



Storm Water Management Program

Ohio EPA MS4 Permit Number OHQ000003

Permit Term: 2014-2019

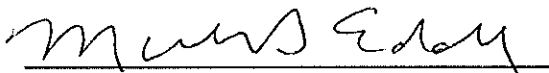
May 2018 Update

Prepared By:



Certification

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Michael Eddy, City Engineer
City of Moraine

Storm Water Management Program

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Executive Summary

The previous National Pollutant Discharge Elimination System (NPDES) permit for authorization for small Municipal Separate Storm Sewer Systems (MS4s) to discharge storm water (NPDES Permit No. OHQ000002) required the development and implementation of a Storm Water Management Program (SWMP) that satisfied the appropriate water quality requirements of Ohio Revised Code (ORC) 6111 and the Clean Water Act. The SWMP document is intended to identify and describe the best management practices (BMPs) selected by the City of Moraine (City) to meet the requirements of the six minimum control measures (MCMs) described in the permit, why those BMPs were selected in light of local water quality issues, and performance standards for BMP implementation. The six MCMs are:

1. Public Education and Outreach on Storm Water Impacts
2. Public Participation / Involvement
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 NPDES small MS4 permit was reissued on September 11, 2014 (NPDES Permit No. OHQ000003) and requires MS4 communities which are renewing coverage under this permit to update their SWMP to be consistent with the permit and submit the updated SWMP to Ohio EPA for review. Permit No. OHQ000003 requires that where applicable, BMPs shall be selected to address U.S. EPA approved Total Maximum Daily Load (TMDL) recommendations for identified water quality problems associated with MS4 discharges within the City of Moraine's watershed(s).

This SWMP update will be applicable until September 10, 2109 which is the end of the current permit term for NPDES Permit No. OHQ000003.

Total Maximum Daily Load (TMDL) Overview

The MS4 Permit requires that where applicable, BMPs shall be selected to address U.S. EPA approved TMDL recommendations. The City of Moraine is located entirely within the Great Miami River (lower) watershed, and according to Ohio EPA, the TMDL for this watershed is in preparation. Studies completed by Ohio EPA include the 2010 Study Plan and the 2012 Biological and Water Quality Survey of the Lower Great Miami River Basin. The survey made the following observations:

“In the main stem 13 of the 23 sites sampled were impaired with non-attainment occurring in two distinct segments of the river. The uppermost impaired segment included nine sites and extended from Dayton (RM 78.85 Stewart Street) to south of Miamisburg (RM 64.72 Chautauqua Road). The river in this upper section flows through the cities of Dayton, Moraine, West Carrollton and Miamisburg and includes some of the most developed (urban) land in the study area. Five of the nine impaired sites (RMs 72.48, 71.6, 69.87, 69.3, 66.9) in this upper segment would have attained the PCR Class A recreation use if the exceptionally high values from the October 27 sampling were excluded from the analysis. This indicates that impairment is more likely due to episodic events related to overflows, bypasses, and general runoff attributable to wet weather rather than chronic issues. Four major municipal wastewater facilities (Dayton WWTP, Montgomery County Western Regional WWTP, West Carrollton WWTP and Miamisburg WWTP) discharge directly to the main stem in this upper segment. While there are no documented final effluent bacteria violations for these facilities in the entities’ self-monitoring reports all but West Carrollton reported system wide sanitary sewer overflows (SSOs) during the May through October recreation period that may impact this upper portion of the river. Additionally, a buried sewer line in the Great Miami River downstream from the Stewart Street bridge was broken by a gravel excavator on September 1 causing the release of approximately 130,000 gallons of sewage (bacteria samples were not collected in the main stem on this day). Biological and Water Quality Study of the Lower Great Miami River and Select Tributaries, May 2012, page 136.

The information in these studies indicates the streams that flow through the City are listed as “non-attainment” due to episodic events and the surrounding urban area (Figure 1). Because there is not currently a TMDL that applies to the City, the BMPs selected by the City have been selected to provide overall water quality protection.

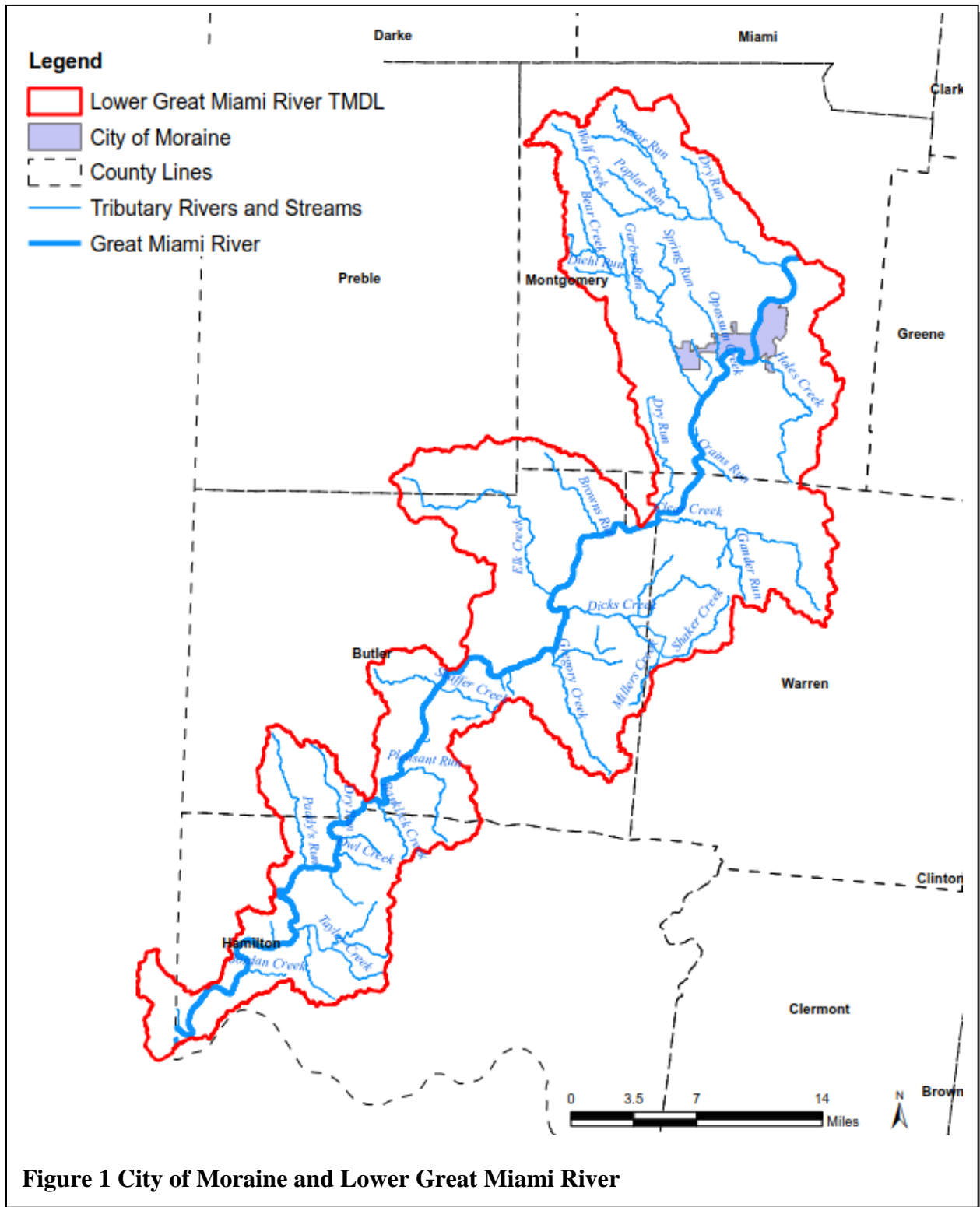
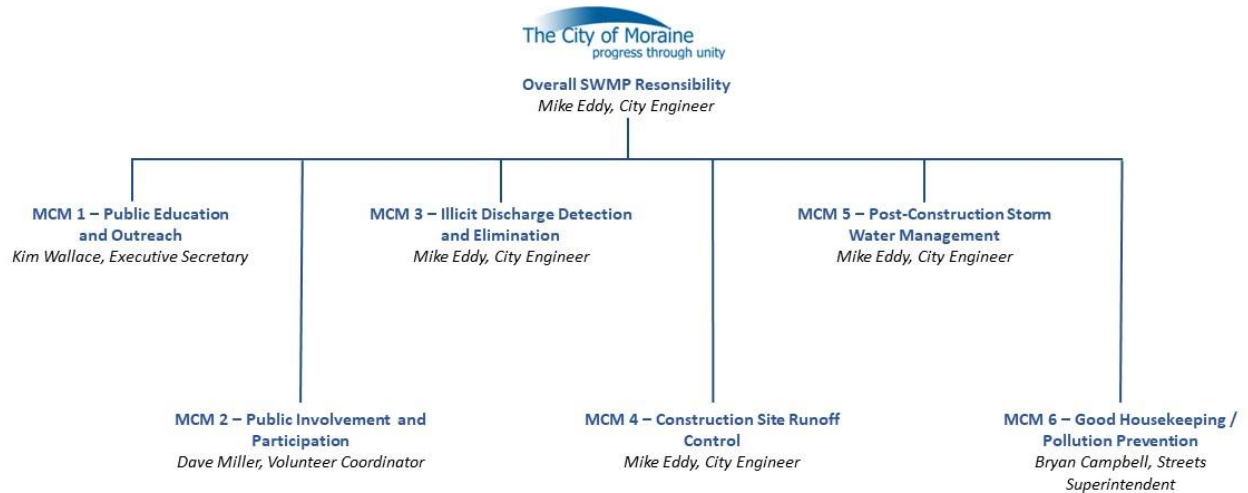


