ensure long-term maintenance of post-construction BMPs including a **protocol for enforcement escalation** of your storm water management codes	Recommended by NEOSWTC[1]	**Civil Engineering**	Yes	Continue to implement recommendation	Continuous/on going/as-needed basis	Yes
6c	Prior to commencing earth-disturbing activities, ensure 100% of applicable sites have a fully executed Maintenance Agreement for the site, including an **approved Maintenance Plan for each post-construction BMP**	Recommended by NEOSWTC[1]	**Stark SWCD**	Yes, via MOU	Continue to implement recommendation	Continuous/on going/as-needed basis	Yes
6d	Require an applicable community department (e.g. SWCD, Engineering) to **annually inspect public and private post-construction BMPs**, or require private property owners to submit an annual maintenance report. **Ensure**	Recommended by NEOSWTC[1]	**Stark SWCD**	Yes, via MOU	Continue to implement recommendation	Continuous/on going/as-needed basis	Yes

Minimum Control Measure #5 Post-Construction Storm Water Management in New Development and Redevelopment Best Management Practices (BMPs) See footnotes at end of table							
#	BMP		Responsible Party	Legal Authority ?	Measurable Goals		Address TMDLs?
	Name	Justification			(Schedules, Frequency, Etc.)	Justification	
	corrective actions are performed as needed by the applicable party.						
6e	Conduct a **physical inspection of BMPs** at least once during the NPDES permit term	Recommended by NEOSWTC[1]	**Stark SWCD**	Yes, via MOU	Conduct annual inspections of post-construction BMPs that discharge to a City MS4	Continuous/on going/as-needed basis	Yes
7	Establish a **performance bond for post-construction BMPs** and require documentation of acceptance before releasing bond;	Recommended by NEOSWTC[1]	**[All applicable departments]**	[TBD[3]]	Implement recommendation[5]	Pending	Yes
8	Establish a **Sediment and Erosion Control Bond** equivalent to the cost to stabilize (vegetate) disturbed areas of respective sites in cases of non-performance (i.e. developer foreclosure/bankruptcy)	Recommended by NEOSWTC[1]	**[All applicable departments]**	[TBD[3]]	Implement recommendation[5]	Pending	Yes
9	Require submittal of **as-built drawings** for post-construction BMPs to ensure installment	Recommended by NEOSWTC[1]	**Stark SWCD**	Yes, via MOU	Require as-built drawings for all underground post-construction BMPs and other BMPs as directed	Continuous/on going/as-needed basis	Yes
10	Adopt at least one of the following **planning and development codes:** • **Conservation development[2]** • **Riparian and wetland setbacks[2]** • **Downspout disconnections** (redirect flow to rain gardens, rain barrel systems, and/or filter strips)	Recommended by NEOSWTC[1]	**Development; Zoning**	[TBD[3]]	Implement recommendation[5]	Pending	Yes
11	Adopt into **planning and development codes**: • **Revised parking codes[2]** (e.g. decrease overall number of spaces, allow alternative pervious materials, shared parking, etc.)	Recommended by NEOSWTC[1]	**Development; Zoning**	[TBD[3]]	Implement recommendation[5]	Pending	Yes
12	Incentivize the following **within existing developed areas**: • **Retrofitting of storm water management control systems to increase infiltration and to function as constructed wetlands[2]**	Recommended by NEOSWTC[1]	**Development**	[TBD[3]]	Implement recommendation[5]	Pending	Yes

Minimum Control Measure #5 Post-Construction Storm Water Management in New Development and Redevelopment Best Management Practices (BMPs) See footnotes at end of table							
#	BMP		Responsible Party	Legal Authority ?	Measurable Goals		Address TMDLs?
	Name	Justification			(Schedules, Frequency, Etc.)	Justification	
13	Incentivize the following **within existing developed areas**: • Encourage commercial, industrial, and institutional land owners to **reduce impervious surfaces** and replace them with storm water practices that infiltrate, capture and reuse, or otherwise reduce storm water runoff such as permeable pavement, cisterns, infiltration basins and trenches, bioretention with internal water storage, etc.	Recommended by NEOSWTC[1]	**Development**	[TBD[3]]	Implement recommendation[5]	Pending	Yes
14	Incentivize the following **within existing developed areas**: • Implement **practices that deter waterfowl around storm water ponds**	Recommended by NEOSWTC[1]	**Development**	[TBD[3]]	Implement recommendation[5]	Pending	Yes
15	Incentivize the following **within existing developed areas**: • **Retrofitting of storm water management control systems to treat the WQv and/or increase infiltration[2]**	Recommended by NEOSWTC[1]	**Development**	[TBD[3]]	Implement recommendation[5]	Pending	Yes
16	**[Any post-construction BMPs as recommended by USEPA[2]]**	Recommended by USEPA[2]	**[All applicable departments]**	[TBD[3,4,5]]	Implement recommendations[5]	Pending	[TBD[3]]
17	**[Other MCM#5 BMPs[1,2,3,4,5]]**	[TBD[3,4,5]]	**[Any Department[3,4,5]]**	[TBD[3]]	[TBD[3]]	[TBD[3]]	[TBD[3]]

[1] Specific BMPs that address TMDLs are recommended by the Northeast Ohio Stormwater Training Council (NEOSWTC). See Total Maximum Daily Loads section of SWMP.
[2] See USEPA's National Menu of Best Management Practices (BMPs) for Stormwater at: https://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater#post.
[3] To be determined.
[4] As applicable.
[5] As feasible.
[6] See "Annual Reporting for MCM#5" below.

Evaluating the Success of MCM#5

There are various ways to measure the City of Canton's success of implementing Minimum Control Measure #5:

- Assess individual BMPs to determine if they have been implemented in accordance with measurable goals, MCM performance standards, and applicable EPA and NEOSWTC recommendations.
- Annual Reports will provide indication of the status of implementation.
- The Storm Water Program Coordinator will conduct and annual review of the program with the Service Director so that appropriate adjustments and actions can be taken.
- Ohio EPA or other entities may conduct sampling of the Nimishillen Creek to determine if corresponding pollutant levels have decreased.
- Ohio EPA may perform audits of the City's Storm Water Management Program.

Annual Reporting for MCM#5

Whenever any of the following BMPs are implemented or are planned to be implemented, the responsible party will need to track corresponding information. The Storm Water Management Program Coordinator will send out annual questionnaires to departments requesting the respective information and possibly other information as well. The information provided will then be utilized to prepare Annual Reports that will be submitted as required to Ohio EPA.

- **Post-Construction Storm Water Management Ordinance:**
    a. *Regarding the previous year (BMP was implemented):*
        i. Responsible Party:
        ii. Measurable Goal:
        iii. Completed (Yes or No)?
        iv. Cite Local Code(s) Being Used (If available, web link for code(s)):
        v. Summary of Results or Activities:
        vi. Was it Effective (Yes or No)?
        vii. You are required to maintain supporting documentation. What do you have?
    b. *Regarding this year (BMP is planned to be implemented):*
        i. Responsible Party:
        ii. Measurable Goal:
        iii. Summary of Planned Activities:
        iv. Proposed Schedule:

- **Post-Construction Requirements:**
    a. *Regarding the previous year (BMP was implemented):*
        i. Responsible Party:
        ii. Measurable Goal:
        iii. Completed (Yes or No)?
        iv. Structural and/or Non-Structural Standards Being Used:
        v. Summary of Results or Activities:
        vi. Were they Effective (Yes or No)?
        vii. You are required to maintain supporting documentation. What do you have?
    b. *Regarding this year (BMP is planned to be implemented):*
        i. Responsible Party:
        ii. Measurable Goal:
        iii. Summary of Planned Activities:
        iv. Proposed Schedule:

- **Site Plan Review Procedures:**
    a. *Regarding the previous year (BMP was implemented):*
        i. Responsible Party:
        ii. Measurable Goal:
        iii. Completed (Yes or No)?

iv. # of Applicable Sites Requiring Post-Construction Storm Water Quality Management:
v. # of Plans Reviewed:
vi. Summary of Results or Activities:
vii. Were they Effective (Yes or No)?
viii. You are required to maintain supporting documentation. What do you have?

b. *Regarding this year (BMP is planned to be implemented):*
i. Responsible Party:
ii. Measurable Goal:
iii. Summary of Planned Activities:
iv. Proposed Schedule:

- **Site Inspection Procedures:**
  a. *Regarding the previous year (BMP was implemented):*
     i. Responsible Party:
     ii. Measurable Goal:
     iii. Completed (Yes or No)?
     iv. # of Site Inspections Performed:
     v. Average Frequency of Inspections:
     vi. Summary of Results or Activities:
     vii. Were they Effective (Yes or No)?
     viii. You are required to maintain supporting documentation. What do you have?
  b. *Regarding this year (BMP is planned to be implemented):*
     i. Responsible Party:
     ii. Measurable Goal:
     iii. Summary of Planned Activities:
     iv. Proposed Schedule:

- **Enforcement Procedures:**
  a. *Regarding the previous year (BMP was implemented):*
     i. Responsible Party:
     ii. Measurable Goal:
     iii. Completed (Yes or No)?
     iv. # of Violation Letters:
     v. # of Enforcement Actions:
     vi. Summary of Results or Activities:
     vii. Were they Effective (Yes or No)?
     viii. You are required to maintain supporting documentation. What do you have?
  b. *Regarding this year (BMP is planned to be implemented):*
     i. Responsible Party:
     ii. Measurable Goal:
     iii. Summary of Planned Activities:
     iv. Proposed Schedule:

- **Long-Term O&M Plans/Agreements:**
  a. *Regarding the previous year (BMP was implemented):*
     i. Responsible Party:
     ii. Measurable Goal:
     iii. Completed (Yes or No)?
     iv. # of Sites Requiring Plans/Agreements:
     v. # of Plans Developed/Agreements in Place:
     vi. Summary of Results or Activities:
     vii. Were they Effective (Yes or No)?
     viii. You are required to maintain supporting documentation. What do you have?

b. *Regarding this year (BMP is planned to be implemented):*
   - **i.** Responsible Party:
   - **ii.** Measurable Goal:
   - **iii.** Summary of Planned Activities:
   - **iv.** Proposed Schedule:

Further Guidance and Information for MCM#5

See the "Additional Information" section of this Storm Water Management Program.

