City of Bellefontaine National Pollution Discharge Elimination Program (NPDES)

Municipal Separate Storm Sewer System (MS4)
Permit # OHQ000004
Storm Water Management Plan (SWMP)



Facility ID# 1GQ00065



Revised: March, 2023

City of Bellefontaine, Ohio Storm Water Management Plan

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Executive Summary

The Clean Water Act (CWA) and its subsequent amendments provide the Environmental Protection Agency the authority to regulate standards for pollutant discharges to "navigable waters of the United States". A National Pollutant Discharge Elimination System (NPDES) permit is required to lawfully discharge a pollutant to a navigable water. Phase 1 of the NPDES permit requirements regulated three types of activities (Industrial, Construction Activities disturbing 5 or more acres, and Municipal Separate Storm Systems (MS4) serving more than 100,000 in population).

Phase 2 of the NPDES permit was signed into law in 1999 and required smaller communities (50,000 to 100,000 in population) to obtain a permit for their storm water discharges as a collective system. Phase 2 also allowed the EPA to regulate communities below 50,000 in population if they could adversely impact the quality of the navigable waters. Phase 2 also reduced the construction activity threshold from 5 acres to 1 acre.

In 2007 the City of Bellefontaine (City) filed a Notice of Intent (NOI) to obtain coverage under the Ohio Environmental Protection Agency (OEPA) NPDES Permit, Authorization for Small Municipal Separate Storm Sewer Systems to Discharge Storm Water under The National Pollution Discharge Elimination System. Applying for coverage under this permit, required the City to comply with the permit conditions to allow it to discharge storm water from designated outfalls to the receiving surface waters of the state.

One such condition is the Development of a Stormwater Management Plan (SWMP). The purpose of the SWMP is to protect and improve water quality in streams, rivers, and lakes and help ensure the health of the general public and the environment. Improving water quality involves reducing pollutants that are collected and transported by storm sewer systems to the receiving waters. Since these storm sewers systems are classified as separate sewers, the water they discharge is untreated thus creating a pollutant load to the receiving body of water. Some pollutants typically found in MS4 discharges are oils/greases, pesticides/herbicides, litter, pet waste, soaps/detergents, bacteria from failing septic systems, and sediment from construction activities.

The goal of the SWMP is to reduce pollutants discharged from the MS4 to the "maximum extent practicable (MEP) through Best Management Practices (BMPs) for six Minimum Control Measures (MCMs). These MCM's include:

- MCM 1- Public Education and Outreach
- MCM 2-Public Involvement/Participation
- MCM 3-Illicit Discharge Detection and Elimination
- MCM 4-Construction Site Storm Water Runoff Control

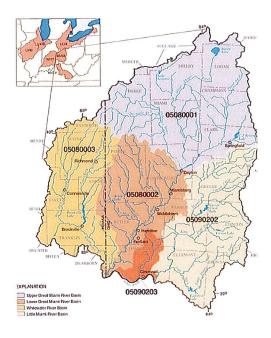


- MCM 5-Post Construction Storm Water Management in New Development and Redevelopment
- MCM 6-Pollution Prevention/Good Housekeeping for Municipal Operations

The City of Bellefontaine's SWMP developed as part of seeking coverage in 2007, has remained unchanged. The most current NPDES permit (OHQ000004) can be found in Appendix A, and includes Total Maximum Daily Loads (TMDL's) for certain pollutants. Therefore, the City's SWMP has been modified to address the applicable TMDL's in addition to updating the plan to successfully achieve compliance of the MCM's.

TMDL Performance Standard: The Clean Water Act required the Ohio Environmental Protection Agency to prepare Total Maximum Daily Loads (TMDL's) for watersheds that do not meet water quality goals. These TMDL's are listed in our MS4 NPDES permit.

Stormwater from the City of Bellefontaine discharges to several small named and unnamed streams that eventually drain to the Great Miami River (upper watershed) which has a TMDL Performance Standard for E. Coli. MCM 1, MCM 2, MCM 3, and MCM 6 of the City of Bellefontaine's SWMP will address this TMDL Performance Standard.



Debrewer, Linda & Rowe Jr, Gary & Reutter, David & Moore, Rhett & Hambrook, Julie & Baker, Nancy. (2000). Environmental Setting and Effects on Water Quality in the Great and Little Miami River Basins, Ohio and Indiana.

E.Coli can be used to indicate the presence of bacteria or viruses resulting from fecal contamination in a body of water. There are a wide variety of sources that can contribute to this type of contamination but some of the most common are failing home sewage treatment systems, livestock waste, illicit discharges, improper application of biosolids, and combined sewer/sanitary sewer overflows.



Some strains of E. coli can be pathogenic (disease-causing), capable of causing serious illness. Although not necessarily agents of disease, fecal indicator bacteria such as E. coli may indicate the potential presence of pathogenic organisms that enter the environment through the same pathways. When E. coli are present in high numbers in a water sample, it invariably means the water has received fecal matter from one or multiple sources. Swimming or other recreation-based contact with water having a high E. coli count may result in ear, nose, and throat infections, as well as stomach upsets, skin rashes, and diarrhea. Young children, the elderly, and those with depressed immune systems are most susceptible to infection. Streams in the upper Great Miami River watershed are designated as primary contact recreation (PCR) and/or secondary contact recreation (SCR) use in OAC Rule 3745-1-24. Water bodies with a designated recreation use of PCR "...are suitable for one or more full-body contact recreation activities such as, but not limited to, wading, swimming, boating, water skiing, canoeing, kayaking, and scuba diving" [OAC 3745-1-07 (B)(4)(b)]. There are three classes of PCR use to reflect differences in the potential frequency and intensity of use. Streams designated PCR class A support, or potentially support, frequent primary contact recreation activities. Streams designated PCR class B support, or potentially support, occasional primary contact recreation activities. Streams designated as PCR class C support, or potentially support, infrequent primary contact recreation activities. Streams designated as SCR use are rarely used for water-based recreation and all but two in the upper Great Miami River watershed study area are designated PCR.1