Figure 1 City of Moraine and Lower Great Miami River

Organizational Chart

The City of Moraine’s MS4 program is implemented through various departments within the City. The following organizational chart provides a visual representation of how these departments work collaboratively to accomplish the goals outlined in this Storm Water Management Program.



Minimum Control Measure 1: Public Education and Outreach on Storm Water Impacts

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The City of Moraine’s MS4 permit requires the public education and outreach efforts to accomplish the following:

Shall implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff.

Performance Standards: Program shall include more than 1 mechanism and at least five different storm water themes or messages over the permit term, at least one theme shall be targeted to the development community and reach at least 50% of the population.

The following table outlines the best management practices (BMPs) selected by the City of Moraine to accomplish MCM 1 for the remainder of the permit term. The five themes the City will focus on include: (1) Nutrient Pollution, (2) Sediment Pollution / Erosion Control, (3) Residential Storm Water Management (4) Litter and Trash, and (5) Hazardous Waste Disposal. The City anticipates these outreach strategies will reach well beyond 50 percent of the population within its service area during the remainder of the permit term. The City has the legal authority to implement identified BMPs.

BMP Type: Erosion Control Pamphlets		
<p>Description of BMP: The City will provide erosion prevention and sediment control information to developers on all new development and re-development projects to ensure that the development community remains educated on water quality impacts associated with construction site runoff and the importance of adequate erosion prevention and sediment control measures.</p>		
Measurable Goal	Implementation Schedule and Frequency	Responsible Party
<p>Document the number of erosion control pamphlets distributed to developers, to be provided to the developer of every new development and re-development project.</p>	<p>Develop pamphlet by October 1, 2018. Begin distributing to developers.</p>	<p>City of Moraine City Engineer</p>
<p>Rationale for BMPs: Written communication is a proven way to target specific groups of people with key information related to the storm water program, including the development community. Local developers will be able to utilize the information in the erosion control pamphlets to understand the importance of erosion prevention and sediment control measures on all active construction sites.</p> <p>Target Audience: Development community.</p>		

BMP Type: Multi-Media Communications		
Description of BMP: The City will provide multi-media communications through the City’s website and the City’s monthly news magazine “Moraine Messenger” to promote education and outreach of the storm water program and related issues.		
Measurable Goal	Implementation Schedule and Frequency	Responsible Party
Develop storm water page on City’s website to include information related to public education and outreach of storm water management themes.	Complete website page by December 31, 2018.	City of Moraine Executive Secretary
Include in the Moraine Messenger city magazine information related to public education and outreach of storm water management themes.	Three articles per year.	City of Moraine Executive Secretary
Rationale for BMP: Multi-media communication is a growing way to provide current information to the public in multiple formats and can reach a broad audience. Target Audience: General public.		

MCM 1 Decision Process - Rationale Statement

The rationale statement shall include the following information, at a minimum:

i. How you will inform individuals and households about the steps they can take to reduce storm water pollution?

The City of Moraine’s media campaign targets individuals and households regarding the connection between their personal habits and the health of local streams. It will help inform individuals and households about steps they can take to reduce storm water pollution.

ii. How you plan to inform individuals and groups on how to become involved in the storm water program (with activities such as local stream restoration activities).

Erosion control pamphlets, the city magazine, and the new website page and updates are all means to notify individuals about the importance of storm water management and a variety of water quality topics.

iii. Who are the target audiences for your education program who are likely to have significant storm water impacts (including commercial, industrial and institutional entities) and why those target audiences were selected?

This control measure will target developers, homeowners, and the general public. An informed and knowledgeable community is crucial to the success of the storm water management program.

iv. What are the target pollutant sources your public education program is designed to address?

The City has chosen a mix of BMPs to address appropriate pollutants in the Great Miami River Watershed. Since there is not an approved TMDL, the City will educate the public on a variety of pollutant sources including residential sources and development sources.

- v. ***What is your outreach strategy, including the mechanisms (e.g., printed brochures, newspapers, media, workshops, etc.) you will use to reach your target audiences, and how many people do you expect to reach by your outreach strategy over the permit term?***

See the above tables for detailed strategies the City intends to implement to reach people throughout its service area. The City anticipates these outreach strategies will reach well beyond 50 percent of the population within its service area during the remaining permit term.

- vi. ***Who (person or department) is responsible for overall management and implementation of your storm water public education and outreach program and, if different, who is responsible for each of the BMPs identified for this program.***

Refer to the tables above for the responsible party for each BMP included in the program.

- vii. ***How will you evaluate the success of this minimum measure, including how you selected the measurable goals for each of the BMPs?***

The measurable goals were selected to be specific, measurable, achievable and realistic. The City of Moraine intends to evaluate the effectiveness of the public education and outreach BMPs by tracking and documenting information as described in the tables above.

Minimum Control Measure 2: Public Involvement/Participation

Minimum Control Measure 2: Public Involvement/Participation

The City of Moraine’s MS4 permit requires the public involvement/participation efforts to accomplish the following:

Comply with State and local public notice requirements and satisfy this minimum control measure’s minimum performance standards when implementing a public involvement/ participation program.

Performance Standards: *Include five public involvement activities.*

The following table outlines the best management practices (BMPs) selected by the City of Moraine to accomplish MCM 2 for the remainder of the permit term. The City has the legal authority to implement identified BMPs.

BMP Type: Park and Stream Clean-Up Events		
Description of BMP: The City will work with groups of volunteers to complete park and stream clean-up events.		
Measurable Goal	Implementation Schedule and Frequency	Responsible Party
Document the date and number of volunteers participating in park and stream clean-up events.	Four events per year with an average of 10 participants per event.	City of Moraine Volunteer Coordinator
Rationale for BMP: Engaging the public in park and stream clean-up activities provides an opportunity for hands-on involvement and participation while also improving water quality through cleaning the parks and streams.		
Target Audience: General public, citizen/student groups.		

BMP Type: Adopt-A-Flowerbed Annual Program		
Description of BMP: The City will engage the public in beautification activities at the six City-owned sites.		
Measurable Goal	Implementation Schedule and Frequency	Responsible Party
Document the number of volunteers assisting in planting and maintaining City-owned sites.	Throughout the growing season- March through October.	City of Moraine Volunteer Coordinator
Rationale for BMP: Involving residents and volunteers introduces them to the benefits of gardens in reducing stormwater runoff.		
Target Audience: Residents, citizen/student groups.		

MCM 2 Decision Process - Rationale Statement

The rationale statement shall include the following information, at a minimum:

i. Have you involved the public in the development and submittal of your NOI and SWMP description?

The City of Moraine has involved the public in developing its SWMP by posting a draft update of the SWMP on the City's website for public review and comment.

ii. What is your plan to actively involve the public in the development and implementation of your program?