MCM#6: Pollution Prevention/Good Housekeeping for Municipal Operations

General Requirements

As part of its overall Storm Water Management Program, the City of Canton is required to implement a "Pollution Prevention/Good Housekeeping Program" that has the ultimate goal of preventing or reducing pollutant runoff from municipal operations. See "Further Guidance and Information for MCM#5" below for details.

Decision Process for Development of "Pollution Prevention/Good Housekeeping Program"

The decision process for the development of a Pollution Prevention/Good Housekeeping Program consisted of the following steps, at a minimum:

Steps to Develop and Implement a "Pollution Prevention/Good Housekeeping Program"	
Step #	**Description**
1	Understand permit requirements
2	Identify and document the City's decision process for the development of a Pollution Prevention/ Good Housekeeping Program per permit requirements
3	Identify and implement program BMPs
4	Prepare and submit annual reports to Ohio EPA
5	Evaluate the success of the program annually and make adjustments accordingly

Additional information pertaining to the decision process is provided below.

Operation and Maintenance Program to Reduce Pollutant Runoff from Municipal Operations

This program impacts daily municipal operations and activities that are most susceptible to storm water pollution. All "service" departments as well as other City departments have a role in storm water pollution prevention. The following table shows potential pollutants likely associated with certain municipal activities.

Potential Pollutants Likely Associated with Municipal Activities										
General Operations	Activities	Potential Pollutants								
		Sediment	Nutrients	Trash	Metals	Bacteria	Oil & Grease	Organics	Pesticides	Oxygen Demanding Substances
Municipal Facility Activities	Building & Grounds Maintenance and Repair	✓	✓	✓	✓		✓	✓	✓	✓
	Parking/Storage Area Maintenance		✓		✓		✓	✓	✓	✓
	Waste Handling & Disposal	✓	✓	✓			✓	✓	✓	✓
	Vehicle & Equipment Fueling	✓		✓	✓		✓	✓		
	Vehicle & Equipment Maintenance & Repair			✓	✓	✓	✓	✓	✓	✓
	Vehicle & Equipment Washing & Steam Cleaning	✓	✓	✓		✓			✓	✓
	Outdoor Loading & Unloading of Materials	✓	✓	✓	✓		✓	✓	✓	✓
	Outdoor Container Storage of Liquids		✓		✓		✓	✓	✓	✓
	Outdoor Storage of Raw Materials	✓	✓	✓			✓	✓	✓	✓
	Outdoor Process Equipment	✓		✓	✓		✓	✓		
	Overwater Activities			✓	✓	✓	✓	✓	✓	✓
	Landscape Maintenance	✓	✓	✓		✓			✓	✓
Streets & Highways Operation & Maintenance	Sweeping & Cleaning	✓		✓	✓		✓			✓
	Street Repair, Maintenance, & Striping/Painting	✓		✓	✓		✓	✓		
	Bridge & Structure Maintenance	✓		✓	✓		✓	✓		
Plaza, Sidewalk, and Parking Lot Maintenance & Cleaning	Surface Cleaning	✓	✓			✓	✓			✓
	Graffiti Cleaning	✓	✓		✓			✓		
	Sidewalk Repair	✓		✓						
	Controlling Litter	✓		✓		✓	✓			✓
Fountains, Pools, Lakes, & Lagoons Maintenance	Fountain & Pool Draining		✓					✓		
	Lake & Lagoon Maintenance	✓	✓	✓		✓			✓	✓
Landscape Maintenance	Mowing/Trimming/Planting	✓	✓	✓		✓			✓	✓
	Fertilizer & Pesticide Management	✓	✓						✓	
	Managing Landscape Wastes			✓					✓	✓
	Erosion Control	✓	✓							
Drainage System Operation & Maintenance	Inspection & Cleaning of Stormwater Conveyance Structures	✓	✓	✓		✓		✓		✓
	Roadside ditching	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Controlling Illicit Connections & Discharges	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Controlling Illegal Dumping	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Maintenance of Inlet & Outlet Structures	✓		✓	✓		✓			✓
Waste Handling & Disposal	Solid Waste Collection		✓	✓	✓	✓	✓	✓		✓
	Waste Reduction & Recycling			✓	✓					✓
	Household Hazardous Waste Collection			✓	✓		✓	✓	✓	
	Controlling Litter			✓	✓	✓		✓		✓
	Controlling Illegal Dumping	✓		✓		✓	✓		✓	✓
Water & Sewer Utility Operation & Maintenance	Water Line Maintenance	✓				✓	✓			
	Sanitary Sewer Maintenance	✓				✓	✓			✓
	Spill/Leak/Overflow Control, Response, & Containment	✓	✓			✓		✓		✓

The City of Canton is involved in most, if not all, of the above activities. Based on this and other aspects of the SWMP, the following key City departments have been determined to be impacted by the "Pollution Prevention/Good Housekeeping Program" for typical reasons shown below:

City Departments Involved in Operations Potentially Related to Storm Water Pollution		
	Department	**Typical Operations Potentially Related to Storm Water Pollution**
1	Building	Inspection of building construction
2	Building Maintenance	City building operations and maintenance
3	Civil Engineering	Storm water capital improvement projects; drainage complaints; etc.
4	Collection Systems (CSD)	Sewers operations and maintenance
5	Division of Motor Vehicles (DMV)	Fleet maintenance
6	Fire	Illicit discharge response, investigation
7	Health	Illicit discharge response, investigation
8	Parks & Recreation	Parks operations and maintenance
9	Police (Impound Lot)	Impound lot operations
10	Sanitation	City sanitation services
11	Street	City street operations and maintenance
12	Traffic: Parking	City-owned public-use parking lots/decks operations and maintenance
13	Traffic: Sign & Paint	City street signage and painting
14	Urban Forestry	City tree management
15	Water	City water utility operations and maintenance
16	Water Reclamation Facility (WRF)	City waste-water treatment plant operations and maintenance

Industrial Facilities Subject to Ohio EPA's NPDES Industrial Storm Water General or Individual Permits

The City of Canton owns and operates the following "industrial facilities" that are subject to Ohio EPA's Industrial Storm Water General Permit or individual NPDES permits for discharges of storm water associated with industrial activity:

City of Canton Facilities with NPDES Industrial/Individual Permits			
#	**Facility Description**	**Permit Number**	**Discharge to a Canton MS4?**
1	City of Canton Water Reclamation Facility	3PE00000*QD (issued 2016)	Yes
2	City of Canton Water Department (NE)	3IY00011*HD (issued 2017)	No[1]
3	City of Canton Water Department (NW)	3IY00010*HD (issued 2017)	No[1]
4	City of Canton Water Department (Sugar Creek)	3IY00012*HD (issued 2017)	No[1]

[1] Discharges to water of the state or other drainage system that is not a City MS4.

SWP3s for Municipal Facilities that Conduct "Industrial" Activities

Per the Ohio EPA "Guidance for MS4 Operated Industrial Facilities" flowchart, there are four City-owned facilities (highlighted in the table below) that are candidates for which a Storm Water Pollution Prevention Plan (SWP3) may need to be developed and implemented in accordance with the SWP3 requirements of Ohio EPA's Industrial Storm Water General Permit. However, after evaluating the flowchart and specific applicable conditions, it has been determined that only the Publicly-Owned Treatment Works (POTW)/Water Reclamation Facility is required to develop and implement an Industrial SWP3. The other three facilities can either certify "No Exposure" of respective activities and materials to storm water per Ohio EPA's "No Exposure Certification for Exclusion from NPDES Storm Water Permitting" checklist, or they do not perform specified operations and are therefore exempt. Each of the three exempt facilities will be reviewed annually to determine the current applicability of whether or not an Industrial SWP3 is required.

SWP3s for Municipal Facilities that Conduct "Industrial" Activities						
Does City of Canton operate any of the following?		**Does Facility Have:**			**Can Facility Certify "No Exposure"**	**Is Industrial SWP3 Required?**
		Vehicle Maintenance Shop?	**Equipment Cleaning Operations?**	**Airport Deicing Operations?**		
Landfill	No	N/A	N/A	N/A	N/A	N/A
Steam Electric Power Generating Facility	No	N/A	N/A	N/A	N/A	N/A

SWP3s for Municipal Facilities that Conduct "Industrial" Activities							
Does City of Canton operate any of the following?			Does Facility Have: Vehicle Maintenance Shop?	Does Facility Have: Equipment Cleaning Operations?	Does Facility Have: Airport Deicing Operations?	Can Facility Certify "No Exposure"	Is Industrial SWP3 Required?
POTW (≥1 mgd)	***Yes***		***N/A***	***N/A***	***N/A***	***No***	***Yes[1]***
Airport	No		N/A	N/A	N/A	N/A	N/A
Vehicle Maintenance Facility	***Yes***	***DMV***	***Yes***	***Yes***	***No***	***Yes***	***No***
		Fire Station #1	***Yes***	***Yes***	***No***	***Yes***	***No***
Bus Terminal	No		N/A	N/A	N/A	N/A	N/A
Impoundment Lot	***Yes***		***No***	***No***	***No***	***N/A***	***No***
Waste Transfer Station	No		N/A	N/A	N/A	N/A	N/A
Composting Facility	No		N/A	N/A	N/A	N/A	N/A

[1] An Industrial SWP3 has been prepared in accordance with permit requirements.

Although Industrial SWP3s are not required for the two vehicle maintenance facilities and the impoundment lot, various pollution prevention/good housekeeping BMPs are still implemented, as applicable. See "Best Management Practices (BMPs)" below.

Government Employee Training Program

Municipal employee training is necessary to teach staff about potential sources of stormwater contamination and ways to minimize the water quality impact of municipal activities. Over the past several years, the City has purchased the following municipal storm water pollution prevention training kits:

1. *"Storm Watch" – Municipal Storm Water Pollution Prevention Everyday Best Management Practices*
2. *"Rain Check" – Storm Water Pollution Prevention for MS4s*
3. *"IDDE a grate concern" – Illicit Discharge Detection & Elimination*

These kits are all produced by Excal Visual and contain training DVDs, employee quizzes, pocket references, trainer's guides, and other training materials on various aspect of common municipal operations. Certain departments are expected to ensure appropriate employees are trained by using these training kits or by partaking in other relevant training opportunities throughout the year.