Certification

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

James F. Bischoff, City Engineer

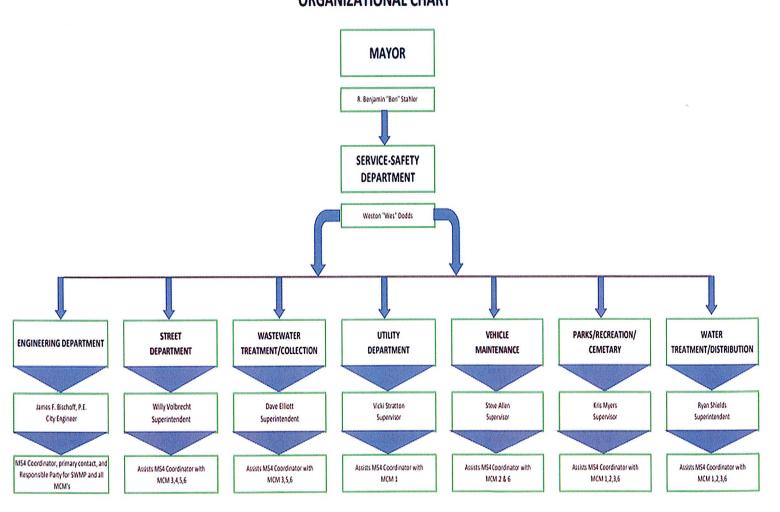
City of Bellefontaine



Organizational Chart

The following organizational chart is a visual aid as to how the City of Bellefontaine is structured and how the organization will collaborate as a team to accomplish the goals of the Storm Water Management Program. Many other organizations are involved in helping to accomplish the goals. These other organizations are not listed since Memorandums of Understanding (MOU's) are not in place since they are not a responsible party. They are a resource to aid in the success of the Program. **The City Engineer is the MS4 coordinator and primary point of contact**. The City Engineer is ultimately responsible for all aspects of the Program.

MUNICIPAL SEPARATE STORMWATER WATER PROGRAM (MS4) CITY OF BELLEFONTAINE, OHIO ORGANIZATIONAL CHART





Minimum Control Measure 1: Public Education and Outreach

The City of Bellefontaine'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.

A. Decision Process:

Rationale for how and why you selected each of the BMP's and measurable goals for the SWMP, including how selected BMP's address applicable TMDL recommendations. The rationale statement shall include the following information, at a minimum:

- 1) How you will inform individuals and households about the steps they can take to reduce storm water pollution?
 - The City of Bellefontaine shall use a media campaign focused on the targeted audience. The campaign will demonstrate the relationship of personal habits to quality and a healthy environment. It will help inform and provide resources to the targeted audience so they can do their part to reduce pollutants and negative impacts to water quality.
- 2) 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).
 - Brochures, website updates, articles, and social media posts are all means to notify individuals about opportunities to become involved.
- 3) 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 homeowners, developers, designers/consultants, business sector, and the general public. An informed and knowledgeable community is crucial to the success of the storm water management program.



4) What are the target pollutant sources your public education program is designed to address?

The City's program is designed to address a variety of storm water themes which cover many potential pollutant sources, especially residential sources of pollution and construction site runoff. Special consideration will be given to the pollutant sources identified in the TMDL documents.

5) 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?

Table 1 details the 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 permit term.

6) 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 Table 1 for the responsible party for each BMP included in the program. The City of Bellefontaine (specifically the City Engineer) is responsible for all BMPs for this program.

7) 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 will evaluate the effectiveness of the public education and outreach BMPs by tracking and documenting information as described in Table 1.

B. Performance Standards:

The SWMP shall include more than 1 delivery mechanism and at least five different storm water themes or messages must be covered over the permit term. At least one theme shall be targeted to the development community and reach at least 50% of the population.



<u>TMDL Performance Standard</u>: The storm water system for the City of Bellefontaine discharges to the Great Miami River watershed (upper) which has an approved TMDL for E. Coli. The Public Education and Outreach Program will, at a minimum, target the TMDL pollutant (E. Coli) at least once over the permit term.

Table 1 outlines the best management practices (BMPs) selected by the City to accomplish MCM 1. The themes the City will focus on include: (1) Storm Water Management, (2) Water Quality, (3) Nutrient Management, (4) Illicit Discharges/Detection/Elimination, (5) Home Sewer Treatment Systems, (6) Storm Water Management Regulation/Permitting, (7) Trash and Litter, and (8) Construction Site/Sediment/Erosion Control.

The City anticipates these outreach strategies will reach well beyond 50 percent of the population within its service area during the permit term.

The City has the legal authority to implement all identified BMPs.

The rationale for the BMP's listed in Table 1 is two-fold.

- According to a survey performed by the Pew Research Center in 2020, approximately 86% of adults in the United States said they use digital media for news and information. This method provided a quick and reliable delivery method that can reach a wide-range of audiences.
- Printed material is a reliable method that can be referred back too. Having a pamphlet or brochure is an easy reference to use and is "in the hand" rather than trying to find it digitally which lends itself to more distractions.



TABLE 1 MCM 1: PUBLIC EDUCATION AND OUTREACH

BMP TYPE (Mechanism):	Targeted Audience:	Responsible Party:
Electronic and Digital Media Platforms	Residents, Developers, Designers, Business owners, Consultants	MS4 Coordinator (City Engineer)

Description:

The City of Bellefontaine will distribute educational material via the City Engineering Website for the general public, developers, contractors, business owners, and property owners. Links to brochures and pamphlets will be made available on our website along with a copy of our SWMP. The Parks and Recreation Department Facebook page will also be utilized to distribute material.

Measureable Goal:

Number of hits to website, providing a heightened awareness to the E. Coli TMDL and general stormwater water quality benefits.

Targeted Theme(s):

- 1. Stormwater Management Plan
- 2. Water Quality
- 3. Nutrient Management
- 4. Illicit Discharges, detection, eliminiation
- 5. Home sewer treatment systems (HSTS)
- 6. Stormwater Management Regulations/permitting
- 7. Trash and Litter
- 8. Construction sites/Sediment/Erosion Control

Proposed Schedule:

Ongoing. SWMP will be available immediately and updates will be made corresponding to schedule of other delivery methods.

BMP TYPE (Mechanism):	Targeted Audience:	Responsible Party:
Printed (Hard Copy) Educational outreach materials	Residents, Developers, Designers, Business owners, Consultants	MS4 Coordinator (City Engineer)

Description:

Printed material (including the SWMP) will be available in the City Engineer's Office for the general public, developers, contractors, business owners, and property owners. Information will distributed during City Council meetings and various community events.

Measureable Goal:

Number of printed pamphlets and brochures distributed during the outreach programs. Number of utilty accounts billed with themed messages included.

Targeted Theme(s):

- 1. Stormwater Management Plan
- 2. Water Quality
- 3. Nutrient Management
- 4. Illicit Discharges, detection, eliminiation
- 5. Home sewer treatment systems (HSTS)
- 6. Stormwater Management Regulations/permitting
- 7. Trash and Litter
- 8. Construction sites/Sediment/Erosion Control

Proposed Schedule:

Ongoing. SWMP will be available immediately in the City's Office. Utility Accounts will receive one message annually. At least one annual community outreach program will be utilized to distribute materials.

BMP TYPE (Mechanism):	Targeted Audience:	Responsible Party:
Community Meeting/Presentation	Residents, Developers, Designers, Business owners, Consultants	MS4 Coordinator (City Engineer)

City Engineer will perform an stormwater education presentation during Bellefontaine City Council or Council Committee meeting.

Measureable Goal:

Number in attendance.