As outlined in the tables above, the proposed SWMP includes various opportunities for members of the public to get involved in the implementation of the SWMP.

iii. Who are the target audiences for your public involvement program, including a description of the types of ethnic and economic groups engaged? You are encouraged to actively involve all potentially affected stakeholder groups, including commercial and industrial businesses, trade associations, environmental groups, homeowners associations, and educational organizations, among others.

This program targets the general public. The City of Moraine will utilize the website and the city magazine to reach a broad spectrum of ethnic and economic audiences.

iv. What are the types of public involvement activities included in your program? Where appropriate, consider the following types of public involvement activities: citizen representatives on a storm water management panel, public hearings, working with citizen volunteers willing to educate others about the program, volunteer monitoring or stream/beach clean-up activities.

The selected activities are specified in the tables above.

v. Who (person or department) is responsible for the overall management and implementation of your storm water public involvement/participation program and, if different, who is responsible for each of the BMPs identified for this program.

Refer to the tables above for the responsible party for each BMP included in the program.

vi. How you will evaluate the success of this minimum measure, including how you selected the measurable goals for each of the BMPs.

The measurable goals were selected to be specific, measurable, achievable and realistic. The City of Moraine intends to evaluate the effectiveness of the public involvement and participation BMPs by tracking and documenting information as described in the tables above.

Minimum Control Measure 3: Illicit Discharge Detection and Elimination

Minimum Control Measure 3: Illicit Discharge Detection and Elimination

The City of Moraine's MS4 permit requires the illicit discharge detection and elimination efforts to include the following:

Shall develop, implement and enforce a program to detect and eliminate illicit discharges.

Shall develop a comprehensive storm water system map, showing the location of all outfalls and the names and location of all waters of the United States that receive discharges from those outfalls; MS4 system (catch basins, pipes, ditches, detention/retention ponds, post construction water quality BMPs), and private water quality BMPs.

Shall submit to EPA a list of HSTSs including addresses; a map of HSTS's including type and size of conduits that receive discharges.

Shall effectively prohibit through ordinance, or other regulatory mechanism, illicit discharges including enforcement procedures.

Shall development and implement a plan to detect and eliminate non-storm water discharges, including illegal dumping and HSTS. At a minimum this includes:

- i. Working with applicable agencies and/or departments to identify HSTS's that could be connected to central sewers and require connection for any HSTS not operating properly.***
- ii. Working with the health department to develop a proactive O&M program.***
- iii. Actively investigating contamination sources during dry weather screening.***
- iv. Evaluating the planned/possible installation of sewers in areas with high densities of HSTS's.***

Shall inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste.

Shall address the following categories of non-storm water discharges or flows if identified as significant contributors of pollutants: water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration, uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, street wash water, and discharges or flows from fire-fighting activities.

Performance Standards: Initial dry weather screening of all storm water outfalls over the permit term. Establish priorities and goals for long-term system wide surveillance of MS4. System map shall be updated as needed.

The following table outlines the best management practices (BMPs) selected by the City of Moraine to accomplish MCM 3 for the remainder of the permit term. The City has the legal authority to implement identified BMPs.

BMP: Outfall Mapping		
Description of BMP: The City of Moraine intends to complete mapping of outfalls and add the outfalls to a storm water system map.		
Measurable Goal	Implementation Schedule and Frequency	Responsible Party
Identify and field locate outfalls, then add to storm water system map.	Complete by December 31, 2018.	City of Moraine City Engineer
Rationale for BMP: Updating the storm water system mapping to include outfalls.		

BMP: Storm Water System Map		
Description of BMP: The City of Moraine intends to build a comprehensive storm water system map from record drawings and field investigations in GIS. Mapping to include the information required in the permit, including post-construction water quality BMPs.		
Measurable Goal	Implementation Schedule and Frequency	Responsible Party
Build storm water system map from record drawings and field investigations.	Complete by December 31, 2018.	City of Moraine City Engineer.
Add to mapping the information required in the permit, including post-construction water quality BMPs.	Complete by December 31, 2019.	City of Moraine City Engineer
Rationale for BMP: Building a comprehensive storm water system map to include additional assets will create a more accurate representation of the entire storm water system network.		

BMP: HSTS Mapping and List		
Description of BMP: The City of Moraine will coordinate with the Montgomery County Public Health Department to identify existing and planned home sewage treatment system (HSTS) within its service area. All known locations of HSTS will be added to the mapping database, and any new applications for HSTS in the future will be added to the mapping database. Coordination on this effort between these agencies will continue in future years to assess the feasibility of future sewer service at locations of HSTS.		
Measurable Goal	Implementation Schedule and Frequency	Responsible Party
Compile list and add known HSTS to storm water system map.	Complete by December 31, 2018.	City of Moraine City Engineer
Evaluate feasibility to sewer HSTS properties.	Complete by December 31, 2019.	City of Moraine Engineering Department
Rationale for BMP: Adding HSTS information to the storm water system map will provide the City with a detailed database of the location of HSTSs, which will be useful for future planning purposes.		

BMP: Dry-Weather Screening of Storm Water Outfalls		
Description of BMP: The City of Moraine will conduct dry-weather screening of all known storm water outfalls within the MS4 service area at least once during the permit term. The City utilizes standard operating procedures for dry-weather screening of outfalls.		
Measurable Goal	Implementation Schedule and Frequency	Responsible Party
Track the location and number of outfalls screened for illicit discharges during dry weather.	All outfalls will be identified by December 31, 2018. 50% of the outfalls will be screened in 2018, and 50% in 2019.	City of Moraine City Engineer
Rationale for BMP: Screening storm water outfalls will assist the City in identifying illicit discharges throughout the storm sewer system.		

BMP: Eliminating Illicit Discharges		
Description of BMP: The City of Moraine will implement its illicit discharge detection and elimination (IDDE) program to systematically eliminate illicit discharges to the MS4.		
Measurable Goal	Implementation Schedule and Frequency	Responsible Party
Develop IDDE Plan, including process for detecting illicit discharges.	Complete by December 31, 2018.	City of Moraine City Engineer
Document the number of illicit discharges identified and eliminated.	Ongoing	City of Moraine City Engineer
Rationale for BMP: Eliminating illicit discharges results in a successful program.		

MCM 3 Decision Process - Rationale Statement

The rationale statement shall include the following information, at a minimum:

- i. How you will develop a comprehensive storm sewer map showing the location of all outfalls and the names and location of all receiving waters. Describe the sources of information you used for the maps, and how you plan to verify the outfall locations with field surveys. If already completed, describe how you developed this map. Also, describe how your map will be regularly updated.***

The City will hire a consultant to build the comprehensive storm water system map in GIS. The City will then maintain the MS4 system GIS information as needed.

- ii. The mechanism (ordinance or other regulatory mechanism) you will use to effectively prohibit illicit discharges into the MS4 and why you chose that mechanism. If you need to develop this mechanism, describe your plan and a schedule to do so. If your ordinance or regulatory mechanism is already developed, include a copy of the relevant sections with your program.***

The City has in place Moraine City Ordinance (MCO) Chapter 945- Storm Sewer System Illicit Discharge Detection and Elimination. The purpose and intent of the ordinance is to regulate the contribution of pollutants to the MS4 by storm water discharges; to prohibit

illicit connections and discharges to the MS4; and to establish legal authority to carry out inspection, surveillance, monitoring procedures, and enforcement necessary to ensure compliance. MCO Chapter 945 is included as Appendix A.

iii. Your plan to ensure through appropriate enforcement procedures and actions that your illicit discharge ordinance (or other regulatory mechanism) is implemented.

As mentioned above, the City has in place Moraine City Ordinance (MCO) Chapter 945-Storm Sewer System Illicit Discharge Detection and Elimination. Section 945.14 addresses enforcement.

iv. Your plan to detect and address illicit discharges to your system, including discharges from illegal dumping and spills. Your plan shall include dry weather field screening for non-storm water flows and Ohio EPA recommends field tests of selected chemical parameters as indicators of discharge sources. You shall describe the mechanisms and strategies you will implement to ensure outfalls which have previously been dry-weather screened will not have future illicit connections. Your plan shall also address on-site sewage disposal systems (including failing on-lot HSTs and off-lot discharging HSTs) that flow into your storm drainage system. Your description shall address the following, at a minimum:

1. Procedures for locating priority areas which include areas with higher likelihood of illicit connections (e.g., areas with older sanitary sewer lines, for example) or ambient sampling to locate impacted reaches;

As described above, the City will utilize this remaining permit term to build their storm water system mapping and identify outfall and HSTS locations. Priority areas will be identified by analyzing the collected and mapped data. Resident complaints and inquiries will also be utilized.