Since City employees are also considered part of the general public, this government employee training on storm water pollution prevention can also be considered part of the overall "Public Education and Outreach Program" (see MCM#1) as well as the education requirements for the "Storm Water Illicit Discharge Detection and Elimination Program" (see MCM#3). Departments that are expected to provide respective employee training are encouraged to also use resources that have been used to satisfy public education requirements in general.

Maintenance Activities, Schedules, and Long-Term Inspection Procedures to Reduce Pollution

In general, some of the BMPs implemented by the City of Canton to reduce floatables and other pollutants to and from the City's MS4 are scheduled, as applicable. Others are "reactive" and are performed in response to complaints or necessity. Many of the BMPs are typically "routine maintenance" by nature and are performed continually or on an as-needed basis. For example, street sweeping and lot/deck sweeping are often "scheduled" as part of routine maintenance instead of performed as a reaction to complaints. Long term inspection of permanent post-construction storm water quality BMPs has a "scheduled" aspect to it in that the Stark SWCD annually performs inspections of permanent post-construction storm water quality BMPs. So, depending on the nature of the respective BMP, there may or may not be a "scheduled" aspect to it. See "Best Management Practices (BMPs)" below for details.

Controls for Reducing or Eliminating the Discharge of Pollutants from Streets and Municipal Operations

Controls for Reducing or Eliminating the Discharge of Pollutants from Streets and Municipal Operations	
Pollutants from	**Controls Used[1]**
Streets, roads, and highways	• Street sweeping; • Storm sewer, catch basin, and manhole cleaning - CSD performs catch basin, manhole, and storm line cleaning throughout the year. Priority is typically given to certain storm sewer systems (such as those serving main streets and highways) while others are cleaned based on responses to complaints. • Roadside Ditching
Municipal parking lots	• Lot/deck sweeping - City-owned parking lots can be classified into 2 categories: those used for public parking (2 decks, 3 lots) and those used for City employee parking (various locations throughout City). Public-use parking lots are swept by the Traffic: Parking Division of the City Engineering Department, while City employee parking lots are swept by the Street Department. Scheduled sweepings are typically performed on public-use lots, while visual inspections are used to determine the need for lot sweeping on City employee lots. The Traffic: Parking and Street Departments both have street sweepers that are used as necessary, for public-use and City employee lots, respectively. Traffic: Parking also uses hand brooms and dust pans as needed on public-use lots.
Maintenance and storage yards	• Berms areas around some outdoor material supplies; • Drums labeled and closed with lids; • Dumpsters with closed lids; • Catch basins with special water quality inserts installed near fuel islands - Nyloplast Catch Basins with Storm Pure Infiltration System inserts have been installed downstream from vehicle fuel pumps at the City Service Center and at WRF. These systems consist of features that capture sediment, debris, and tiny particles of hydrocarbons and oil-bound pollutants and therefore prevent or reduce such pollutants from discharging into the MS4 and ultimately into surface waters. • Hay bales near sanitation trucks parking area to filter possible polluted runoff from trucks; • Some materials on pallets to keep from contact with runoff;
Waste transfer stations	[City of Canton does not operate any waste transfer stations]
Fleet or maintenance shops with outdoor storage areas	• No maintenance materials stored outside - The City of Canton owns/operates two fleet maintenance shops (garages). These garages are located at the Division of Motor Vehicles (at City Service Center: 2436 30th St NE, Canton, OH 44705) and at Fire Station #1 (at 110 7th St SW, Canton, OH 44702). However, neither of these maintenance garages store any materials outdoors. All fleet maintenance materials are stored indoors. • Drip pans/cloths placed under outdoor vehicles awaiting service, as needed
Salt/sand storage locations	• Road salt is stored in domes - The City of Canton has 6 salt domes on City-owned property: 3 at the City Service Center (1 not in use); 2 at Cleveland Ave SW location (1 used by ODOT); 1 at Schroyer Ave SW. • Bagged salt, when used, is stored on pallets; • Salt spills swept up as needed
Snow disposal areas	• Snow is plowed to edges of streets; • Parking bans are issued as needed to facilitate plowing; • If needed, excess snow may be transported to maintenance outpost where, after snowmelt, remaining debris is swept up as needed

[1] Not an exhaustive list. Also see "Best Management Practices (BMPs)" below.

The following is a description of materials used for roadway winterization per the City Street Department:

Roadway Winterization		
Materials Used	**Application Rate**	**Rationale for Application Rates**
Standard road salt	300 lbs/lane-mile	ODOT-recommended rates
Salt brine	Anti-icing: 20-30 gal/lane-mile; Pre-wet: 8-10 gal/ton of salt	

Latest revision: 1/4/2019

Procedures for Proper Disposal of Waste Removed from the MS4 and Related Municipal Operations

The City of Canton abides by the following for the management of waste removed from streets, ditches, and storm sewers:

Management of Waste Removed from Streets, Ditches, and Storm Sewers						
Municipal Activity	**Considered to be "Solid Waste" by EPA?**	**Allowed to be Open-Dumped?**	**Must be Taken to Licensed Solid Waste Landfill?**	**Must be De-Watered First?**	**Comments**	**Considered to be "Hazardous Waste"?**
• Street sweeping debris • Storm sewer cleaning debris (including CBs and MHs)	Yes	No	Yes	Yes	Can be de-watered on outdoor pad that drains to sanitary sewer OR can be de-watered indoors with floor drains connected to sanitary sewer. Debris CAN be re-used for certain applications but must be de-watered, etc. first	Only if it contains hazardous spill components. If so, it must be handled as hazardous waste.
• "Clean" roadside ditching debris • Berm maintenance debris	No	Yes	No	No	"Clean" is considered sediment/dirt only and NOT containing any street or storm sewer debris or trash. If it is NOT "clean", it is considered "solid waste" which must be separated from the "clean" ditching debris and handled as "solid waste" OR if NOT separated the entire debris needs to be handled as "sold waste".	Only if it contains hazardous spill components. If so, it must be handled as hazardous waste.

Procedures to Ensure Flood Management Projects are Assessed for Impact on Water Quality

Any public "flood management projects" that occur in the City of Canton are coordinated through the City Engineering Department. In cooperation with NPDES storm water permitting requirements, qualifying land disturbances (including flood management projects) of one acre or more in the City are assessed for proper water quality practices (See MCM #4 and MCM #5). The Engineering Department has staff that are trained in storm water quantity and quality management. Water quality practices are therefore ensured to be incorporated into all applicable new and redevelopment projects. The incorporation of water quality protection devices or practices on current sites/projects are to be evaluated on a case-by-case basis.

Responsible Parties for Implementing the Pollution Prevention/Good Housekeeping Program

The City of Canton Service Director is responsible for the overall compliance of the City with the NPDES Storm Water Permit requirements. Coordination of the SWMP is delegated to the Assistant City Engineer of the Civil Engineering Department. Responsibility for implementation of *certain* BMPs has been assigned to *specific* departments. *Other* BMPs may be implemented by *any* department *as feasible*. See Best Management Practices (BMPs) below and the Table of Organization for details. As BMPs are implemented, each respective responsible position is required to maintain appropriate supporting documentation.

Best Management Practices (BMPs)

Aside from Minimum Control Measure #6 BMPs that may be described above, the table below also lists certain BMPs that are expected or required to be implemented by certain departments, while others are shown as recommendations for potential implementation depending on applicability and/or feasibility. Recommendations are based on USEPA, NEOSWTC, and permit recommendations:

- USEPA has prepared "BMP Fact Sheets" and other resources related to many BMPs in the City's Storm Water Management Program. They can be found on the *National Menu of Best Management Practices (BMPs) for Stormwater* webpage by clicking on the respective Minimum Control Measure tabs. The BMP Fact Sheets provide further explanation, applicability, recommendations, implementation, and effectiveness information of common BMPs. Fact sheets and resources should be reviewed periodically by employees who are involved in respective BMP implementation. See "Further Guidance and Information for MCM#6" below.

- The Northeast Ohio Storm Water Training Council (NEOSWTC) has prepared "TMDL Fact Sheets" pertaining to respective Nimishillen Creek TMDLs and corresponding recommended BMPs to address the TMDLs. In order to meet permit requirements, appropriate BMPs must be selected to address TMDL recommendations. Therefore, some of the recommended BMPs are to be utilized as part of the City's Pollution Prevention/Good Housekeeping Program. According to the NEOSWTC, the implementation of pollution prevention and good housekeeping practices at community facilities and operations addresses habitat, nutrients, and bacteria TMDLs. Therefore, essentially all BMPs implemented for MCM#6 may possibly address respective TMDLs.

Depending on whether or not a BMP is a requirement or recommendation, measurable goals have been written accordingly. Annual Reports will document exactly which BMPs were implemented in the previous year as well as identify possible BMPs to be implemented in the upcoming year.