Targeted Theme(s):

- 1. Stormwater Management Plan
- 2. Water Quality
- 3. Nutrient Management
- 4. Illicit Discharges, detection, eliminiation
- Home sewer treatment systems (HSTS)
- 6. Stormwater Management Regulations/permitting
- 7. Trash and Litter
- 8. Construction sites/Sediment/Erosion Control

Proposed Schedule:

Once annually



Minimum Control Measure 2: Public Involvement/Participation

The City of Bellefontaine'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.

A. Decision Process:

Rationale for how and why you selected each of the BMP's and measurable goals for the SWMP, including how selected BMP's address applicable TMDL recommendations. The rationale statement shall include the following information, at a minimum:

1) Have you involved the public in the development and submittal of your NOI and SWMP description?

The City of Bellefontaine has posted its SWMP on the Engineering Page of the City's website for the public to review and comment. A hard copy of the SWMP is also available for review in the City Engineer's Office. Since the development of this revised SWMP, contractors have been encouraged to review and provide feedback on the plan.

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

As outlined in the Table 2, the proposed SWMP includes various opportunities for members of the public to get involved in the implementation of the SWMP through community park clean-ups, composting, litter clean-ups, storm drain marking program, waste oil recycling day, and proper yard maintenance.

3) 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, especially residential home owners. The City will utilize various methods and messages that appeal



to and reach audiences of all economic and ethnic backgrounds. Business owners, service groups, residents, and educational groups will be invited to participate in the programs described in Table 2. All target audiences will be exposed to the information concerning the TMDL pollutants in the watershed.

4) What are the types of public involvement activities included in your program?

The selected activities are specified in the Table 2.

5) 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 Table 2 for the responsible party for each BMP included in the program. The City of Bellefontaine (specifically the City Engineer) is responsible for all BMPs for this program.

6) 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 will evaluate the effectiveness of the public participation and outreach BMPs by tracking and documenting information as described in Table 2. This will be accomplished through sign-up sheets, meeting minutes, and attendance records.

B. Performance Standards:

The SWMP shall include at least 5 public involvement activities that will occur during this permit cycle.

TMDL Performance Standard: The storm water system for the City of Bellefontaine discharges to the Great Miami River watershed (upper) which has an approved TMDL for E. Coli. The Public Involvement and Participation Program will, at a minimum, target the TMDL pollutant (E. Coli) at least once over the permit term.



Table 2 outlines the best management practices (BMP's) selected by the City to accomplish MCM 2. The BMP's listed provide a range of opportunities that will be available for public participation in the SWMP. The BMP's

The City has the legal authority to implement all identified BMPs.

The rationale for the BMP's listed in Table 2 is as follows:

- Leaf pick-up and composting will encourage home owners to properly manage organic material from their property. It provides awareness to potential impacts to water quality not only from organic material but also floatable material.
- Waste oil collection will encourage home owners to properly dispose of used motor oil. As a cost savings, many residents perform this task on their own, and this will encourage the proper disposal of this material. Educational information will be provided to those that drop off waste oil as to the impacts waste oil can have to water quality and why it's considered an illicit discharge.
- Volunteer storm drain marking program will provide an opportunity for the community to take an active role in our SWMP. It will bring visual awareness that there are no preventative measures in place between the storm drain and our waterways.



TABLE 2 MCM 2: PUBLIC INVOLVEMENT/PARTICIPATION

BMP TYPE (Mechanism):	Targeted Audience:	Responsible Party:
Litter Clean-up Days and Streetscape Maintenance	Residents, Business owners, and other community members	MS4 Coordinator (City Engineer) Service and Parks Departments

The City of Bellefontaine will hold a Spring clean up day focused on the downtown district. This will involve residents, civic groups, and other voluteers to remove litter and debris from the downtown area of the City. This area is highest concentration of impervious area, thus creating a higher probability for pollutants to enter the storm water system. Additionally trained staff overseeing volunteers, will perform streetscape maintenance of lawn and planted areas. This will provide guidance on responsible use of fertilizers, mulching, and discharging of vegitative material.

Measureable Goal:

Number of volunteers present and possibly volume or weight of material collected and properly disposed of.

Targeted Theme(s):

1. Trash and Litter

3. Nutrient Management

2. Water Quality

Proposed Schedule:

Annually and possibly bi-annually (seasonal)

BMP TYPE (Mechanism):	Targeted Audience:	Responsible Party:
Waste Oil Collection	Residents	MS4 Coordinator (City Engineer) Service Departments

Description:

The City will hold a one-day waste oil collection recycling day. A notice will be provided through a delivery method in our public outreach BMP. It will be open to residents of the city. Waste oil will be accepted by the City from current residents and disposed of properly.

Measureable Goal:

Number of residents who participate and gallons of waste oil collected.

Targeted Theme(s):

1. Water Quality

2. Illicit Discharges, detection, eliminiation

Proposed Schedule:

This will be a one-day event that will take place at least once during the permit cycle.

BMP TYPE (Mechanism):	Targeted Audience:	Responsible Party:
Storm Drain Marking Program	Residents, Businesses, civil groups, Volunteer organizations	MS4 Coordinator (City Engineer)

Description:

The City of Bellefontaine will initiate a storm drain marking program. Information will be make available through our MCM 1 methods. This program will solicit volunteers to place decals on our storm drains.

Number of volunteers and how my storm drains are marked

Targeted Theme(s):

- Stormwater Management Plan
- 2. Water Quality

- 3. Trash and Litter
- 4. Illicit Discharges, detection, eliminiation

Proposed Schedule:

Ongoing annually

BMP TYPE (Mechanism):	Targeted Audience:	Responsible Party:
Leaf and Yard Waste Pickup and Composting	Residents	MS4 Coordinator (City Engineer) Service Departments

The City of Bellefontaine will provide leaf pick up and maintain a composting facility for use by the general public to reduce pollutants in storm water runoff.

Measureable Goal:

Leaves and composite material collected and processed will be measured by tons or cubic yards.

Targeted Theme(s):

- Stormwater Management Plan
- 2. Water Quality

- 3. Trash and Litter
- 4. Illicit Discharges, detection, eliminiation

Proposed Schedule:

Leaf pickup is seasonal and compost facility is open year around



Minimum Control Measure 3: Illicit Discharge Detection and Elimination

The City of Bellefontaine's MS4 permit requires that Illicit Discharge Detection and Elimination efforts accomplish the following:

Shall develop, implement and enforce a program to detect and eliminate illicit discharges, as defined in this permit, into your small MS4.

Shall develop a comprehensive storm water system map, showing the location of all outfalls and the names and location of all surface waters of the state that receive discharges from those outfalls. The map shall contain the MS4 system, owned and operated by the City (including catch basins, pipes, ditches, detention/retention ponds), post construction water quality BMPs by type and owner. Existing post construction BMPs shall be identified by type within 5 years of the effective date of this permit.