2. Procedures for tracing the source of an illicit discharge, including the specific techniques you will use to detect the location of the source;

City crews have the ability to provide general field investigations, CCTV inspection, and dye testing, to help locate and isolate the source of an illicit discharge.

3. Procedures for removing the source of the illicit discharge.

Illicit discharges will be resolved on a case-by-case basis given the unique nature of each situation. The City Engineer will lead any cleanup and elimination effort. Outside contractors are sometimes utilized for cleanup and elimination work as needed.

4. Procedures for program evaluation and assessment.

As described above, the City will utilize this remaining permit term to build their storm water system mapping database. The City will then maintain and update the database moving forward as needed. This GIS database will be the tool used for program evaluations and assessments.

- v. ***How you plan to inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste. Include in your description how this plan will coordinate with your public education minimum measure and your pollution prevention/good housekeeping minimum measure programs.***

Illicit discharges will be a topic that is covered under the multi-media communications BMPs described under MCM. The information will be provided to residents in the City news magazine and on the webpage.

- vi. ***Who is responsible for overall management and implementation of your storm water illicit discharge detection and elimination program and, if different, who is responsible for each of the BMPs identified for this program.***

The City Engineer is responsible for MCM 3.

- vii. ***How you will evaluate the success of this minimum measure, including how you selected the measurable goals for each of the BMPs.***

The measurable goals were selected to be specific, measurable, achievable and realistic. The City of Moraine intends to evaluate the effectiveness of the illicit discharge detection and elimination BMPs by tracking and documenting information as described in the tables above.

Minimum Control Measure 4: Construction Site Storm Water Runoff Control

Minimum Control Measure 4: Construction Site Storm Water Runoff Control

The City of Moraine’s MS4 permit requires the construction site storm water runoff control efforts to include the following:

Shall develop, implement, and enforce a program to reduce pollutants in any storm water runoff to your small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre including projects less than one acre that are part of a larger common plan of development. At a minimum this includes:

- i. Ordinance or other requirements for construction site operators to require erosion and sediment controls as well as sanctions to ensure compliance.***
- ii. Requirements for construction site operators to implement appropriate erosion and sediment control BMPs.***
- iii. Requirements for construction site operators to control waste at the construction site that may cause adverse impacts to water quality.***
- iv. Procedures for storm water pollution prevention plan review which incorporates consideration of potential water quality impacts.***
- v. Procedures for the receipt and consideration of information submitted by the public.***
- vi. Procedures for site inspection and enforcement of control measures.***

Performance Standards: Program shall include a pre-construction SWPPP for all land disturbances greater than or equal to one acre. Applicable sites shall be initially inspected. Frequency of follow up shall be monthly unless otherwise documented.

The following table outlines the best management practices (BMPs) selected by the City of Moraine to accomplish MCM 4 for the remainder of the permit term. The City has the legal authority to implement identified BMPs.

BMP: Tools and Program Update		
Description of BMP: The City will maintain ordinances regarding sediment and erosion control, appropriate BMPs, and site plan review procedures.		
Measurable Goal	Implementation Schedule and Frequency	Responsible Party
Ordinance update (MCO Chapter 1323) to comply with MS4 General Permit erosion and sediment control requirements.	Complete by December 31, 2018.	City of Moraine City Engineer
Develop site plan review checklist, including MS4 requirements for post-construction BMPs.	Complete by December 31, 2018.	City of Moraine City Engineer
Perform construction site plan reviews for each new development and document number completed.	Ongoing	City of Moraine City Engineer
Rationale for BMP: Updating the ordinance and producing a checklist for construction site plan review will aid the City in the successful implementation of this MCM.		

BMP: Construction Site Runoff Control Implementation		
Description of BMP: The City will ensure that on-site inspections are implemented to address and correct issues and that contractors are asked to address violations and correct as needed.		
Measurable Goal	Implementation Schedule and Frequency	Responsible Party
Document complaint process currently utilized.	Complete by December 31, 2018.	City of Moraine City Engineer
Develop site inspection checklist, including MS4 requirements.	Complete by December 31, 2018.	City of Moraine City Engineer
Perform construction site inspections for each new development site and document number completed.	At least monthly.	City of Moraine City Engineer
Rationale for BMP: Implementation of construction site runoff inspection activities are critical for a successful construction site runoff control program.		

MCM 4 Decision Process - Rationale Statement

The rationale statement shall include the following information, at a minimum:

- i. The mechanism (ordinance or other regulatory mechanism) you will use to require erosion and sediment controls at construction sites and why you chose that mechanism. If you need to develop this mechanism, describe your plan and a schedule to do so. If your ordinance or regulatory mechanism is already developed, include a copy of the relevant sections with your SWMP description.***

The City has in place Moraine City Ordinance (MCO) Chapter 1323- Erosion and Sedimentation Control. The purpose and intent of the ordinance is for any owner of property within the City to provide adequate controls of erosion and sedimentation of both a temporary and permanent nature during and after construction and development activities. MCO Chapter 1323 is included as Appendix B.

- ii. Your plan to ensure compliance with your erosion and sediment control regulatory mechanism, including the sanctions and enforcement mechanisms you will use to ensure compliance. Describe your procedures for when you will use certain sanctions. Possible sanctions include non-monetary penalties (such as a stop work orders), fines, bonding requirements, and/or permit denials for non-compliance.***

As mentioned above, the City has in place Moraine City Ordinance (MCO) Chapter 1323- Erosion and Sedimentation Control. Section 1323.99 addresses penalties.

- iii. Your requirements for construction site operators to implement appropriate erosion and sediment control BMPs and control waste at construction sites that may cause adverse impacts to water quality. Such waste includes, but is not limited to, discarded building materials, concrete truck washouts, chemicals, litter, and sanitary waste;***

This is covered in the Codified Ordinances of Moraine, Chapter 1323 EROSION AND SEDIMENTATION CONTROL and Chapter 945 STORM SEWER ILLICIT DISCHARGE DETECTION AND ELIMINATION.

- iv. Your procedures for pre-construction storm water pollution prevention plan review which incorporate consideration of potential water quality impacts. Describe the estimated number of sites that will have pre-construction site plans reviewed;***

All construction sites go through the City's site plan review process. As stated above, the City intends to develop a site plan review checklist to standardize the reviews.

- v. Your procedures for receipt and consideration of information submitted by the public. Consider coordinating this requirement with your public education program;***

The public may call and report an issue at any time, or use the City's website to submit a complaint. When complaints are received, the City Engineer conducts an inspection and addresses the issue as needed. As stated above, the City intends to document the current complaint process utilized.

- vii. Your procedures for site inspection and enforcement of control measures, including how you will prioritize sites for inspection;***

Construction site inspections are performed at all sites either by City of Moraine staff or by a consulting firm acting on the City's behalf. Added inspections occur if public complaints are received regarding muddied streets and debris escaping the construction area. As stated above, the City intends to develop a construction site inspection review checklist to standardize the reviews.

- viii. Who is responsible for overall management and implementation of your construction site storm water control program and, if different, who is responsible for each of the BMPs identified for this program;***

The City Engineer is responsible for MCM 4.

- ix. Describe how you will evaluate the success of this minimum measure, including how you selected the measurable goals for each of the BMPs.***

The measurable goals were selected to be specific, measurable, achievable and realistic. The City of Moraine intends to evaluate the effectiveness of the construction site storm water runoff control BMPs by tracking and documenting information as described in the tables above.

Minimum Control Measure 5: Post-Construction Storm Water Management in New and Redevelopment

Minimum Control Measure 5: Post-Construction Storm Water Management in New and Redevelopment

The City of Moraine’s MS4 permit requires the Post Construction Storm Water Management in New and Redevelopment efforts to include the following:

Shall develop, implement, and enforce a program to address storm water runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development.

Shall develop and implement strategies which include a combination of structural and/or non-structural BMPs.

Shall use an ordinance, or other regulatory mechanism, to address post-construction runoff from new and redevelopment.

Shall ensure adequate long-term operation and maintenance of BMPs.