Minimum Control Measure #6 Pollution Prevention/Good Housekeeping for Municipal Operations Best Management Practices (BMPs) See footnotes at end of table							
#	BMP		Responsible Party	Legal Authority?	Measurable Goals		Address TMDLs?
	Name	Justification			(Schedules, Frequency, Etc.)	Justification	
1	**"Municipal Employee Training and Education"[2]**						
1a	**Employee Training Program**[2] to reduce storm water pollution from activities such as: • **Park and open space maintenance** • **Fleet and building maintenance** • **New construction and land disturbances** • **Storm water system maintenance**	Required by permit	**Building; Building Maintenance; Civil Engineering; CSD; DMV; Fire; Health; Parks & Recreation; Police (Impound Lot); Sanitation; Street; Traffic: Parking; Traffic: Sign & Paint; Urban Forestry; Water; WRF**	Yes	• Conduct annual training of appropriate employees; • **Annual Reporting requirements**[7]	Required	Yes
1b	Complete an **annual training for applicable employees** on any combination of the topics listed below: • **Streets, roads, and highways** • **Municipal parking lots** • **Maintenance and storage yards**, including, but not limited to municipal composting facilities and leaf collection yards • Golf courses, **parks**, and related maintenance facilities • Waste transfer stations, compost facilities, solid waste facilities (e.g. municipal solid waste (MSW) landfills, and construction and demolition (C&D) landfills)	Recommended by NEOSWTC[1]	**Building; Building Maintenance; Civil Engineering; CSD; DMV; Fire; Health; Parks & Recreation; Police (Impound Lot); Sanitation; Street; Traffic: Parking; Traffic: Sign & Paint; Urban Forestry; Water; WRF**	Yes	Implement recommendation	Continuous/ongoing/as-needed basis	Yes

Minimum Control Measure #6 Pollution Prevention/Good Housekeeping for Municipal Operations Best Management Practices (BMPs) See footnotes at end of table							
#	BMP		Responsible Party	Legal Authority?	Measurable Goals		Address TMDLs?
	Name	Justification			(Schedules, Frequency, Etc.)	Justification	
	• Marinas • **Fleet and/or maintenance shops** • **Salt/sand storage locations** • **Snow disposal areas**						
2	**Pollution Prevention from "Coal-Tar Sealcoats and Polycyclic Aromatic Hydrocarbons"[2]**						
2a	**Do not use coal-tar pavement sealants**	Recommended by USEPA[2]	**Street; [All other applicable departments]**	Yes	Implement recommendation[5]	Pending	Possibly[6]
2b	Use **pervious concrete, permeable asphalt, or permeable pavers**	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation[5]	Pending	Possibly[6]
3	**"Municipal Landscaping"[2]**						
3a	Select **native species** and locate plants in areas where conditions are optimal for growth requirements	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation[5]	Pending	Possibly[6]
3b	Perform **soil analysis** to prevent over-application of **fertilizer**	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation[5]	Pending	Possibly[6]
3c	Carefully select turf to **minimize watering and fertilizer** requirements by choosing grasses that thrive in local climate	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation[5]	Pending	Possibly[6]
3d	**Minimize turf area** by replacing it with ground cover, shrubs, and trees, thus reducing **mowing requirements**	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation[5]	Pending	Possibly[6]
3e	Implement **efficient watering practices**	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Continue to implement recommendation	Pending	Possibly[6]
3f	Use **mulches** to stabilize exposed soils, prevent growth of nuisance vegetation, and improve soil fertility	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation[5]	Pending	Possibly[6]
3g	Practice reduced/judicious application of **pesticides, herbicides, and/or fertilizers** according to manufacturer recommendations	Recommended by USEPA[2]	**[All applicable departments]**	Yes	• Continue to implement recommendation; • **Annual Reporting requirements[7]**	Continuous/ongoing/as-needed basis	Yes

Minimum Control Measure #6 Pollution Prevention/Good Housekeeping for Municipal Operations Best Management Practices (BMPs) See footnotes at end of table							
#	BMP		Responsible Party	Legal Authority?	Measurable Goals		Address TMDLs?
	Name	Justification			(Schedules, Frequency, Etc.)	Justification	
3h	Implement BMPs for **fertilizer storage and application**	Recommended by NEOSWTC[1]	**[All applicable departments]**	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Yes
3i	Use **composted organic material** for fertilizer	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation[5]	Pending	Possibly[6]
3j	**Do not bag grass clippings** or only bagged as needed	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
3k	**Do not mow along banks of creeks, lakes, etc.**	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation[5]	Pending	Yes
3l	Implement **low-mow or no-mow practices** that preserve buffer areas around streams, wetlands, and storm water basins	Recommended by NEOSWTC[1]	**[All applicable departments]**	Yes	Implement recommendation[5]	Pending	Yes
3m	Develop written department **procedures for proper municipal landscaping**	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
3n	**Reduce turf grass** on municipal parks and open spaces	Recommended by NEOSWTC[1]	**[All applicable departments]**	Yes	Implement recommendation[5]	Pending	Yes
3o	At community-owned and operated facilities (maintenance garages, golf courses, parks, community gardens, cemeteries, etc.) maintain, protect, and restore **permanent natural vegetative buffers** between developed areas and water resources	Recommended by NEOSWTC[1]	**[All applicable departments]**	Yes	Implement recommendation[5]	Pending	Yes
3p	Incorporate **leachate management** for maintenance and storage yards, including municipal composting facilities and leaf collection yards	Recommended by NEOSWTC[1]	**[All applicable departments]**	Yes	Implement recommendation[5]	Pending	Yes
4	**"Municipal Vehicle Fueling"[2]**						
4a	Pave and slope **fuel dispensing area** to prevent ponding	Recommended by USEPA[2]	**DMV**	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
			WRF	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]

Minimum Control Measure #6 Pollution Prevention/Good Housekeeping for Municipal Operations Best Management Practices (BMPs) See footnotes at end of table							
#	BMP		Responsible Party	Legal Authority?	Measurable Goals		Address TMDLs?
	Name	Justification			(Schedules, Frequency, Etc.)	Justification	
4b	Separate **fuel dispensing area** from the rest of the site by a grade break or berm that prevents run-on of storm water	Recommended by USEPA[2]	**DMV**	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
			WRF	Yes	Implement recommendation[5]	Pending	Possibly[6]
4c	Provide a **holding tank at fuel dispensing area** to capture any fuel spills; properly drain holding tank as needed	Recommended by USEPA[2]	**DMV**	Yes	Implement recommendation[5]	Pending	Possibly[6]
			WRF	Yes	Implement recommendation[5]	Pending	Possibly[6]
4d	Cover entire **fuel dispensing area** by roof or canopy	Recommended by USEPA[2]	**DMV**	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
			WRF	Yes	Implement recommendation[5]	Pending	Possibly[6]
4e	Do not allow roof/canopy over **fuel dispensing area** to drain onto the fuel dispensing area	Recommended by USEPA[2]	**DMV**	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
			WRF	Yes	Implement recommendation[5]	Pending	Possibly[6]
4f	Use a **perimeter drain** or **slope the pavement inward** so that the runoff drains to a **blind sump**	Recommended by USEPA[2]	**DMV**	Yes	Implement recommendation[5]	Pending	Possibly[6]
			WRF	Yes	Implement recommendation[5]	Pending	Possibly[6]
4g	Install and maintain **oil control devices in catch basins** (i.e. inserts specifically designed to catch hydrocarbons) that might receive runoff from the fueling area	Recommended by USEPA[2]	**DMV**	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
			WRF	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
4h	For facilities where equipment is being fueled with a **mobile truck**, establish a **designated fueling area**. Place **temporary "caps"** over nearby catch basins and manhole covers.	Recommended by USEPA[2]	**DMV**	Yes	Implement recommendation[4]	Pending	Possibly[6]
			WRF	Yes	Implement recommendation[4]	Pending	Possibly[6]
4i	Use **secondary containment** when **transferring fuel** from tank truck to fuel tank. Also temporarily cover nearby storm drains.	Recommended by USEPA[2]	**DMV**	Yes	Implement recommendation[4]	Pending	Possibly[6]
			WRF	Yes	Implement recommendation[4]	Pending	Possibly[6]

Minimum Control Measure #6 Pollution Prevention/Good Housekeeping for Municipal Operations Best Management Practices (BMPs) See footnotes at end of table							
#	BMP		Responsible Party	Legal Authority?	Measurable Goals		Address TMDLs?
	Name	Justification			(Schedules, Frequency, Etc.)	Justification	
4j	Install **vapor recovery nozzles** to help control drips as well as reduce air pollution	Recommended by USEPA[2]	**DMV**	Yes	Implement recommendation[5]	Pending	Possibly[6]
			WRF	Yes	Implement recommendation[5]	Pending	Possibly[6]
4k	Provide a written **fuel spill prevention and cleanup plan** and clearly post it at the fuel pumps	Recommended by USEPA[2]	**DMV**	Yes	Implement recommendation	Pending	Possibly[6]
			WRF	Yes	Implement recommendation	Pending	Possibly[6]
4l	Provide readily-accessible **dry spill cleanup materials and/or spill kits** at the fuel pumps. **Sweep** to remove litter and debris and **use rags and adsorbents** for leaks and spills. **Do not use water** to wash the areas.	Recommended by USEPA[2]	**DMV**	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
			WRF	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
4m	Regularly **inspect fuel pumps** by qualified personnel: • Check for **external corrosion** and **structural failure** in above-ground tanks • Check for **spills and overfills** due to operator error • Check for **failure of any piping systems** • Check for **leaks or spills** during pumping of liquids or gases from a truck or rail car to a storage facility or vice-versa • Visually inspect new tank or container installations for **loose fittings, poor welds, and improper or poorly-fitted gaskets** • Inspect tank **foundations, connections, coatings, tank walls, and piping systems**. Look for	Recommended by USEPA[2]	**DMV**	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
			WRF	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]

Minimum Control Measure #6 Pollution Prevention/Good Housekeeping for Municipal Operations Best Management Practices (BMPs) See footnotes at end of table							
#	BMP		Responsible Party	Legal Authority?	Measurable Goals		Address TMDLs?
	Name	Justification			(Schedules, Frequency, Etc.)	Justification	
	corrosion, leaks, cracks, scratches, and other physical damage that may weaken the tank or container system. • **Above-ground tanks** should be tested periodically for integrity by a qualified professional						
4n	During **routine cleaning**, use a damp cloth on the pumps and a damp mop on the pavement rather than spraying with a hose	Recommended by USEPA[2]	**DMV**	Yes	Implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
			WRF	Yes	Implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
4o	Fuel-dispensing **nozzles** should be fitted **with "hold-open latches"** except where prohibited by local fire departments	Recommended by USEPA[2]	**DMV**	Yes	Implement recommendation[5]	Pending	Possibly[6]
			WRF	Yes	Implement recommendation[5]	Pending	Possibly[6]
4p	Post **signs** at fuel dispensers or island **warning against "topping-off"** vehicle fuel tanks	Recommended by USEPA[2]	**DMV**	Yes	Implement recommendation	Pending	Possibly[6]
			WRF	Yes	Implement recommendation	Pending	Possibly[6]
4q	Provide **written procedures** to employees who will be using fueling systems that describe fueling BMPs	Recommended by USEPA[2]	**DMV**	Yes	Implement recommendation	Pending	Possibly[6]
			WRF	Yes	Implement recommendation	Pending	Possibly[6]
4r	Adequately and regularly **train appropriate employees** with respect to fueling operations and spill prevention and cleanup.	Recommended by USEPA[2]	**DMV**	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
			WRF	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
5	**"Municipal Vehicle and Equipment Maintenance"[2]**						
5a	Perform all **vehicle and equipment maintenance** activities indoors	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
5b	Clean up **spills** immediately, without water whenever possible; dispose of cleanup materials properly	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]