Shall submit to EPA a list of HSTS's including addresses; a map of HSTS's connected or discharging to the MS4. The map shall include the type and size of the conduits/ditches that receive the HSTS discharge and the name of the receiving water of the State.

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. For HSTS's, at a minimum the program shall include:

- i. Working with applicable agencies and/or departments to identify HSTS's that could be legally, feasibly, and economically 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 in our during dry weather screening.
- iv. Evaluating the planned/possible future installation of sewers in areas with high densities of discharging HSTS's.

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

Shall train all employees who have a responsibility to implement the Illicit Discharge Detection and Elimination Plan on an annual basis.



Shall notify the Southwest District office of the OEPA within 24 hours if an illicit sanitary sewer cross connection or a leaking sanitary sewer is identified as contributing sewage to the MS4.

Shall address the following categories of non-storm water discharges or flows (i.e. illicit discharges) 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/dibrominated/desalinated swimming pool discharges, street wash water, and discharges or flows from fire-fighting activities.

May develop a list of other similar occasional incidental non-storm water discharges. These non-storm water discharges must not be a reasonably expected significant source of pollutants to the small MS4, because of either the nature of the discharges or conditions established for allowing these discharges to the MS4. The SWMP must describe any local controls or conditions placed on them. The SWMP must include a provision prohibiting an individual non-storm water discharge that is determined to contribute a significant source of pollutants to the MS4.

A. Decision Process:

Rationale for why a storm water illicit discharge/detection/elimination program was developed and how and why you selected each of the BMP's and measurable goals for the SWMP. Including how selected BMP's address applicable TMDL recommendations. The rationale statement shall include the following information, at a minimum:

1) 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 of Bellefontaine considers its comprehensive storm sewer map complete. The City will continue to update the existing MS4 system mapping as needed to include all required information and updates. These updates will be based on field observations, data collection with survey equipment by our Engineering Department Staff. All



construction projects are required to obtained permits through the City. These permits allow us to track changes that might affect our mapping. Additionally, any changes made to the public storm sewer system are maintained in the City Engineer's office. As these changes are completed, the mapping is immediately updated with the new information.

2) The 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 recently developed a Comprehensive Storm Water Manual as its regulatory mechanism. This describes the process to effectively prohibit illicit discharges. This is included in the Appendix Section of SWMP. This is in addition to City of Bellefontaine Codified Ordinance Chapters 925, 927, 1103, and 1105-1111.

- 3) 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 HSTSs and off-lot discharging HSTSs) that flow into your storm drainage system. Your description shall address the following, at a minimum:
 - a. 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;
 - Priority areas currently identified are areas with HSTS's and older commercial and industrial sections of the City. The City will evaluate complaints from residents and use the comprehensive storm water map to evaluate future priority areas.
 - b. 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, excavation and dye testing or smoke testing, to help locate the source of illicit discharges. Water quality sampling may also be utilized where needed.

c. 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.

d. Procedures for program evaluation and assessment.

Inspection reports will be developed and maintained by the City Engineer's office. Mapping of all outfall screening and issues will be used a as a tool during evaluation and assessment of the program. This will provide a possible indication of isolated events or if part of a larger connected problem.

e. 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.

The hazards of illicit discharges will be a topic that is covered under MCM 1 earlier in this document and MCM 6 covered later in this document.

f. 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.

Refer to Table 3 for the responsible party for each BMP included in the program. The City of Bellefontaine (specifically the City Engineer) is responsible for all BMPs for this and the overall management and implementation of the Illicit discharge/detection/elimination program.

g. 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 will evaluate the effectiveness of the illicit discharge/detection/elimination BMPs by tracking and documenting information as described in Table 3.

B. Performance Standards:

The Illicit discharge detection and elimination program shall include an initial dryweather screening of all storm water outfalls within five years of the effective date of this permit.

The program shall establish priorities and specific goals for long-term system-wide surveillance of the MS4, as well as specific investigations of outfalls and their tributary area where previous surveillance demonstrates high likelihood of illicit discharges.

Data collected each year shall be evaluated and priorities and goals shall be revised annually based on this evaluation.

The comprehensive storm sewer map shall be updated annually.

The City of Bellefontaine has not identified any of the following non-storm water discharges as significant contributors of pollutants to the MS4 system and according to the permit will not address them:

Landscape Irrigation

Rising ground water

Air conditioning condensation

Foundation Drains

Diverted Stream Flows
Uncontaminated ground water infiltration
Uncontaminated pumped ground water
Discharges from potable water sources
Water from crawl space pumps
Flows from riparian habits and wetlands

Water line flushing

Discharges from potable water sources
Water from crawl space pumps
Flows from riparian habits and wetlands
Individual residential car washing
Discharges from firefighting activities

Springs
Lawn Watering
Street wash water
Irrigation water
Footing Drains

Discharges from charity car washes not exceeding 4 hours or less than 4,000 sf. Dechlorinated/dibrominated swimming pool discharges

*These are also outlined in the City of Bellefontaine's Comprehensive Storm Water Manual.

*The City reserves the right at any time to prohibit any individual non-storm water discharge that it determines to be contributing significant amounts of pollutants to the MS4 system.



Table 3 outlines the best management practices (BMP's) selected by the City to accomplish MCM 3. The BMP's listed provide methods to identify, reduce, and eliminate Illicit Discharges to the MS4.

The City believes it has the legal authority to implement all identified BMPs.

The rationale for the BMP's listed in Table 3 is as follows:

- Mapping updates help provide a more accurate representation of how the MS4 operates and will help isolate Illicit discharges when they occur.
- HSTS's can be a major source of illicit discharges. Having a location and understanding their operational condition will help isolate these areas, providing a targeted approach for dry-weather screening and planning of projects to remove HSTS's within the MS4.
- Dry weather screening will assist the City with identifying illicit discharges. The dry weather screening evaluation forms will be way to document these screenings in a consistent and methodical approach that will have a defined outcome.



TABLE 3 MCM 3: ILLICIT DISCHARGE DETECTION AND ELIMINATION

BMP TYPE (Mechanism):	Targeted Audience:	Responsible Party:
Update System Mapping	Ohio EPA and City Personnel	MS4 Coordinator (City Engineer)

Description:

The City of Bellefontaine completed its MS4 sytem wide mapping including the location of HSTS within the MS4. It also continues to identify all post-construction BMPs. Will update map annually.

Measureable Goal:

Maintain and update mapping. All HSTS's will be labeled as discharging or not discharging to MS4. Previously constructed post-construction BMPs will be identified by type within 5 years of effective date of permit.

Targeted Theme(s):

- 1. Illicit Discharges, detection, eliminiation
- 3. Stormwater Management Regulations/permitting
- 2. Home sewer treatment systems (HSTS)

Proposed Schedule:

Ongoing updates. The map will be updated as new information is gathered including the type of practice for post-construction BMPs previously constructioned. Previously constructed BMPs will be labeled with type within 5 years of effective date of this permit.