Performance Standards: Post construction SWMP shall include a pre-construction SWPPP review of all projects which disturb greater than 1 acre. Sites shall be inspected to ensure controls are installed per requirements. Program shall ensure long term O&M plans are developed and agreements are in place.

The following table outlines the best management practices (BMPs) selected by the City of Moraine to accomplish MCM 5 for the remainder of the permit term. The City has the legal authority to implement identified BMPs.

BMP: Tools and Program Update		
Description of BMP: The City will review the requirements and procedures necessary to ensure plans provide for effective BMPs.		
Measurable Goal	Implementation Schedule and Frequency	Responsible Party
Develop post-construction ordinance, including BMP requirements, enforcement procedures, and long-term O&M plans / agreements.	Complete by December 31, 2018.	City of Moraine City Engineer
Develop post-construction plan review checklist items for City staff. Checklist items to be incorporated into Site Plan Review Checklist (developed as part of MCM 4).	Complete by December 31, 2018.	City of Moraine City Engineer
Rationale for BMP: Developing an ordinance and developing post-construction plan review checklist items will aid the City in the successful implementation of this MCM.		

BMP: Post-Construction Runoff Control Implementation		
Description of BMP: The City will focus on implementation and ongoing documentation of the post-construction MCM during plan review and post-inspections.		
Measurable Goal	Implementation Schedule and Frequency	Responsible Party
Document the number post-construction BMPs installed.	Complete by December 31, 2018.	City of Moraine City Engineer
Develop post-construction BMP inspections checklist, including MS4 requirements.	Complete by December 31, 2018.	City of Moraine City Engineer
Perform inspections of post-construction BMPs.	Annually	City of Moraine City Engineer
Rationale for BMP: Ongoing management and implementation of the post-construction program is the key to the program being successful and impactful.		

MCM 5 Decision Process - Rationale Statement

The rationale statement shall include the following information, at a minimum:

- i. Your program to address storm water runoff from new development and redevelopment projects. Include in this description any specific priority areas for this program.***

The City will develop a post-construction ordinance for all new and redevelopment projects that disturb greater than or equal to one acre. The ordinance will implement post-construction storm water management controls to address both water quantity and water quality. The new ordinance will include BMP requirements, enforcement procedures, and long-term O&M plans / agreements.

- ii. How your program will be specifically tailored for your local community, minimize water quality impacts, and attempt to maintain pre-development runoff conditions.***

This program will follow a new City ordinance which meets the MS4 permit requirements and mimics the guidelines prepared by the Ohio Department of Natural Resources (ODNR).

- iii. Any non-structural BMPs in your program, including, as appropriate: green infrastructure storm water management techniques, 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 (including a dedicated funding source for open space acquisition), provide buffers along sensitive water bodies, minimize impervious surfaces, and minimize disturbance of soils and vegetation; policies or ordinances that encourage infill development in higher density urban areas, and areas with existing storm sewer infrastructure; education programs for developers and the public about project designs that minimize water quality impacts; and 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 often thought of as good housekeeping, preventive maintenance and spill prevention.***

The new City ordinance will allow for non-structural BMPs that meet the MS4 permit requirements. Non- structural BMPs will be evaluated and approved by City staff on a case-by-case basis.

- iv. Any structural BMPs in your program, including, as appropriate: green infrastructure storm water management techniques, storage practices such as wet ponds and extended-detention outlet structures; filtration practices such as grassed swales, bioretention cells, sand filters and filter strips; and infiltration practices such as infiltration basins and infiltration trenches.***

The new City ordinance will allow for structural BMPs that meet the MS4 permit requirements. Structural BMPs will mimic those outlined in the Ohio Department of Natural Resources (ODNR) Rainwater and Land Development Manual. Structural BMPs will be evaluated and approved by City staff on a case-by-case basis.

- v. The mechanisms (ordinance or other regulatory mechanisms) you will use to address post-construction runoff from new developments and redevelopments and why you chose the mechanism(s). If you need to develop a mechanism, describe your plan and a schedule to do so. If your ordinance or regulatory mechanism is already developed, include a copy of the relevant sections with your program.***

The City will adopt a new post-construction ordinance which meets the MS4 permit requirements and mimics the guidelines prepared by the Ohio Department of Natural Resources (ODNR). The new ordinance will be adopted by December 31, 2018.

- vi. How you will ensure the long-term operation and maintenance (O&M) of your selected BMPs. Options to help ensure that future O&M responsibilities are clearly identified include an agreement between you and another party such as the post-development landowners or regional authorities.***

Long-term O&M responsibilities and requirements will be detailed in the City's new post-construction ordinance.

- vii. Who is responsible for overall management and implementation of your post-construction SWMP and, if different, who is responsible for each of the BMPs identified for this program.***

The City Engineer is responsible for MCM 5.

- viii. How you will evaluate the success of this minimum measure, including how you selected the measurable goals for each of the BMPs.***

The measurable goals were selected to be specific, measurable, achievable and realistic. The City of Moraine intends to evaluate the effectiveness of the post-construction storm water management BMPs by tracking and documenting information as described in the tables above.

Minimum Control Measure 6: Pollution Prevention/Good Housekeeping For Municipal Operations

Minimum Control Measure 6: Pollution Prevention/Good Housekeeping for Municipal Operations

The City of Moraine’s MS4 permit requires the Pollution Prevention/Good Housekeeping For Municipal Operations efforts to include the following:

Shall develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations.

Using training materials available from Ohio EPA or other organizations, program shall include employee training to prevent and reduce storm water pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and storm water system maintenance,

Shall include a list of industrial facilities owned and operated by the City. Stormwater Pollution Prevention Plans (SWPPP or SWP3) shall be developed and implemented as required.

Performance Standards: *Include an annual employee training. Operation and maintenance shall include appropriate documented procedures, controls, maintenance schedules, and record keeping.*

The following table outlines the best management practices (BMPs) selected by the City of Moraine to accomplish MCM 6 for the remainder of the permit term. The City has the legal authority to implement identified BMPs.

BMP: Employee Training		
Description of BMP: The City will utilize available storm water training materials to train City staff on storm water related issues and a review of SWPPP.		
Measurable Goal	Implementation Schedule and Frequency	Responsible Party
Review MS4 permit and SWPPP with City staff on a rotating basis each year.	Three training sessions will be held during the remainder of the permit term.	City of Moraine Streets Superintendent
Rationale for BMP: Training City staff is a very important aspect of reducing pollution from municipal facilities. Using materials and training already available results in efficiencies and consistent messaging.		

BMP: Operation and Maintenance Program		
Description of BMP: The City will continue implementation of City's Operation and Maintenance Program for Municipal facilities.		
Measurable Goal	Implementation Schedule and Frequency	Responsible Party
Inspect 100 to 150 catch basins / dry wells and clean as needed.	Annually	City of Moraine Streets Superintendent
Continue current leaf collection and brush pickup practices. Document amount of waste properly disposed.	Annually	City of Moraine Streets Superintendent
Continue current practices for road salt, calcium and brine applied to roads. Document amount of material used.	Seasonal	City of Moraine Streets Superintendent
Continue current practices for usage of pesticides and herbicides. Document amount of material used.	Annually	City of Moraine Streets Superintendent
Continue current practices for usage of fertilizers. Document amount of material used.	Annually	City of Moraine Streets Superintendent
Continue current street sweeping practices. Document the number of hours spent street sweeping and amount of waste properly disposed.	Annually	City of Moraine Streets Superintendent
Rationale for BMP: Implementing the SWPPP and practicing good housekeeping is critical for reducing pollution from municipal facilities.		

MCM 6 Decision Process - Rationale Statement

The rationale statement shall include the following information, at a minimum:

- i. Your operation and maintenance program to prevent or reduce pollutant runoff from your municipal operations. Your program shall specifically list the municipal operations that are impacted by this operation and maintenance program.***

See tables above for specific activities. Note that the City's Streets Department facility located at 4720 Vance Road is a non-exposure facility. A non-exposure form will be submitted to OEPA by December 31, 2018.

- ii. Any government employee training program you will use to prevent and reduce storm water pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and storm water system maintenance. Describe any existing, available materials you plan to use. Describe how this training program will be coordinated with the outreach programs developed for the public information minimum measure and the illicit discharge minimum measure.***

The City will conduct training with staff on a rotating basis each year. Three more training sessions will be held this permit term. This program will be coordinated with Illicit Discharge and Public Outreach programs to the extent that the information provided in all programs will be consistent and will be cross-referenced as appropriate.

iii. Your program description shall specifically address the following areas:

1. Maintenance activities, maintenance schedules, and long-term inspection procedures for controls to reduce floatables and other pollutants to your MS4.