Minimum Control Measure #6 Pollution Prevention/Good Housekeeping for Municipal Operations Best Management Practices (BMPs) See footnotes at end of table							
#	BMP		Responsible Party	Legal Authority?	Measurable Goals		Address TMDLs?
	Name	Justification			(Schedules, Frequency, Etc.)	Justification	
5c	Seal **floor drains** that are known to discharge to storm sewers	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation	Pending	Possibly[6]
5d	Use a **solvent service** to supply parts and cleaning materials and to collect spent solvent	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation[5]	Pending	Possibly[6]
5e	For **floor drains** that discharge to sanitary sewer, verify with WRF if treatment is required prior to release from the site (i.e. oil/grease separators)	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation	Pending	Possibly[6]
5f	Keep the number of **solvents** used to a minimum	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
5g	Do all **liquid cleaning** at a centralized station to ensure that solvents and residues stay in one area	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation[5]	Pending	Possibly[6]
5h	Locate **drip pans and draining boards** to direct solvents back into a solvent sink or holding tank for reuse	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation[5]	Pending	Possibly[6]
5i	Use **non-hazardous cleaners** when possible	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
5j	Replace chlorinated organic **solvents** with non-chlorinated ones like kerosene or mineral spirits	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation[5]	Pending	Possibly[6]
5k	Purchase **recycled products**, such as engines, oil, transmission fluid, antifreeze, and hydraulic fluid	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation[5]	Pending	Possibly[6]
5l	**Install berms or other measures** to contain spills and prevent work surface runoff from entering storm drains	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation[5]	Pending	Possibly[6]
5m	Use as little water as possible to clean **spills, leaks, and drips**	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]

Minimum Control Measure #6 Pollution Prevention/Good Housekeeping for Municipal Operations Best Management Practices (BMPs) See footnotes at end of table							
#	BMP		Responsible Party	Legal Authority?	Measurable Goals		Address TMDLs?
	Name	Justification			(Schedules, Frequency, Etc.)	Justification	
5n	Follow a **spill prevention plan**	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
5o	Reinforce **employee training** and public outreach to reinforce proper disposal practices	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
5p	Update **facility schematics** to accurately reflect all plumbing connections	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
5q	Closely **monitor parked vehicles** for leaks and place pans under any leaks to collect the fluids for proper disposal or recycling	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation[5]	Pending	Possibly[6]
5r	**Promptly transfer used fluids** to recycling drums or hazardous waste containers	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
5s	Dispose of **liquid waste** properly	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
5t	In the event of a **spill**, cover drains with drain mats	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
5u	Store **cracked batteries** in leak-proof secondary containers	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
5v	Use detergent-based or water-based **cleaning systems** instead of organic solvent degreasers	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation[5]	Pending	Possibly[6]
5w	Steam-clean or pressure-wash parts instead of using **solvents**	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation[5]	Pending	Possibly[6]
5x	Periodically inspect and maintain **oil/water separators**	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
5y	**Certify "No Exposure"** to storm water runoff for all vehicle maintenance garage activities.	As applicable	**DMV; Fire (Station #1)**	Yes	Review qualifications for "No Exposure" annually and update status accordingly	Continuous/ongoing/as-needed basis	Possibly[6]
6	**"Municipal Vehicle and Equipment Washing"[2]**						
6a	Install **indoor wash racks** that discharge wash water to the sanitary	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]

Minimum Control Measure #6 Pollution Prevention/Good Housekeeping for Municipal Operations Best Management Practices (BMPs) See footnotes at end of table							
#	BMP		Responsible Party	Legal Authority?	Measurable Goals		Address TMDLs?
	Name	Justification			(Schedules, Frequency, Etc.)	Justification	
	sewer - The City Service Center has 4 indoor vehicle washing bays (at DMV, Street, Parks & Rec, and CSD. WRF and Water Department also have indoor vehicle washing bays. All of these indoor bays have floor drains that connect to sanitary sewers.						
6b	Use **commercial car washes** and/or steam cleaning businesses accordingly - The City annually contracts with local commercial car washes for washing of other City vehicles used by various departments, as necessary. All commercial car washes are required to have wash water treated via sanitary sewer.	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
6c	**Train employees** and subcontractors in proper washing procedures to avoid illicit discharges	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
6d	Pave and berm or slope **designated wash areas** to contain and direct wash water to a sump connected to the sanitary sewer or a holding tank, process system, or enclosed recycling system	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
6e	Seek the **permission of WRF** before discharging wash water to the sanitary sewer, and abide by any special treatment requirements	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
6f	Design wash racks to **recycle wash water**	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation[5]	Pending	Possibly[6]

Minimum Control Measure #6 Pollution Prevention/Good Housekeeping for Municipal Operations Best Management Practices (BMPs) See footnotes at end of table							
#	BMP		Responsible Party	Legal Authority?	Measurable Goals		Address TMDLs?
	Name	Justification			(Schedules, Frequency, Etc.)	Justification	
6g	**Avoid detergents** whenever possible. If detergents are necessary, a phosphate-free, non-toxic, biodegradable soap is recommended. Detergents should be avoided if an oil/water separator is used for pretreatment prior to discharge to the sanitary sewer.	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation[5]	Pending	Possibly[6]
6h	Municipal facilities that store vehicles should **stencil their storm drains (or post signage)** to remind employees to wash vehicles within the designated wash area.	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation[5]	Pending	Possibly[6]
6i	Mount **spill kits** with absorbent containment materials and instructions near wash racks. Immediately contain and treat all spills.	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation	Pending	Possibly[6]
6j	If **vehicle washing outside** must be performed, take precautions to avoid wash water discharges to the storm drainage system: • For **small jobs**, berm the area surrounding the vehicle and use a wet/dry vacuum to capture the wash water for discharge to the sanitary sewer • For **large jobs**, use a combination of berms and a vacuum truck • If **detergents** are used, clean the pavement to prevent the detergents from being carried to the storm drain.	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation	Pending	Possibly[6]
6k	Periodically **inspect, clean, and maintain** wash rack paved surfaces,				Implement recommendation	Pending	

Minimum Control Measure #6 Pollution Prevention/Good Housekeeping for Municipal Operations Best Management Practices (BMPs) See footnotes at end of table							
#	BMP		Responsible Party	Legal Authority?	Measurable Goals		Address TMDLs?
	Name	Justification			(Schedules, Frequency, Etc.)	Justification	
	sumps, plumbing, recycling, and pretreatment systems						
7	**"Parking Lot and Street Cleaning"[2]**						
7a	**Street sweeping**	Recommended by USEPA[2]; NEOSWTC[1]	**Street**	Yes	• Sweep all streets except alleys at least 3 times per year; • **Annual Reporting requirements[7]**	Practical	Yes
7b	**Parking lot/deck sweeping**	Recommended by USEPA[2]; NEOSWTC[1]	**Traffic: Parking**	Yes	• Sweep City-owned public parking decks at least 5 times per year; • **Annual Reporting requirements[7]**	Practical	Yes
7c	Design and maintain a **sweeping schedule**	Recommended by USEPA[2]	**Street**	Yes	Sweep all streets except alleys at least 3 times per year	Practical	Possibly[6]
			Traffic: Parking	Yes	Sweep City-owned public parking decks at least 5 times per year	Practical	Possibly[6]
7d	Conduct **sweeping** as soon as possible **after snow melts**	Recommended by USEPA[2]	**Street; Traffic: Parking**	Yes	Implement recommendation[5]	Pending	Possibly[6]
7e	**Maintain accurate records** of the number of lane-miles (or lot areas) swept and the amount of waste collected	Recommended by USEPA[2]	**Street; Traffic: Parking**	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
7f	Ensure **debris** collected from sweepings is **de-watered to sanitary sewer** then **disposed at solid waste landfill**	Recommended by USEPA[2]	**Street; Traffic: Parking**	Yes	• Implement recommendation; • **Annual Reporting requirements[7]**	Continuous/ongoing/as-needed basis	Possibly[6]
7g	If **debris** collected from sweepings needs to be **temporarily stored**, ensure it is **covered and secondary containment** is provided	Recommended by USEPA[2]	**Street; Traffic: Parking**	Yes	Implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]