BMP TYPE (Mechanism):	Targeted Audience:	Responsible Party:
HSTS Mapping and Coordination	Ohio EPA and City Personnel	MS4 Coordinator (City Engineer)

Description:

HSTS's have been included in the system wide mapping. This will be updated annually with new information as it is available. The HSTS are regulated by the Logan County Health District (LCHD) and they have a published policy concerning failed systems and connection to the public system. Updated mapping provides a tool to identify illicit discharges from HSTS's.

Measureable Goal:

The map of known HSTS's within in MS4 boundary will be updated.

The MS4 coordinator will meet with LCHD to review the operations of those HSTS's discharging to the MS4 Review opportunities to provide public sanitary to remove HSTS's discharging to MS4

Targeted Theme(s):

- 1. Ilicit Discharges, detection, elimination
- 3. Home sewer treatment systems (HSTS)

2. Water Quality

4. Stormwater Management Regulations/permitting

Proposed Schedule:

Map updates completed annually.

Meeting with LCHD will occur at least once annually

Annually review future projects for opportunies to eliminate HSTS's

BMP TYPE (Mechanism):	Targeted Audience:	Responsible Party:
Dry-Weather Screening of Storm Water Outfalls	Ohio EPA and MS4 Personnel	MS4 Coordinator (City Engineer)

Description:

MS4 has developed dry-weather outfall screening and will conduct dry weather screenings of all known storm water outfalls.

Measureable Goal:

Track/document the the location and number of outfalls screend for illicit disharges during dry weather flow

Targeted Theme(s):

- 1. Illcit Discharges, Detection, Elimination
- 4. Home sewer treatment systems (HSTS)

2. Water Quality

5. Stormwater Management Regulations/permitting

3. Litter/Trash

Proposed Schedule:

All known storm water outfalls of the MS4 will be dry-weather screened at least once during the permit cycle.



Minimum Control Measure 4: Construction Site Storm Water Runoff Control

The City of Bellefontaine'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. Reduction of pollutants in storm water discharges from construction activity disturbing less than one acre shall be included in your program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more. If Ohio EPA waives requirements for storm water discharges associated with small construction from a specific site(s), The MS4 is not required to enforce this program to reduce pollutant discharges from such site(s). At a minimum this includes:

- i. Ordinance or other regulatory mechanism to require erosion and sediment controls, and non-sediment pollutant controls, as well as sanctions to ensure compliance, to the extent allowable under State or local law;
- ii. Requirements for construction site operators to implement appropriate erosion and sediment controls;
- iii. Requirements for construction site operators to control waste such as, but not limited to, discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste as the construction site that may cause potential water quality impacts;
- 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.

Decision Process:

Rationale for why a construction site storm water control program was developed and how and why you selected each of the BMP's and measurable goals for the



SWMP. Including how selected BMP's address applicable TMDL recommendations. The rationale statement shall include the following information, at a minimum:

1) 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.

This is covered in the City of Bellefontaine's Comprehensive Storm Water Manual and Codified Ordinance Chapters 927, 1103, 1109.

2) 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. This is covered in the City of Bellefontaine's Comprehensive Storm Water Manual and its Codified Ordinances. The level of sanctions will be based on severity of offense and frequency of poor performance.

3) 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 City of Bellefontaine's Comprehensive Storm Water Manual and references to Ohio's Construction General Permit for specific details.

4) 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;

This process is described in the City of Bellefontaine's Comprehensive Storm Water Manual. Every construction site shall go through the City's plan review process. As part of this process, the City uses the OEPA's



Construction General Permit Storm Water Pollution Prevention Plan (SWPPP) Checklist as the guide for proper sediment and erosion control practices as well as other pollution prevention considerations as needed.

5) 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. When complaints are received, the City conducts an inspection and addresses the issue as needed. The City intends to include this in themes for MCM 1 and MCM 2.

6) Your procedures for site inspection and enforcement of control measures, including how you will prioritize sites for inspection;

Construction site inspections are performed by the City of Bellefontaine's engineering staff at a minimum on a monthly basis for active sites. More frequent inspections (every 14 days) may be made for high priority/high impact sites or sites that the City has received complaints on or are non-compliant.

7) 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;

Refer to Table 4 for the responsible party for each BMP included in the program. The City of Bellefontaine (specifically the City Engineer) is responsible for all BMPs for this and the overall management and implementation of the construction site storm water control program.

8) 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 will evaluate the effectiveness of the Construction Site Storm Water Runoff Control BMPs by tracking and documenting information as described in Table 4.



Performance Standards:

The construction site storm water runoff control program shall include a regulatory mechanism that is equivalent to the technical requirements set forth in the current Ohio EPA NPDES General Storm Water Permit for Construction Activities.

A pre-construction SWPPP must be developed, reviewed, and approved for all land disturbances of one acre or more, or part of a larger common plan of development or sale that will disturb one acre or more.

All applicable sites shall have an initial inspection, and follow-up inspections shall be on a monthly basis.

Site inspection shall occur when the following compliance issues have been identified:

- Construction activity began prior to SWPPP review and approval by MS4
- Failure to install sediment basin(s) within 7 days prior to grading/grubbing when the SWPPP or site drainage indicated this to be the first step.
- Construction activities taking place without sediment/erosion controls
- Dewatering activities resulting in turbid discharges

Table 4 outlines the best management practices (BMP's) selected by the City to accomplish MCM 4.

The City has the legal authority to implement all identified BMPs.

The rationale for the BMP's listed in Table 4 is as follows:

- Regulatory mechanisms (Comprehensive Storm Manual) provide the authority to the City to regulate and enforce storm water management practices.
- Reviewing and approving SWPPPs prior to construction activities provides a safeguard that sediment and erosion controls are designed for specific site conditions and meet best available solutions for controlling runoff and sediment pollution.
- Site inspections verify that designed controls are in place and are working property. It provides an early warning mechanism for identifying deficiencies in the controls or possible compliance issues.



TABLE 4 MCM 4: CONSTRUCTION SITE STORM WATE RUNOFF CONTROL

BMP TYPE (Mechanism):	Targeted Audience:	Responsible Party:
Maintain/Update ordinances/regulatory mechanisms	Ohio EPA, MS4 Personnel, Designers, Consultants, Developers and Contractors	MS4 Coordinator (City Engineer)

Description:

The City of Bellefontaine will evaluate the current ordinances and regulatory mechanisms as to effectiveness. If they cannot obtain the disired outcome of the permit, they will updated to ensure compliance. The focus is on construction site storm water runoff control including sediment control and overall site development.

Measureable Goal

Maintain/Update ordinances if Comprehensive Storm Water Manual is not obtaining the preferred outcomes. Document type/frequency/correction of any enforcement actions.