The City routinely conducts street sweeping, catch basin / dry wells cleaning, and leaf collection and brush pickup. The City will continue with current practices that have been effective. The collected materials are disposed of as appropriate at the Montgomery County Transfer Station or taken to a local landscape company to be processed for mulch.

2. Controls for reducing or eliminating the discharge of pollutants from streets, roads, highways, municipal parking lots, maintenance and storage yards, waste transfer stations, fleet or maintenance shops with outdoor storage areas, and salt/sand storage locations and snow disposal areas you operate. A description of the materials used for roadway and municipal parking lot winterization (use of salt, sand, bottom ash, etc. or combination thereof), associated application rates, and the rationale for the selected application rates shall be included. Also identify controls or practices to be used for reducing or eliminating discharges of pollutants resulting from roadway and municipal parking lot winterization activities.

The City will continue with current practices of applying road salt, calcium and brine to roads as needed to provide safe travel for residents. The amount of material used will be documented.

3. Procedures for the proper disposal of waste removed from your MS4 and your municipal operations, including dredge spoil, accumulated sediments, floatables, and other debris.

The collected materials from O&M BMPs are disposed of as appropriate at the Montgomery County Transfer Station or taken to a local landscape company to be processed for mulch.

4. Procedures to ensure that new flood management projects are assessed for impacts on water quality and existing projects are assessed for incorporation of additional water quality protection devices or practices.

All new projects go through the City's plan review process which includes MS4 requirements for water quality controls.

iv. Who is responsible for overall management and implementation of your pollution prevention/good housekeeping program and, if different, who is responsible for each of the BMPs identified for this program.

The Streets Superintendent is responsible for MCM 6.

v. ***How you will evaluate the success of this minimum measure, including how you selected the measurable goals for each of the BMPs.***

The measurable goals were selected to be specific, measurable, achievable and realistic. The City of Moraine intends to evaluate the effectiveness of the pollution prevention / good housekeeping for municipal operations BMPs by tracking and documenting information as described in the tables above.

Appendix A:
Moraine Ordinance Chapter 945-
Storm Sewer System Illicit Discharge Detection and Elimination

CHAPTER 945

Storm Sewer System Illicit Discharge Detection and Elimination

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- [945.02](#) Definitions.
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945.01 PURPOSE AND INTENT.

The purpose of this ordinance is to provide for the health, safety, and general welfare of the citizens of Moraine through the regulation of non-storm water discharges to the storm drainage system to the maximum extent practicable as required by federal and state law. This ordinance establishes methods for controlling the introduction of pollutants into the municipal separate storm sewer system (MS4) in order to comply with requirements of the National Pollutant Discharge Elimination System (NPDES) permit process. The objectives of this ordinance are:

- (a) To regulate the contribution of pollutants to the municipal separate storm sewer system (MS4) by storm water discharges by any user.
- (b) To prohibit illicit Connections and Discharges to the municipal separate storm sewer system.
- (c) To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this chapter.

(Ord. 1696-08. Passed 1-24-08.)

945.02 DEFINITIONS.

For purposes of this chapter, the following shall mean:

- (a) **Authorized Enforcement Agency:** Employees or designees of the director of the municipal agency designated to enforce this chapter.
- (b) **Best Management Practices (BMPs):** Schedules of activities, prohibitions of practices, general good house keeping practices, pollution prevention and educational practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants directly or indirectly to storm water, receiving waters, or storm water conveyance systems. BMPs also include treatment practices, operating procedures, and practices to control site runoff, spillage or leaks, sludge or water disposal, or drainage from raw materials storage.
- (c) **Clean Water Act:** The federal Water Pollution Control Act (33 U.S.C. § 1251 *et seq.*), and any subsequent amendments thereto.
- (d) **Construction Activity:** Activities subject to NPDES Construction Permits. Currently these include construction projects resulting in land disturbance of 5 acres or more. Beginning in March 2003, NPDES Storm Water Phase II permits will be required for construction projects resulting in land disturbance of 1 acre or more. Such activities include but are not limited to clearing and grubbing, grading, excavating, and demolition.
- (e) **Hazardous Materials:** Any material, including any substance, waste, or combination thereof, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause, or significantly contribute to, a substantial present or potential hazard to human health, safety, property, or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.
- (f) **Illegal Discharge:** Any direct or indirect non-storm water discharge to the storm drain system, except as exempted in Section [945.07](#).
- (g) **Illicit Connections:** An illicit connection is defined as either of the following: Any drain or conveyance, whether on the surface or subsurface, which allows an illegal discharge to enter the storm drain system including but not limited to any conveyances which allow any non-storm water discharge including sewage, process wastewater, and wash water to enter the storm drain system and any connections to the storm drain system from indoor drains and sinks, regardless of whether said drain or connection had been previously allowed, permitted or approved by an authorized enforcement agency or, any drain or conveyance connected from a commercial or industrial land use to the storm drain system which has not been documented in plans, maps, or equivalent records and approved by an authorized enforcement agency.
- (h) **Industrial Activity:** Activities subject to NPDES Industrial Permits as defined in 40 CFR, Section 122.26 (b)(14).
- (i) **National Pollutant Discharge Elimination System (NPDES) Storm Water Discharge Permit:** Means a permit issued by EPA (or by a State under authority delegated pursuant to 33 USC § 1342(b)) that authorizes the discharge of pollutants to waters of the United States, whether the permit is applicable on an individual, group, or general area-wide basis.
- (j) **Non-Storm Water Discharge:** Any discharge to the storm drain system that is not composed entirely of storm water.
- (k) **Person:** Means an individual, association, organization, partnership, firm, corporation or other entity recognized by law and acting as either the owner or as the owner's agent.
- (l) **Pollutant:** Anything which causes or contributes to pollution. Pollutants may include, but are not limited to: paints, varnishes, and solvents; oil and other automotive fluids; non-hazardous liquid and solid wastes and yard wastes; refuse, rubbish, garbage, litter, or other discarded or abandoned objects, ordinances, and accumulations, so that same may cause or contribute to pollution; floatables; pesticides, herbicides, and fertilizers; hazardous substances and wastes; sewage, fecal coli form and pathogens; dissolved and particulate metals; animal wastes; wastes and residues that result from constructing a building or structure; and noxious or offensive matter of any kind.
- (m) **Premises:** Any building, lot, parcel of land, or portion of land whether improved or unimproved including adjacent sidewalks and parking strips.
- (n) **Storm Drainage System:** Publicly-owned facilities by which storm water is collected and/or conveyed including but not limited to any roads with drainage systems, municipal streets, gutters, curbs, inlets, piped storm drains, pumping facilities, retention and detention basins, natural and human-made or altered

drainage channels, reservoirs, and other drainage structures.

(o) **Storm Water:** Any surface flow, runoff, and drainage consisting entirely of water from any form of natural precipitation, and resulting from such precipitation.

(p) **Storm Water Pollution Prevention Plan:** A document which describes the Best Management Practices and activities to be implemented by a person or business to identify sources of pollution or contamination at a site and the actions to eliminate or reduce pollutant discharges to Storm water, Conveyance Systems, and/or Receiving Waters to the Maximum Extent Practicable.

(q) **Wastewater:** Any water or other liquid, other than uncontaminated storm water, discharged from a facility. (Ord. 1696-08. Passed 1-24-08.)

945.03 APPLICABILITY.

This chapter shall apply to all water entering the storm drain system generated on any developed and undeveloped lands unless explicitly exempted by an authorized enforcement agency.
(Ord. 1696-08. Passed 1-24-08.)

945.04 RESPONSIBILITY FOR ADMINISTRATION.

The City Manager and/or his/her designee, shall administer, implement, and enforce the provisions of this chapter. Any powers granted or duties imposed upon the authorized enforcement agency may be delegated in writing by the Director of the authorized enforcement agency to persons or entities acting in the beneficial interest of or in the employ of the agency.

(Ord. 1696-08. Passed 1-24-08.)