Minimum Control Measure #6 Pollution Prevention/Good Housekeeping for Municipal Operations Best Management Practices (BMPs) See footnotes at end of table							
#	BMP		Responsible Party	Legal Authority?	Measurable Goals		Address TMDLs?
	Name	Justification			(Schedules, Frequency, Etc.)	Justification	
7h	Only **reuse debris** collected from sweepings **as approved by Ohio EPA**	Recommended by USEPA[2]	**Street; Traffic: Parking**	Yes	Implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
7i	Establish and enforce **parking policies** to increase the effectiveness of sweeping program	Recommended by USEPA[2]	**Street; Traffic: Parking**	Yes	Implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
7j	Regularly **inspect and maintain sweeping equipment**	Recommended by USEPA[2]	**Street; Traffic: Parking**	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
7k	**Inventory and stock sweeping equipment parts** to prevent downtime and decrease productivity	Recommended by USEPA[2]	**Street; Traffic: Parking**	Yes	Implement recommendation[5]	Pending	Possibly[6]
7l	**Replace old sweepers** with new sweepers that maximize pollutant removal	Recommended by USEPA[2]	**Street; Traffic: Parking**	Yes	Implement recommendation[4,5]	Pending	Possibly[6]
8	**"Road Salt Application and Storage"[2]**						
8a	Maintain **accurate records of the amount of salt used**	Required by Ohio EPA	**Street; [All other applicable departments]**	Yes	• Continue to implement recommendation; • **Annual Reporting requirements[7]**	Required	Possibly[6]
8b	**Cover stored salt**	Recommended by USEPA[2]	**Street; [All other applicable departments]**	Yes	• Continue to implement recommendation; • **Annual Reporting requirements[7]**	Continuous/ongoing/as-needed basis	Possibly[6]
8c	Locate **salt storage piles outside of 100-year floodplain**	Recommended by USEPA[2]	**Street; [All other applicable departments]**	Yes	• Continue to implement recommendation; • **Annual Reporting requirements[7]**	Continuous/ongoing/as-needed basis	Possibly[6]
8d	**Regulate application of salt** to reflect specific site characteristics such as road/lot width, traffic concentration, and proximity to surface waters	Recommended by USEPA[2]	**Street; [All other applicable departments]**	Yes	• Continue to implement recommendation; • **Annual Reporting requirements[7]**	Continuous/ongoing/as-needed basis	Possibly[6]
8e	**Use calibration devices** mounted in cabs of spreader-trucks to ensure	Recommended by USEPA[2]	**Street;**	Yes	• Continue to implement recommendation[4,5];	Continuous/ongoing/as-needed basis	Possibly[6]

Minimum Control Measure #6 Pollution Prevention/Good Housekeeping for Municipal Operations Best Management Practices (BMPs) See footnotes at end of table							
#	BMP		Responsible Party	Legal Authority?	Measurable Goals		Address TMDLs?
	Name	Justification			(Schedules, Frequency, Etc.)	Justification	
	proper application rates; routinely calibrate		**[All other applicable departments]**		• **Annual Reporting requirements[7]**		
8f	Use **alternative deicing or traction materials** in especially sensitive areas	Recommended by USEPA[2]	**Street; [All other applicable departments]**	Yes	• Implement recommendation[5]; • **Annual Reporting requirements[7]**	Pending	Possibly[6]
8g	**Train appropriate employees** in proper de-icing techniques, the timing of deicer applications, and the type of deicer to apply	Recommended by USEPA[2]	**Street; [All other applicable departments]**	Yes	• Continue to implement recommendation; • **Annual Reporting requirements[7]**	Continuous/ongoing/as-needed basis	Possibly[6]
8h	**Use alternative deicers** like glycol, urea, or calcium magnesium acetate (CMA) to reduce the corrosion of metal bridge supports	Recommended by USEPA[2]	**Street; [All other applicable departments]**	Yes	• Implement recommendation[5]; • **Annual Reporting requirements[7]**	Pending	Possibly[6]
9	**"Roadway and Bridge Maintenance"[2]**						
9a	Perform **paving operations** only in dry weather, using concrete, asphalt, or other sealers	Recommended by USEPA[2]	**Street; [All other applicable departments]**	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
9b	Use **proper staging techniques** to reduce spillage of paving materials during the repair of potholes and worn pavement	Recommended by USEPA[2]	**Street; [All other applicable departments]**	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
9c	**Cover storm drains and manholes** during paving operations	Recommended by USEPA[2]	**Street; [All other applicable departments]**	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
9d	Use **erosion and sediment controls** to decrease runoff from repair sites	Recommended by USEPA[2]	**Street; [All other applicable departments]**	Yes	Implement recommendation[5]	Pending	Possibly[6]
9e	Use **drip pans, absorbent materials, and other pollution prevention materials** to limit leaks of paving materials and fluids from paving machines	Recommended by USEPA[2]	**Street; [All other applicable departments]**	Yes	Implement recommendation	Pending	Possibly[6]

Minimum Control Measure #6 Pollution Prevention/Good Housekeeping for Municipal Operations Best Management Practices (BMPs) See footnotes at end of table							
#	BMP		Responsible Party	Legal Authority?	Measurable Goals		Address TMDLs?
	Name	Justification			(Schedules, Frequency, Etc.)	Justification	
9f	For resurfacing operations, use **porous asphalt for potholes and shoulder repair**	Recommended by USEPA[2]	**Street; [All other applicable departments]**	Yes	Implement recommendation[5]	Pending	Possibly[6]
9g	**Sweep and vacuum** heavily-traveled roadways	Recommended by USEPA[2]	**Street**	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
9h	Regularly **clean runoff control structures** such as catch basins	Recommended by USEPA[2]	**Street; CSD**	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
9i	Restrict the use of **herbicides, pesticides, and fertilizers** on roadway vegetation	Recommended by USEPA[2]	**Street; [All other applicable departments]**	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
9j	**Train employees** on the proper handling and application of herbicides, pesticides, fertilizers, and other chemicals	Recommended by USEPA[2]	**Street; [All other applicable departments]**	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
9k	Select **roadside vegetation** with higher salt tolerances	Recommended by USEPA[2]	**Street; [All other applicable departments]**	Yes	Implement recommendation[5]	Pending	Possibly[6]
9l	**Avoid installing scupper drains** on new bridges	Recommended by USEPA[2]	**Civil Engineering**	Yes	Implement recommendation[5]	Pending	Possibly[6]
9m	Routinely **clean existing scupper drains**	Recommended by USEPA[2]	**Street; [All other applicable departments]**	Yes	Implement recommendation[5]	Pending	Possibly[6]
9n	**Retrofit existing scupper drains** with catch basins or otherwise redirecting water to vegetated areas to provide treatment	Recommended by USEPA[2]	**Street; [All other applicable departments]**	Yes	Implement recommendation[5]	Pending	Possibly[6]
9o	Use **suspended tarps, booms, and vacuums** to capture paint, solvents, rust, paint chips, and other pollutants generated by bridge maintenance	Recommended by USEPA[2]	**Street; [All other applicable departments]**	Yes	Implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
9p	Provide **litter control** along roads and bridges	Recommended by USEPA[2]	**Street; [All other applicable departments]**	Yes	Implement recommendation[5]	Pending	Possibly[6]

Minimum Control Measure #6 Pollution Prevention/Good Housekeeping for Municipal Operations Best Management Practices (BMPs) See footnotes at end of table							
#	BMP		Responsible Party	Legal Authority?	Measurable Goals		Address TMDLs?
	Name	Justification			(Schedules, Frequency, Etc.)	Justification	
9q	Locate **snow disposal areas** where there are wide vegetative buffers or within berms	Recommended by NEOSWTC[1]	**Street; [All other applicable departments]**	Yes	Implement recommendation[5]	Continuous/ongoing/as-needed basis	Yes
10	**"Storm Drain System Cleaning"[2]**						
10a	Regularly **clean storm drain systems**	Recommended by USEPA[2]; NEOSWTC[1]	**CSD**	Yes	• Continue to implement recommendation • **Annual Reporting requirements[7]**	Required	Yes
10b	Ensure **debris** collected from storm sewer cleaning is **de-watered to sanitary sewer** then **disposed at solid waste landfill**	Required by Ohio EPA	**CSD**	Yes	• Continue to implement recommendation; • **Annual Reporting requirements[7]**	Required	Possibly[6]
10c	Implement **ditch cleaning**	Recommended by NEOSWTC[1]	**Street**	Yes	• Continue to implement recommendation; • **Annual Reporting requirements[7]**	Continuous/ongoing/as-needed basis	Yes
10d	Implement a **trash collection program for open channel MS4s**	Recommended by NEOSWTC[1]	**Street; [All other applicable departments]**	Yes	Implement recommendation[5]	Pending	Yes
11	**"Hazardous Materials Storage"[2]**						
11a	Ensure **sufficient aisle space** to provide access for inspections and to improve the ease of material transport	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
11b	**Store materials away from high-traffic areas** to reduce the likelihood of accidents that might cause spills or damage to drums, bags, or containers	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
11c	**Stack containers in accordance with manufacturer's directions** to avoid damaging the container or the product itself	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]

Minimum Control Measure #6 Pollution Prevention/Good Housekeeping for Municipal Operations Best Management Practices (BMPs) See footnotes at end of table							
#	BMP		Responsible Party	Legal Authority?	Measurable Goals		Address TMDLs?
	Name	Justification			(Schedules, Frequency, Etc.)	Justification	
11d	**Store containers on pallets or equivalent structures**	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation[5]	Pending	Possibly[6]
11e	Delegate the **responsibility for management of hazardous materials** to personnel trained and experienced in hazardous substance management	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
11f	**Cover or enclose hazardous materials and handling areas**	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation	Pending	Possibly[6]
11g	**Prioritize storage locations** of the most hazardous materials	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
11h	Conduct **routine maintenance and inspections** of hazardous materials storage areas by appropriately trained employees	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
11i	Regularly **train appropriate employees** to maintain and inspect hazardous materials storage areas	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
12	**"Materials Management"[2]**						
12a	Improve the **maintenance of** industrial **machinery** and other machinery	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
12b	Establish **material storage and inventory controls**	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
12c	Conduct **routine cleaning, inspection, organization, and maintenance** of workplaces and facilities where materials are stored or processed	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
12d	Properly **collect and dispose of wastes**	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
12e	Conduct **regular material inventories**:	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]

Minimum Control Measure #6 Pollution Prevention/Good Housekeeping for Municipal Operations Best Management Practices (BMPs) See footnotes at end of table							
#	BMP		Responsible Party	Legal Authority?	Measurable Goals		Address TMDLs?
	Name	Justification			(Schedules, Frequency, Etc.)	Justification	
	• **Identify** all hazardous and nonhazardous substances present at the facility • Compile a **list** of all chemicals present and obtain an **MSDS** for each one • **Label** all containers with the name of the chemical, unit number, expiration date, handling instructions, and health or environmental hazards • Make **special note** of hazardous chemicals that require special handling, storage, or disposal						
12f	**Train employees** about the benefits of proper materials management and to properly respond to spills or leaks	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
13	**"Municipal Facilities Management"[2]**						
13a	Restrict the use of **herbicides, pesticides, and fertilizers** at facilities	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
13b	**Train employees** on storm water BMPs and principles	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
13c	Develop **procedures for properly disposing of waste** removed from the City's MS4 (including dredge spoil, accumulated sediments, floatables, and other debris)	Recommended by USEPA[2]	**Street; CSD**	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
13d	Evaluate facilities for **pollution potential and BMP implementation** where chemicals or hazardous materials are stored or disposed of, and at outdoor trash storage areas	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation	Pending	Possibly[6]