Targeted Theme(s):

- 1. Construction site/Sediment/Erosion Control
- 2. Water Quality

- 3. Illicit Discharges, detection, eliminiation
- Stormwater Management Regulations/permitting

Proposed Schedule:

Ongoing.

BMP TYPE (Mechanism):	Targeted Audience:	Responsible Party:
Construction Site Storm Water Runoff Control Plan Review	MS4 Personnel, Ohio EPA, Designers, Consultants, Developers, and Contractors	MS4 Coordinator (City Engineer)

Description:

City will ensure plan reviews are completed and checklists are maintained.

Measureable Goal:

Review all submitted plans in accordance with current OEPA Construction General Permit SWPPP checklist.

Maintain accurate records that are readily available in the Engineer's office.

Targeted Theme(s):

- 1. Construction site/Sediment/Erosion Control
- 2. Water Quality

- 3. Illicit Discharge, Detection, Elimination
- 4. Stormwater Management Regulations/permitting

Proposed Schedule:

Ongoing. All proposed developments will be reviewed for compliance to OEPA Construction General Permit Plan Development guidelines.

BMP TYPE (Mechanism):	Targeted Audience:	Responsible Party:	
Construction Site Storm Water Runoff Control Site Inspections	MS4 Personnel, Ohio EPA, Designers, Consultants, Developers, and Contractors	MS4 Coordinator (City Engineer)	

Description:

City will perform scheduled on-site inspections to verify construction is following approved plans. Ensure contractors address violations.

Measureable Goal:

Inspect all sites per the prescribed schedule to ensure construction follows approved plans.

Document and respond to any complaints recieved about the site development.

Maintain accurate records that are readily available in the Engineer's office.

Targeted Theme(s):

- 1. Construction site/Sediment/Erosion Control
- 2. Water Quality

- 3. Illicit Discharge, Detection, Elimination
- Stormwater Management Regulations/permitting

Proposed Schedule:

Ongoing. All construction sites meeting the development guidelines will be inspected per the prescribed schedule.



Minimum Control Measure 5:

Post-Construction Storm Water Management in New Development and Redevelopment

The City of Bellefontaine's MS4 permit requires the post-construction site storm water management in New Development and Redevelopment to include the following:

Shall develop, implement, and enforce a program that will prevent or minimize water quality impacts by addressing 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 or sale, that discharge to the small MS4;

Shall develop and implement strategies which include a combination of structural and/or non-structural post-construction runoff controls appropriate for the community;

Shall use an ordinance, or other regulatory mechanism, to address postconstruction runoff from new and redevelopment to the extent allowable under State and local law;

Shall ensure adequate long-term operation and maintenance of postconstruction runoff controls, including provisions for when property changes ownership;

A. Decision Process:

Rationale for why a post-construction site storm water control program was developed and how and why you selected each of the BMP's and measurable goals for the SWMP. Including how selected BMP's address applicable TMDL recommendations. The rationale statement shall include the following information, at a minimum:

1) The 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 of Bellefontaine requires by codified ordinance and through its Comprehensive Storm Water Manual, all new and redevelopment projects that disturb greater than or equal to one acre to implement post-construction storm water management controls to address both water quantity and water quality.



2) 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 the requirements outlined in the Comprehensive Storm Water Manual, which meets the MS4 permit requirements and mimics the guidelines prepared by the Ohio Department of Natural Resources (ODNR) Rainwater and Land Development Manual.

3) Any non-structural post-construction runoff controls 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 potential 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 City's codified ordinances and Comprehensive Storm Water Manual meet the permit requirements and references the guidelines outlined by the OEPA General Storm Water Permit for Construction Activities and the guidelines prepared by the Ohio Department of Natural Resources (ODNR).

4) Any structural post-construction runoff controls 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.

Post-construction BMPs are reviewed using the OEPA's checklist. The BMP design guidance is referenced to the Ohio Department of Natural Resources (ODNR) Rainwater and Land Development Manual.



5) 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 of Bellefontaine Comprehensive Storm Water Manual includes language that references the Ohio EPA NPDES Construction Permit. This mechanism provides all the requirements in one central document.

6) 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.

The standard agreement language is included in our regulatory mechanism and is part of the approval process of the SWPPP prior to construction. O&M responsibilities and requirements will be incorporated into O&M language which will be included with all recorded plats and will be transferrable to the property owner in perpetuity.

7) Who is responsible for overall management and implementation of your postconstruction storm water management program and, if different, who is responsible for each of the BMPs identified for this program.

Refer to Table 5 for the responsible party for each BMP included in the program. The City of Bellefontaine (specifically the City Engineer) is responsible for all BMPs for this and the overall management and implementation of the Post Construction storm water management program.

8) 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 will evaluate the effectiveness of the post-construction BMPs by tracking and documenting the information contained in Table 5.



B. Performance Standards:

The post-construction site storm water runoff control program shall include a regulatory mechanism that is equivalent to the technical requirements set forth in the current Ohio EPA NPDES General Storm Water Permit for Construction Activities. It shall require a review and approval of any modifications to the controls that occur after the initial approval of the SWPPP.

A pre-construction SWPPP must be developed, reviewed, and approved for all land disturbances of one acre or more, or part of a larger common plan of development or sale that will disturb one acre or more. A checklist shall be used to document each SWPPP review.

All applicable sites shall be inspected to ensure controls are installed per the approved SWPPP. Inspections shall be performed and documented using a checklist.

The program shall ensure that long-term operation and maintenance (O&M) plans are developed and agreements are executed for all applicable sites. The agreements and plans shall also cover changes in future ownership.

The operation and maintenance program shall ensure public and private post-construction runoff controls are being maintained per the O&M plans, agreements, and regulatory mechanisms. Copies of the O&M plans and agreements shall be maintained in the City Engineer's office.

Each post-construction runoff control shall be inspected at least once during this permit cycle. Documentation of these inspections shall be maintained in the City Engineer's office.

The program shall provide an educational opportunity to contractors, designers, and MS4 personnel on OEPA General Permit OHC000005 Table 4b practices and/or other green infrastructure practices during this permit cycle. These are in addition to MCM 1 and MCM 2.

During the permit cycle, the program shall include at least of the below standards:

- 1) Retrofit one existing storm water practice that solely provides a peakdischarge function to meet the performance standard for an extended detention post-construction practice in accordance with OHC000005 Table 4a or Table 4b;
- 2) Perform restoration of at least three hundred linear feet of channelized stream where natural channel stability and floodplain restoration will reduce stream erosion;



- 3) Update ordinance or regulatory mechanism to require OHC000005 Table 4b practices and/or other green infrastructure practices where feasible;
- 4) Install one or more OHC000005 Table 4b practices to treat a minimum of one acre of existing impervious area developed prior to 2003.

Table 5 outlines the best management practices (BMP's) selected by the City to accomplish MCM 5.

The City has the legal authority to implement all identified BMPs.