945.05 SEVERABILITY.

The provisions of this chapter are hereby declared to be severable. If any provision, clause, sentence, or paragraph of this chapter or the application thereof to any person, establishment, or circumstances shall be held invalid, such invalidity shall not affect the other provisions or application of this chapter.

(Ord. 1696-08. Passed 1-24-08.)

945.06 ULTIMATE RESPONSIBILITY.

The standards set forth herein and promulgated pursuant to this chapter are minimum standards; therefore this chapter does not intend nor imply that compliance by any person will ensure that there will be no contamination, pollution, nor unauthorized discharge of pollutants.

(Ord. 1696-08. Passed 1-24-08.)

945.07 DISCHARGE PROHIBITIONS.

(a) Prohibition of Illegal Discharges. No person shall discharge or cause to be discharged into the municipal storm drain system or watercourses any materials, including but not limited to pollutants or waters containing any pollutants that cause or contribute to a violation of applicable water quality standards, other than storm water.

The commencement, conduct or continuance of any illegal discharge to the storm drain system is prohibited except as described as follows:

(1) The following discharges are exempt from discharge prohibitions established by this ordinance: water line flushing or other potable water sources, landscape irrigation or lawn watering, diverted stream flows, rising ground water, ground water infiltration to storm drains, uncontaminated pumped ground water, foundation or footing drains (not including active groundwater dewatering systems), crawl space pumps, air conditioning condensation, springs, non-commercial washing of vehicles, natural riparian habitat or wet-land flows, swimming pools (if dechlorinated-typically less than one PPM chlorine), fire fighting activities, and any other water source not containing Pollutants.

(2) Discharges specified in writing by the authorized enforcement agency as being necessary to protect public health and safety.

(3) Dye testing is an allowable discharge, but requires a verbal notification to the authorized enforcement agency prior to the time of the test.

(4) The prohibition shall not apply to any non-storm water discharge permitted under an NPDES permit, waiver, or waste discharge order issued to the discharger and administered under the authority of the Federal Environmental Protection Agency, provided that the discharger is in full compliance with all requirements of the permit, waiver, or order and other applicable laws and regulations, and provided that written approval has been granted for any discharge to the storm drain system.

(b) Prohibition of Illicit Connections.

(1) The construction, use, maintenance or continued existence of illicit connections to the storm drain system is prohibited.

(2) This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.

(3) A person is considered to be in violation of this chapter if the person connects a line conveying sewage to the MS4, or allows such a connection to continue. (Ord. 1696-08. Passed 1-24-08.)

945.08 SUSPENSION OF MS4 ACCESS.

(a) Suspension Due to Illicit Discharge in Emergency Situations. The City Manager and/or his/her designee, may, without prior notice, suspend MS4 discharge access to a person when such suspension is necessary to stop an actual or threatened discharge which presents or may present imminent and substantial danger to the environment, or to the health or welfare of persons, or to the MS4 or Waters of the United States. If the violator fails to comply with a suspension order issued in an emergency, the authorized enforcement agency may take such steps as deemed necessary to prevent or minimize damage to the MS4 or Waters of the United States, or to minimize danger to persons.

(b) Suspension Due to the Detection of Illicit Discharge. Any person discharging to the MS4 in violation of this ordinance may have their MS4 access terminated if such termination would abate or reduce an illicit discharge. The authorized enforcement agency will notify a violator of the proposed termination of its MS4 access. The violator may petition the authorized enforcement agency for a reconsideration and hearing. (Ord. 1696-08. Passed 1-24-08.)

945.09 INDUSTRIAL OR CONSTRUCTION ACTIVITY DISCHARGES.

Any person subject to an industrial or construction activity NPDES storm water discharge permit shall comply with all provisions of such permit. Proof of compliance with said permit may be required in a form acceptable to the City Manager and/or his/her designee prior to the allowing of discharges to the MS4. (Ord. 1696-08. Passed 1-24-08.)

945.10 MONITORING OF DISCHARGES.

(a) Applicability. This section applies to all facilities that have storm water discharges associated with industrial activity, including construction activity.

(b) Access to Facilities.

(1) The City Manager and/or his/her designee shall be permitted to enter and inspect facilities subject to regulation under this ordinance as often as may be necessary to determine compliance with this ordinance. If a discharger has security measures in force which require proper identification and clearance before entry into its premises, the discharger shall make the necessary arrangements to allow access to representatives of the authorized enforcement agency.

(2) Facility operators shall allow the City Manager and/or his/her designee ready access to all parts of the premises for the purposes of inspection, sampling, examination and copying of records that must be kept under the conditions of an NPDES permit to discharge storm water, and the performance of any additional duties as defined by state and federal law.

(3) The City Manager and/or his/her designee shall have the right to set up on any permitted facility such devices as are necessary in the opinion of the authorized enforcement agency to conduct monitoring and/or sampling of the facility's storm water discharge.

(4) The City Manager and/or his/her designee have the right to require the discharger to install monitoring equipment as necessary. The facility's sampling and monitoring equipment shall be maintained at all times in a safe and proper operating condition by the discharger at its own expense. All devices used to measure storm water flow and quality shall be calibrated to ensure their accuracy.

(5) Any temporary or permanent obstruction to safe and easy access to the facility to be inspected and/or sampled shall be promptly removed by the operator at the written or oral request of the City Manager and/or his/her designee and shall not be replaced. The costs of clearing such access shall be borne by the operator.

(6) Unreasonable delays in allowing the City Manager and/or his/her designee access to a permitted facility are a violation of a storm water discharge permit and of this ordinance. A person who is the operator of a facility with a NPDES permit to discharge storm water associated with industrial activity commits an offense if the person denies the authorized enforcement agency reasonable access to the permitted facility for the purpose of conducting any activity authorized or required by this chapter.

(7) If the City Manager and/or his/her designee has been refused access to any part of the premises from which storm water is discharged and he/she is able to demonstrate probable cause to believe that there may be a violation of this chapter, or that there is a need to inspect and/or sample as part of a routine inspection and sampling program designed to verify compliance with this ordinance or any order issued hereunder, or to protect the overall public health, safety, and welfare of the community, then the authorized enforcement agency may seek issuance of a search warrant from any court of competent jurisdiction. (See Exhibits A-C appended hereto).

(Ord. 1696-08. Passed 1-24-08.)

**945.11 REQUIREMENTS TO PREVENT, CONTROL, AND REDUCE
STORMWATER POLLUTANTS BY THE USE OF BEST MANAGEMENT
PRACTICES.**

The City Manager and/or his/her designee will adopt requirements identifying Best Management Practices for any activity, operation, or facility which may cause or contribute to pollution or contamination of storm water, the storm drain system, or waters of the U.S. The owner or operator of a commercial or industrial establishment shall provide, at their own expense, reasonable protection from accidental discharge of prohibited materials or other wastes into the municipal storm drain system or watercourses through the use of these structural and non- structural BMPs. Further, any person responsible for a property or premise, which is, or may be, the source of an illicit discharge, may be required to implement, at said person's expense, additional structural and non-structural BMPs to prevent the further discharge of pollutants to the municipal separate storm sewer system. Compliance with all terms and conditions of a valid NPDES permit authorizing the discharge of storm water associated with industrial activity, to the extent practicable, shall be deemed compliance with the provisions of this section. These BMPs shall be part of a storm water pollution prevention plan as necessary for compliance with requirements of the NPDES permit. (Ord. 1696-08. Passed 1-24-08.)

945.12 WATERCOURSE PROTECTION.

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

(Ord. 1696-08. Passed 1-24-08.)

945.13 NOTIFICATION OF SPILLS.

Notwithstanding other requirements of law, as soon as any person responsible for a facility or operation, or responsible for emergency response for a facility or operation has information of any known or suspected release of materials which are resulting or may result in illegal discharges or pollutants discharging into storm water, the storm drain system, or water of the U.S. said person shall take all necessary steps to ensure the discovery, containment, and cleanup of such release. In the event of such a release of hazardous materials said person shall immediately notify emergency response agencies of the occurrence via emergency dispatch services. In the event of a release of non-hazardous materials, said person shall notify the authorized enforcement agency in person or by phone or facsimile no later than the next business day. Notifications in person or by phone shall be confirmed by written notice addressed and mailed to the City Manager within three business days of the phone notice. If the discharge of prohibited materials emanates from a commercial or industrial establishment, the owner or operator of such establishment shall also retain an on-site record of the discharge and the actions taken to prevent its recurrence. Such records shall be retained for at least three years.