Minimum Control Measure #6 Pollution Prevention/Good Housekeeping for Municipal Operations Best Management Practices (BMPs) See footnotes at end of table							
#	BMP		Responsible Party	Legal Authority?	Measurable Goals		Address TMDLs?
	Name	Justification			(Schedules, Frequency, Etc.)	Justification	
13e	Obtain coverage under an **NPDES industrial storm water permit**	Required by Ohio EPA	**Water; WRF**	Yes	Requirement implemented		Possibly[6]
13f	Develop and implement a **facility Storm Water Pollution Prevention Plan (SWP3)** in accordance with minimum requirements of the current Ohio EPA NPDES Industrial Storm Water Permit unless "No Exposure" can be certified or otherwise exempt; update accordingly	Required by Ohio EPA	**Fire Dept. (Station #1); DMV; Police (Impound Lot)**	Yes	• Implement requirement[4] (contact the Storm Water Program Coordinator for details); • **Annual Reporting requirements[7]**	Required	Yes
13g	**Update and implement facility SWP3s** to reflect minimum requirements of the Ohio EPA General NPDES Permit for Storm Water Associated with Industrial Activities (OHR000005) unless "No Exposure" can be certified or otherwise exempt; update accordingly • Perform **inspection requirements** • **Quarterly routine facility inspections, quarterly visual assessments of storm water discharges, and an annual comprehensive site inspection with annual report**	Recommended by NEOSWTC[1]	**Fire Dept. (Station #1); DMV; Police (Impound Lot)**	Yes	Implement recommendation[4] (contact the Storm Water Program Coordinator for details)	Pending	Yes
13h	Conduct **routine inspections** of facilities to detect leaks, spills, or other pollution issues	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
13i	Maintain and operate **community-owned sewage treatment systems**	Recommended by NEOSWTC[1]	**WRF**	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Yes
13j	Utilize **Integrated Pest Management (IPM)** on community-owned and operated properties	Recommended by NEOSWTC[1]	**[All applicable departments]**	Yes	Implement recommendation[5]	Pending	Yes

Minimum Control Measure #6 Pollution Prevention/Good Housekeeping for Municipal Operations Best Management Practices (BMPs) See footnotes at end of table							
#	BMP		Responsible Party	Legal Authority?	Measurable Goals		Address TMDLs?
	Name	Justification			(Schedules, Frequency, Etc.)	Justification	
13k	Implement **waste storage in lidded or covered containers**	Recommended by NEOSWTC[1]	**Sanitation; [All other applicable departments]**	Yes	Implement recommendation	Continuous/ongoing/as-needed basis	Yes
14	**"Spill Response and Prevention"[2]**						
14a	Identify **potential spill or source areas**, such as loading and unloading, storage and processing areas, places that generate dust or particulate matter, and areas designated for waste disposal	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
14b	Evaluate **spill potential** for stationary facilities, including manufacturing areas, warehouses, service stations, parking lots, and access roads	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
14c	Recycle, reclaim, or reuse **process materials**	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation[5]	Pending	Possibly[6]
14d	Install **leak detection devices, overflow controls, and diversion berms** as appropriate for materials handling and storage	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation[5]	Pending	Possibly[6]
14e	**Disconnect drains** from processing areas that lead to storm sewers	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation[5]	Pending	Possibly[6]
14f	Perform **preventative maintenance** on storm tanks, valves, pumps, pipes, and other equipment	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
14g	Use **material transfer or filling procedures** that minimize spills from tanks and other equipment	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
14h	**Replace toxic materials** with less or non-toxic products	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation[5]	Pending	Possibly[6]
14i	Provide a well-planned and clearly-defined **spill prevention/response plan**:	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation	Pending	Possibly[6]

Minimum Control Measure #6 Pollution Prevention/Good Housekeeping for Municipal Operations Best Management Practices (BMPs) See footnotes at end of table							
#	BMP		Responsible Party	Legal Authority?	Measurable Goals		Address TMDLs?
	Name	Justification			(Schedules, Frequency, Etc.)	Justification	
	• Identify **individuals responsible** for implementing the plan • Describe **safety measures** to take with each kind of waste • Specify how to **notify appropriate authorities** such as police and fire departments, hospitals, or publicly-owned treatment works for assistance • State **procedures for containing, diverting, isolating, and cleaning up the spill** • Describe **spill response equipment to be used**, including safety and cleanup equipment						
14j	**Train employees** how to reduce and respond to spills	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
14k	Ensure **equipment and materials for cleanup** are readily accessible and clearly marked with procedures for use	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
14l	Update **spill prevention/response plan** to accommodate any changes in the site/facility or procedures	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Implement recommendation	Pending	Possibly[6]
14m	**Regularly inspect areas** where spills might occur to ensure that procedures are posted and cleanup equipment is readily available	Recommended by USEPA[2]	**[All applicable departments]**	Yes	Continue to implement recommendation	Continuous/ongoing/as-needed basis	Possibly[6]
	Other MCM#6 BMPs						

Minimum Control Measure #6 Pollution Prevention/Good Housekeeping for Municipal Operations Best Management Practices (BMPs) See footnotes at end of table							
#	BMP		Responsible Party	Legal Authority?	Measurable Goals		Address TMDLs?
	Name	Justification			(Schedules, Frequency, Etc.)	Justification	
15	**Water Quality Considerations on Flood Management Projects**	Required by permit	**Civil Engineering**	Yes	• Ensure flood management projects are assessed for water quality impacts; • **Annual Reporting requirements[7]**	Required	[TBD[3,4]]
16	Ensure **community-sponsored portable toilets** are maintained and emptied without spills	Recommended by NEOSWTC[1]	**[All applicable departments]**	Yes	Implement recommendation	Continuous/ongoing/as-needed basis	Yes
17	Establish a protection program to obtain **riparian development rights**; e.g. **conservation easements**	Recommended by NEOSWTC[1]	**[All applicable departments]**	Yes	Implement recommendation[5]	Pending	Yes
18	Relocate **stockpiles of waste materials and erodible materials** away from stream banks and steep slopes and/or install appropriate sediment controls around such materials	Recommended by NEOSWTC[1]	**[All applicable departments]**	Yes	Implement recommendation	Continuous/ongoing/as-needed basis	Yes
19	Install **green infrastructure** such as bioretention, permeable pavement, cisterns, green roofs, and infiltration trenches or basins at municipal facilities	Recommended by NEOSWTC[1]	**[All applicable departments]**	Yes	Implement recommendation[5]	Pending	Yes
20	Minimize number and width of **stream crossings** when planning transportation routes	Recommended by NEOSWTC[1]	**[All applicable departments]**	Yes	Implement recommendation	Continuous/ongoing/as-needed basis	Yes
21	Adopt a **"Complete Streets" code**	Recommended by NEOSWTC[1]	**[All applicable departments]**	Yes	Implement recommendation[5]	Pending	Yes
22	Retrofit existing **community-owned parking lots** to incorporate natural habitat, vegetation, and pervious surfaces	Recommended by NEOSWTC[1]	**Traffic: Parking**	Yes	Implement recommendation[5]	Pending	Yes
23	When **contract services** are utilized for community services, require	Recommended by NEOSWTC[1]	**[All applicable departments]**	Yes	Implement recommendation[5]	Pending	Yes

Minimum Control Measure #6 Pollution Prevention/Good Housekeeping for Municipal Operations Best Management Practices (BMPs) See footnotes at end of table							
#	BMP		Responsible Party	Legal Authority?	Measurable Goals		Address TMDLs?
	Name	Justification			(Schedules, Frequency, Etc.)	Justification	
	contract language that ensures BMPs for pollution prevention and good housekeeping						
24	Implement timely **stabilization of disturbed soils and soil stockpiles** at the service yard, landfills, and on municipal construction activity	Recommended by NEOSWTC[1]	**[All applicable departments]**	Yes	Implement recommendation	Continuous/ongoing/as-needed basis	Yes
25	Establish **wash stations directed to sanitary sewers** or utilize **dry cleanup methods** for lawn care equipment, golf carts, and other community vehicles and equipment used in parks and golf course maintenance	Recommended by NEOSWTC[1]	**Parks & Recreation**	Yes	Implement recommendation[5]	Pending	Yes
26	Implement **protection of catch basins** and **other appropriate storm water inlets** when conducting **road repairs, water line repair, and other maintenance activities** of respective service departments	Recommended by NEOSWTC[1]	**[All applicable departments]**	Yes	Implement recommendation	Continuous/ongoing/as-needed basis	Yes
27	Establish **"pick-up pet waste" stations** for residents on public property, parks, community buildings, cemeteries, etc.	Recommended by NEOSWTC[1]	**Parks & Recreation; [Other applicable Depts.]**	Yes	Implement recommendation[5]	Pending	Yes
28	Implement a **road-kill program** and properly store collected carcasses or take to a compost facility licensed to accept	Recommended by NEOSWTC[1]	**Street**	Yes	Implement recommendation[5]	Pending	Yes
29	**[Other MCM#6 BMPs[1,2,3,4,5]]**	[TBD[3,4,5]]	**[Any Department[3,4,5]]**	[TBD[3]]	[TBD[3,4,5]]	[TBD[3]]	[TBD[3,6]]

[1] Specific BMPs that address TMDLs are recommended by the Northeast Ohio Stormwater Training Council (NEOSWTC). See Total Maximum Daily Loads section of SWMP.
[2] See USEPA's National Menu of Best Management Practices (BMPs) for Stormwater at: https://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater#poll.
[3] To be determined.
[4] As applicable.
[5] As feasible.

[6] According to the NEOSWTC, the implementation of pollution prevention and good housekeeping practices at community facilities and operations addresses habitat, nutrients, and bacteria TMDLs. Therefore, essentially all BMPs implemented for MCM#6 may possibly address respective TMDLs.