The rationale for the BMP's listed in Table 5 is as follows:

- Regulatory mechanisms (Comprehensive Storm Manual) provide the authority to the City to regulate and enforce storm water management practices.
- Reviewing and approving SWPPPs prior to construction activities provides a safeguard that sediment and erosion controls are designed for specific site conditions and meet best available solutions for controlling runoff and sediment pollution.
- Site inspections verify that designed controls are in place and are working property. It provides an early warning mechanism for identifying deficiencies in the controls or possible compliance issues.
 The post-construction storm water management program shall include SWMP shall include at leave 5 public involvement activities that will occur.
- O&M plans and agreements ensure that water quality is maintained and pollutants carried by runoff are controlled to ensure the long-term benefit the environment. This ensures the long-term success of the SWMP.



TABLE 5 MCM 5: POST-CONSTRUCTION STORM WATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT

BMP TYPE (Mechanism):	Targeted Audience:	Responsible Party:
Maintain/Update regulatory mechanisms	Ohio EPA, MS4 Personnel, Designers, Consultants, Developers	MS4 Coordinator (City Engineer)
	and Contractors	

Description:

The City of Bellefontaine will evaluate its regulatory mechanisms as to effectiveness and update as neccessary to achieve the desired outcome. The focus is on Post-Construction storm water management for sites 1 acre and larger.

Measureable Goal:

Maintain/update ordinances and the City's Comprehensive Storm Water Manual to ensure post-construction storm water management meets the techincal requirements of the current OEPA Contruction General Permit.

Targeted Theme(s):

- 1. Construction site/Sediment/Erosion Control
- 2. Water Quality

- 3. Illicit Discharges, detection, eliminiation
- 4. Stormwater Management Regulations/permitting

Proposed Schedule:

Ongoing.

BMP TYPE (Mechanism):	Targeted Audience:	Responsible Party:
Post-Construction Storm Water Management and Runoff Control	MS4 Personnel, Ohio EPA, Designers, Consultants, Developers, and Contractors	MS4 Coordinator (City Engineer)

Description:

The City will implement standards for and document post-construction runoff controls.

Measureable Goal:

The City will perform plan reviews to ensure post-construction controls will be in compliance with OEPA Construction General Permit. Document the number of completed plan reviews annually.

The City will update its system mapping with new post-construction BMP's as to type, location, and ownership.

The City will develop and implement an Operation and Maintenance Agreement between the BMP owner and the City of Bellefontaine. Document the number of O&M agreements signed annually.

A copy of the agreement and all inspections reports will maintained in the City Engineer's office.

Targeted Theme(s):

- 1. Construction site/Sediment/Erosion Control
- 2. Water Quality
- 3. Illicit Discharge, Detection, Elimination
- 4. Stormwater Management Regulations/permitting

Proposed Schedule:

Ongoing. All proposed developments will be reviewed for compliance to OEPA Construction General Permit Plan Development guidelines. Post-Construction BMP's will be inspected per the prescribed schedule.



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

The City of Bellefontaine's MS4 permit requires the pollution prevention/good housekeeping for municipal operations to include the following:

Shall develop and implement an O&M program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations;

Use training materials that are available from the Ohio EPA or other organizations, the 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/or operated by the MS4 that are subject to the Ohio EPA's NPDES Industrial Storm Water General Permit (OHR000006) or individual NPDES permits for discharges of storm water associated with industrial activity that ultimately discharge to the MS4. Include the Ohio permit number or a copy of the Industrial NOI for each facility. For municipal operations that conduct activities described in 40 CFR122.269(b)(14) that are not required to obtain Industrial Storm Water General Permit coverage, including vehicle maintenance facilities, bus terminals, composting facilities, impoundment lots and waste transfer stations, a Storm Water Pollution Prevention Plan (SWPPP) shall be developed and implemented in accordance with the SWP3 requirement of OHR000006.

A. Decision Process:

Rationale for the decision process of the development of a pollution prevention/good housekeeping program for municipal operations. Documentation shall include the overall pollution prevention program/good housekeeping program and the individual BMP's, measurable goals, and responsible person for the program. The rationale statement shall include the following information, at a minimum:

1) 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.

Table 6 describes the actions our program will take to prevent or reduce pollutant runoff from our municipal operations. Municipal operations impacted by our program include:

Bellefontaine Municipal Airport
Bellefontaine Vehicle Maintenance
Bellefontaine Impound Facility
City yard waste site
City Parks
Cemetery

(No Exposure Certification)
(No Exposure Certification)
(No Exposure Certification)
SWPPP needed
No SWPPP needed
No SWPPP needed

2) 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 annually. The training will be overseen by the MS4 Coordinator to ensure continuity with the Illicit Discharge and Public Outreach programs. Materials used will be from multiple reliable sources including materials available from the OEPA.

- 3) Your program description shall specifically address the following areas:
 - a. Maintenance activities, maintenance schedules, and long-term inspection procedures for controls to reduce floatables and other pollutants to your MS4.

The City conducts routine street sweeping of all streets located within its municipal boundary and performs catch basin cleaning/debris removal in focused areas.

b. 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 conducts routine street sweeping and focused catch basin maintenance (cleaning). Storm Water Pollution Prevention Plans will be followed for those municipal facilities that require them. Road salt/brine usage is continuous monitored during use through calibrated dispersing equipment. Normal practice for roadway and municipal parking lot winterization is to use the minimal amounts necessary to provide a safe travel route. The City directs snow plow efforts to vegetative areas where practical and uses winterization products only at the entrances to municipal lots or areas susceptible to the collection of ice. The same practices are used in winterization of the municipal streets. Salt/Brine use are focused at intersections, steep slopes, and major traffic control devices. Salt/brine are used sparingly in midblock sections. Fertilizers and pesticides are minimally used by our Parks Department and Street Department. Applications are performed by licensed applicators and strictly adhere to labeled conditions. Neither product is used during precipitation events.

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

Street sweepings and catch basin clean out debris are treated as solid waste and hauled to the landfill once excess water has been removed. The water removed from this debris is treated by our Waste Water Treatment Facility.

d. 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.

The City considers impacts on water quality when completing new flood management projects. None are planned at this time. During the initial phase of project development, the scope will be reviewed and potential impacts identified. Based on this



information, a hydrologic analysis maybe be completed. Specific water quality components will then be identified and incorporated into the project if necessary.

4) 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.

Refer to Table 6 for the responsible party for each BMP included in the program. The City of Bellefontaine (specifically the City Engineer) is responsible for all BMPs for this and the overall management and implementation of the Pollution Prevention/ Good Housekeeping for Municipal Facilities program.

5) 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 intends to evaluate the effectiveness of the good housekeeping BMPs by tracking and documenting information as described in Table 6.

B. Performance Standards:

The pollution prevention/good housekeeping program shall include an annual employee training program.