(Ord. 1696-08. Passed 1-24-08.)

945.14 ENFORCEMENT.

Whenever the City Manager and/or his/her designee finds that a person has violated a prohibition or failed to meet a requirement of this chapter, the authorized enforcement agency may order compliance by written notice of violation to the responsible person. Such notice may require without limitation:

- (1) The performance of monitoring, analysis, and reporting;
- (2) The elimination of illicit connections or discharges;
- (3) That violating discharges, practices or operations shall cease and desist;
- (4) The abatement or remediation of storm water pollution or contamination hazards and the restoration of any affected property;
- (5) Payment of charges for services in the amount of fifty dollars (\$50.00) and payment of remediation costs; and
- (6) The implementation of source control or treatment BMPs.

If abatement of a violation and/or restoration of affected property is required, the notice shall set forth a deadline within which such remediation or restoration must be completed. Said notice shall further advise that, should the violator fail to remediate or restore within the established deadline, the work will be done by a designated governmental agency or a contractor and the expense thereof shall be charged to the violator.
(Ord. 1696-08. Passed 1-24-08.)

945.15 APPEAL OF NOTICE OF VIOLATION.

Any person receiving a Notice of Violation may appeal the determination of the authorized enforcement agency. The notice of appeal must be received by the City Manager within ten (10) days from the date of the Notice of Violation. Hearing on the appeal before the appropriate authority or his/her designee shall take place within fifteen (15) days from the date of receipt of the notice of appeal. The decision of the municipal authority or their designee shall be final.

(Ord. 1696-08. Passed 1-24-08.)

945.16 ENFORCEMENT MEASURES AFTER APPEAL.

If the violation has not been corrected pursuant to the requirements set forth in the Notice of Violation, or, in the event of an appeal, within thirty (30) days of the decision of the municipal authority upholding the decision of the authorized enforcement agency, then representatives of the authorized enforcement agency shall enter upon the subject private property and are authorized to take any and all measures necessary to abate the violation and/or restore the property. It shall be unlawful for any person, owner, agent or person in possession of any premises to refuse to allow the government agency or designated contractor to enter upon the premises for the purposes set forth above. (Ord. 1696-08. Passed 1-24-08.)

945.17 COST OF ABATEMENT OF THE VIOLATION.

Within forty-five (45) days after abatement of the violation, the owner of the property will be notified of the cost of abatement, including administrative costs. The property owner may file a written protest with the City Manager objecting to the amount of the assessment within ten (10) days. If the amount due is not paid within a timely manner as determined by the decision of the municipal authority or by the expiration of the time in which to file an appeal, the charges shall become a special assessment against the property and shall constitute a lien on the property for the amount of the assessment. Any person violating any of the provisions of this section shall become liable to the City by reason of such violation.

(Ord. 1696-08. Passed 1-24-08.)

945.18 INJUNCTIVE RELIEF.

It shall be unlawful for any person to violate any provision or fail to comply with any of the requirements of this chapter . If a person has violated or continues to violate the provisions of this chapter, the authorized enforcement agency may petition for a preliminary or permanent injunction restraining the person from activities which would create further violations or compelling the person to perform abatement or remediation of the violation.

(Ord. 1696-08. Passed 1-24-08.)

945.19 APPEAL OF NOTICE OF VIOLATION.

In lieu of enforcement proceedings, penalties, and remedies authorized by this chapter, the authorized enforcement agency may impose upon a violator alternative compensatory actions, such as storm drain stenciling, attendance at compliance workshops, creek cleanup, etc.
(Ord. 1696-08. Passed 1-24-08.)

945.20 VIOLATIONS DEEMED A PUBLIC NUISANCE

In addition to the enforcement processes and penalties provided, any condition caused or permitted to exist in violation of any of the provisions of this ordinance is a threat to public health, safety, and welfare, and is declared and deemed a nuisance, and may be summarily abated or restored at the violator's expense, and/or a civil action to abate, enjoin, or otherwise compel the cessation of such nuisance may be taken.

(Ord. 1696-08. Passed 1-24-08.)

945.21 CRIMINAL PROSECUTION.

(a) Any person that has violated or continues to violate this ordinance shall be liable to criminal prosecution for a misdemeanor of the fourth degree, to the fullest extent of the law, and shall be subject to a criminal penalty of not more than \$100.00 per violation per day and/or imprisonment for a period of time not to exceed 30 days.

(b) The authorized enforcement agency may recover all attorneys' fees, court costs and other expenses associated with enforcement of this chapter, including sampling and monitoring expenses. (Ord. 1696-08. Passed 1-24-08.)

945.22 REMEDIES NOT EXCLUSIVE.

The remedies listed in this chapter are not exclusive of any other remedies available under any applicable federal, state or local law and it is within the discretion of the authorized enforcement agency to seek cumulative remedies.

(Ord. 1696-08. Passed 1-24-08.)

CODIFIED ORDINANCES OF MORAINÉ

Appendix B:
Moraine City Ordinance Chapter 1323-
Erosion and Sedimentation Control

CHAPTER 1323
Erosion and Sedimentation Control

- [1323.01](#) **Property owner's responsibility; bond.**
- [1323.02](#) **City Engineer plan approval required; plan compliance.**
- [1323.03](#) **Basis for plans.**
- [1323.99](#) **Penalty.**

CROSS REFERENCES

Shore erosion - see Ohio R.C. Ch. 1507

1323.01 PROPERTY OWNER'S RESPONSIBILITY; BOND.

(a) It shall be the responsibility of any owner of property within the Municipality, during and after any development activities to provide adequate controls of erosion and sedimentation of both a temporary and permanent nature, during all phases of any clearing, filling, grading, construction or other development activity which causes a disturbance to the natural terrain or vegetative ground cover.

(b) It shall be the responsibility of any property owner prior to the commencement of any activity set forth above, to submit to the City Engineer plans and specifications for such controls and to secure the approval of such from the City Engineer.

(c) The owner of the property on which the activity is proposed to be performed shall furnish a bond conditioned upon the installation and maintenance of such siltation and erosion control measures, which bond instrument shall incorporate a right-of-entry to the City Manager or his designate for the purpose of installation, reinstallation or maintenance of siltation control measures in the event the property owner fails to install or maintain such measures after notice in writing. (Ord. 595. Passed 1-8-81.)

1323.02 CITY ENGINEER PLAN APPROVAL REQUIRED; PLAN COMPLIANCE.

It shall be unlawful to clear, fill, grade or engage in other activity which shall disturb natural terrain or vegetative ground cover upon any property without having first secured the approval of the City Engineer of plans and specifications for erosion and sedimentation control; and it shall further be unlawful to fail or neglect to conform to such plans and specifications or approved revisions or additions, in conjunction with any such clearing, filling, grading or other activity. (Ord. 595. Passed 1-8-81.)

1323.03 BASIS FOR PLANS.

Detailed plans and specifications for effective erosion and sedimentation control shall be based on the practical combination of the following principles:

- (a) Wherever feasible, natural vegetation should be retained and protected;
- (b) The development plan should be fitted to the topography and soils so as to create the least erosion potential;
- (c) The smallest practical area of land should be exposed at any one time during development;
- (d) When land is exposed during development, the exposure should be kept to the shortest practical period of time;
- (e) Temporary vegetation and/or mulching should be used to protect critical areas exposed during development;
- (f) Planned engineering works should be constructed to slow down the velocity of run off;
- (g) The volume of run off on denuded area should be reduced with planned diversions to protected areas;
- (h) Provisions should be made to effectively accommodate the concentrated and increased run off caused by changed soil and surface conditions during and after development to be equal to or less than the calculated run off prior to development. (Rational method)
- (i) Frequent inspection and continual maintenance of erosion and sedimentation controls should be performed; and
- (j) The permanent final vegetation and structures should be installed as soon as practical in the development.
- (k) All storm run off structures, retention and detention ponds shall be designed to accommodate volumes generated in a ten year storm. (Ord. 595. Passed 1-8-81.)

1323.99 PENALTY.

The owner or other person in possession of land who violates or fails to comply with any of the provisions of this chapter shall be fined not more than one thousand dollars (\$1,000) for each violation thereof. Each day the violation continues shall constitute a separate offense.

(Ord. 595. Passed 1-8-81.)