[7] See "Annual Reporting for MCM#6" below.

Evaluating the Success of MCM#6

There are various ways to measure the City of Canton's success of implementing Minimum Control Measure #6:

- Assess individual BMPs to determine if they have been implemented in accordance with measurable goals, MCM performance standards, and applicable EPA and NEOSWTC recommendations.
- Annual Reports will provide indication of the status of implementation.
- The Storm Water Program Coordinator will conduct and annual review of the program with the Service Director so that appropriate adjustments and actions can be taken.
- Ohio EPA or other entities may conduct sampling of the Nimishillen Creek to determine if corresponding pollutant levels have decreased.
- Ohio EPA may perform audits of the City's Storm Water Management Program.

Annual Reporting for MCM#6

Whenever any of the following BMPs are implemented or are planned to be implemented, the responsible party will need to track corresponding information. The Storm Water Management Program Coordinator will send out annual questionnaires to departments requesting the respective information and possibly other information as well. The information provided will then be utilized to prepare Annual Reports that will be submitted as required to Ohio EPA.

- **Employee Training Program:**
    a. *Regarding the previous year (BMP was implemented):*
        i. Responsible Party:
        ii. Measurable Goal:
        iii. Completed (Yes or No):
        iv. Topic(s):
        v. Target Audience:
        vi. # of Employees Attended:
        vii. Summary of Activity:
        viii. Was it Effective (Yes or No)?
        ix. You are required to maintain supporting documentation. What do you have?
    b. *Regarding this year (BMP is planned to be implemented):*
        i. Responsible Party:
        ii. Measurable Goal:
        iii. Summary of Planned Activities:
        iv. Proposed Schedule:

- **Municipal Facilities Subject to Program:**
    a. *Regarding the previous year (BMP was implemented):*
        i. Were vehicle maintenance or equipment cleaning operations performed at the facility?
            1. If "Yes", can the facility certify "No Exposure" of the operations to storm water according to Ohio EPA's No Exposure Certification?
        ii. Is there a Storm Water Pollution Prevention Plan specifically developed for the facility?
        iii. What operation and maintenance procedures have been developed for the facility with respect to storm water pollution prevention?
        iv. # of Facility Inspections Performed:
        v. Frequency of Inspections:
        vi. You are required to maintain supporting documentation. What do you have?
    b. *Regarding this year (BMP is planned to be implemented):*
        i. Responsible Party:
        ii. Measurable Goal:
        iii. Summary of Planned Activities:
        iv. Proposed Schedule:

- **MS4 Maintenance:**

a. *Regarding the previous year (BMP was implemented):*
    i. Summarize Maintenance Activities and Schedules (in general):
    ii. Summarize Activities Performed (provide specifics):
    iii. You are required to maintain supporting documentation. What do you have?
    iv. **Disposal of Wastes:**
        1. What procedures are developed to ensure waste removed from MS4 maintenance operations is properly disposed?
        2. Document Amounts of Wastes Properly Disposed (Report the number of tons of waste removed from the MS4 and disposed at landfills during the reporting period):
        3. You are required to maintain supporting documentation. What do you have?
b. *Regarding this year (BMP is planned to be implemented):*
    i. Responsible Party:
    ii. Measurable Goal:
    iii. Summary of Planned Activities:
    iv. Proposed Schedule:
    v. **Disposal of Wastes:**
        1. Responsible Party:
        2. Measurable Goal:
        3. Summary of Planned Activities:
        4. Proposed Schedule:

- **Road Salt:**
    a. *Regarding the previous year (BMP was implemented):*
        i. Is Salt Storage Covered (Yes or No)?
        ii. Amount (lbs or tons) Used (January – December):
        iii. Summarize Measures Taken to Minimize Usage (salting policies, use of anti-icers or additives, spreader calibration practices, etc.):
        iv. You are required to maintain supporting documentation. What do you have?
    b. *Regarding this year (BMP is planned to be implemented):*
        i. Responsible Party:
        ii. Measurable Goal:
        iii. Summary of Planned Activities:
        iv. Proposed Schedule:

- **Pesticide and Herbicide Usage:**
    a. *Regarding the previous year (BMP was implemented):*
        i. Have procedures or Best Management Practices been developed to limit storm water pollution from pesticides and/or herbicides (Yes or No)?
        ii. Gallons of Pesticides Used:
        iii. Gallons of Herbicides Used:
        iv. Summarize Measures Taken to Minimize Usage:
        v. You are required to maintain supporting documentation. What do you have?
    b. *Regarding this year (BMP is planned to be implemented):*
        i. Responsible Party:
        ii. Measurable Goal:
        iii. Summary of Planned Activities:
        iv. Proposed Schedule:

- **Fertilizer Usage:**
    a. *Regarding the previous year (BMP was implemented):*
        i. Have procedures or Best Management Practices been developed to limit storm water pollution from the usage of fertilizers (Yes or No)?
        ii. Pounds Used:

iii. Summarize Measures Taken to Minimize Usage:
iv. You are required to maintain supporting documentation. What do you have?

b. *Regarding this year (BMP is planned to be implemented):*
   i. Responsible Party:
   ii. Measurable Goal:
   iii. Summary of Planned Activities:
   iv. Proposed Schedule:

- **Street/Lot Sweeping:**
  a. *Regarding the previous year (BMP was implemented):*
     i. Were procedures in place to properly manage and dispose or beneficially reuse street/lot sweepings (Yes or No)?
     ii. # of lane-miles swept and/or # of lots swept:
     iii. Document Amount of Material Collected and Properly Disposed (at a solid waste facility):
     iv. You are required to maintain supporting documentation. What do you have?
  b. *Regarding this year (BMP is planned to be implemented):*
     i. Responsible Party:
     ii. Measurable Goal:
     iii. Summary of Planned Activities:
     iv. Proposed Schedule:

- **Flood Management Projects:**
  a. *Regarding the previous year (BMP was implemented):*
     i. Summarize any New or Existing Flood Management Projects that were assessed for Impacts on Water Quality:
     ii. You are required to maintain supporting documentation. What do you have?
  b. *Regarding this year (BMP is planned to be implemented):*
     i. Responsible Party:
     ii. Measurable Goal:
     iii. Summary of Planned Activities:
     iv. Proposed Schedule:

Further Guidance and Information for MCM#6

See the "Additional Information" section of this Storm Water Management Program.

Reviewing & Updating the Storm Water Management Program

Since new information and guidance is frequently made available and implementation challenges or changes will likely occur throughout the permit term, the City of Canton's SWMP should be considered a "dynamic" document. Thus, the Storm Water Program Coordinator may make revisions to it from time to time. Any requirements of or revisions made to this SWMP may be reviewed by the City of Canton Director of Public Service, who may affirm, modify, or rescind the same. If revisions are made, the cover page and the end of the revised section will both contain:

"***Latest revision: [date]***"

Actual revisions may be identified by comparing against previous versions of the respective sections.

Additional Information

For background and related information pertaining to the NPDES Small MS4 Program as well as the supplemental information for the City of Canton Storm Water Management Program, see:

- **Ohio EPA's NPDES Permit No.: OHQ000003 "Authorization for Small Municipal Separate Storm Sewer Systems to Discharge Storm Water Under the National Pollutant Discharge Elimination System":**
  See Appendix 1

- **Letter from Ohio EPA to City of Canton granting approval under Ohio EPA NPDES General Permit OHQ000003:**
  See Appendix 2

- **Memorandum Of Understanding (MOU) between City of Canton and Stark SWCD**
  http://cantonohio.gov/engineering/?pg=510

- **Memorandum Of Understanding (MOU) between Service Director and City Health Department**
  http://cantonohio.gov/engineering/?pg=510

- **"City of Canton Illicit Discharge Detection & Elimination Response Protocol" flowchart:**
  http://cantonohio.gov/engineering/?pg=510

- **"City of Canton Site Plan Review Process" flowchart:**
  http://cantonohio.gov/engineering/

- **"City of Canton Drainage Complaint General Guidance" table**:
  http://cantonohio.gov/engineering/?pg=510.

- **City of Canton main website:**
  http://cantonohio.gov/

- **City of Canton codified ordinances (including Chapter 961 "Storm Water Management"):**
  http://www.conwaygreene.com/canton.htm

- **City of Canton Storm Water Management webpage (including the "City of Canton Storm Water Management Manual"):**
  http://cantonohio.gov/engineering/?pg=510

- **Ohio EPA's "Guidance for MS4 Operated Industrial Facilities" flowchart:**
  http://www.epa.ohio.gov/portals/35/permits/MS4_industrial_guidance_jun09.pdf

- **Ohio EPA's "No Exposure Certification for Exclusion from NPDES Storm Water Permitting":**
  http://www.epa.ohio.gov/portals/35/storm/no_exposure_certification_fis.pdf

- **Ohio EPA Storm Water Program (including ODNR's Rainwater and Land Development Manual):** http://epa.ohio.gov/dsw/storm/index.aspx

- **USEPA BMP Fact Sheets and resources:** https://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater#edu

- **Nimishillen Creek TMDL Report Fact Sheet:** http://epa.ohio.gov/portals/35/tmdl/NimishillenCreekTMDL_fact_sheet_dec09.pdf

- **Nimishillen Creek TMDL Report:** http://epa.ohio.gov/portals/35/tmdl/NimishillenCreekTMDL_final_oct09_wo_app.pdf

- **Recommended BMPs for Addressing TMDLs (Fact Sheets): Northeast Ohio Storm Water Training Council website:** http://neohiostormwater.com/index.htmll

- **Stark Soil & Water Conservation District (SWCD) website:** https://www.starkswcd.org/

- **USEPA NPDES resources:** https://www.epa.gov/npdes

Latest revision: 1/4/2019

Appendices

Appendix 1: Ohio EPA's NPDES Permit No.: OHQ000003 "Authorization for Small Municipal Separate Storm Sewer Systems to Discharge Storm Water Under the National Pollutant Discharge Elimination System" (24 pages)

Appendix 2: Letter from Ohio EPA to City of Canton granting approval under Ohio EPA NPDES General Permit OHQ000003 (1 page)