Documented procedures, controls, maintenance schedules, and record keeping shall be part of the program that will address:

- 1) Controls to reduce floatables and other pollutants to your small MS4; 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 handling and 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.
- 2) Procedures for the proper management and disposal of waste removed from your small MS4 and your municipal operations, including dredge spoil,



accumulated sediments, floatables, street sweepings/catch basin cleanings and other debris.

- 3) 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.
- 4) 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.
- 5) How you will evaluate the success of the minimum measure, including how you selected the measurable goals for each of the BMPs.

Salt piles shall be covered with no run-on and subsequent run-off of salt. All tanks of brine or other liquid road treatments shall have secondary containment or alternatively bollard or barrier protection. This performance standard shall be completed no later than two (2) years after the effective date of this permit for small MS4s renewing coverage under this permit.

For areas of soil disturbance associated with ditch/MS4 maintenance caused by the small MS4, soil stabilization shall, at a minimum, be initiated in accordance with the time frames specified in the following table:

Ditch/MS4 Maintenance Areas	<u>Time Frame to Initiate Soil Stabilization</u>
Not within 50 feet of a surface	Within 7 days of reaching final grade or
water of the State	within the first 7 days if a disturbed area
	will remain inactive for over 14 days.
Within 50 feet of a surface water	Within 2 days of reaching final grade or
of the State	within 2 days if the area is to remain
	inactive for over 14 days.

*Implementation of this performance standard shall commence no later than two (2) years after the effective date of this permit for small MS4s renewing coverage under this permit.

The program shall address the TMDL performance for E. Coli.

The City's pollution prevention/good housekeeping program shall include, at a minimum, one of the following performance standards. Implementation of this permit requirement shall commence no later than two (2) years after the effective date of this permit for small MS4s renewing coverage under this permit.



- Develop and implement a street sweeping program with proper debris management and disposal. Your program shall document debris collected to prioritize areas to sweep and/or document lane miles swept. At a minimum, sweeping shall occur on curbed streets two times per year; or
- 2. Develop and implement a catch basin cleaning program with proper debris management and disposal. Your program shall document debris collected to prioritize areas to clean. At a minimum, catch basins shall be scheduled to be cleaned once every five years; or
- 3. Develop and implement a leaf/yard waste collection program; or
- 4. For small MS4 facilities that do not require NPDES industrial storm water general permit coverage but require a SWPPP in accordance with Part III.B.6.c of this permit, conduct routine facility inspections for these facilities at least quarterly (i.e., once each calendar quarter). You shall document the findings of each routine facility inspection performed and maintain this documentation onsite with your SWPPP. At a minimum, your documentation of each routine facility inspection shall include:
 - The inspection date and time;
 - The name(s) and signature(s) of the inspector(s);
 - Weather information and a description of any discharges occurring at the time of the inspection;
 - Any previously unidentified discharges of pollutants from the site;
 - Any control measures needing maintenance or repairs;
 - Any failed control measures that need replacement;
 - Any incidents of failure to implement your SWPPP observed;
 - Any additional control measures needed.

Table 6 outlines the best management practices (BMP's) selected by the City to accomplish MCM 6. The BMP's listed provide a range of opportunities that are accessible to an array of audiences in an open and inviting method.

The City has the legal authority to implement all identified BMPs.

The rationale for the BMP's listed in Table 6 is as follows:

• MS4 personnel training is an important step in reducing pollution from our municipal operations. By presenting a uniform and detailed message to all staff, it promotes the alignment to achieve the common goal. Properly



- trained staff also provides for a larger team that has awareness of minimizing pollutants and the knowledge to properly address deficiencies that might be discovered.
- Storm Water Pollution Prevention Plans for municipal operations provide a
 detailed written plan on how to minimize pollution from our facilities. It
 guides personnel on what to look for and how to address it. These will be
 updated if conditions change at a facility.
- MS4 Operations and Maintenance are daily activities performed by our personnel. Awareness of this program, will make pollution prevention and good housekeeping part of these daily activities. Documentation will aid in demonstrating the effectiveness of our plan and provide our personnel with an accurate historical picture of tasks they perform.



TABLE 6 MCM 6: POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

BMP TYPE (Mechanism):	Targeted Audience:	Responsible Party:
Employee Training	MS4 Employees	MS4 Coordinator (City Engineer)

Description:

The City of Bellefontaine will use storm water educational/training material for MS4 personnel training. This material may include audio/visual methods and will focus on good housekeeping, pollution prevention, storm water management/quality, and TMDL performance standards.

Measureable Goal:

Number of service department employees who participate in the training.

Targeted Theme(s):

1. Stormwater Management Plan 4. Illicit Discharges, detection, elimination

2. Water Quality

5.Good Housekeeping 6. Trash and Litter

Proposed Schedule:

3. Nutrient Management

Training will be performed annually and will cover at least one storm water topic.

BMP TYPE (Mechanism):	Targeted Audience:	Responsible Party:
Storm water Pollution Prevention Plans for Municipal Facilities	MS4 Personnel	MS4 Coordinator (City Engineer)

Description:

The City will update/maintain its operation and maintenance program for its facilities.

Measureable Goal:

Develop/maintain SWPPPs for its facilities.

No Exposure certification will be obtained for facilities that meet the criteria.

Conduct facility inspections annually.

Targeted Theme(s):

1. Stormwater Management Plan

4. Illicit Discharges, detection, elimination

2. Water Quality

5.Good Housekeeping

3. Nutrient Management

6. Trash and Litter

Proposed Schedule:

Ongoing.

No Exposure Certification will be maintained in accordance with Certification schedule.

BMP TYPE (Mechanism):	Targeted Audience:	Responsible Party:
MS4 Operations and Maintenance	Residents, Developers, Designers, Business owners, Consultants	MS4 Coordinator (City Engineer)

Description:

The City will continue to manage its program for the operation and maintenance of the City Facilities.

Measureable Goal:

Document the amount of street sweeping debris collected annually in pounds/tons.

Document the gallons of pesticides/herbicides applied annually.

Document the management and useage of road salt/brine annually.

Document storm structures repaired/replaced annually.

Document measures taken to satisfy TMDL performance criteria, annually.

Document assessment of new or existing flood management projects.

Document amount of properly disposed of waste material (tons).

Targeted Theme(s):

1. Stormwater Management Plan

4. Illicit Discharges, detection, elimination

2. Water Quality

5.Good Housekeeping

3. Nutrient Management

6. Trash and Litter

Proposed Schedule:

all items will be documented based on the calendar year except flood management projects will be evaluated on an as-needed basis.



References

1. State of Ohio Environmental Protection Agency, Division of Surface Water. *Biological and Water Quality Study of the Upper Great Miami River and Selected Tributaries 2008* (Ohio EPA Technical Report EAS/2011-1-1). Auglaize, Mercer, Logan, Shelby, Champaign, and Dark Counties. P 48.