Stormwater Quality Management Plan
Part C

Program Implementation Certification

Huntington, Indiana
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PREFACE

The purpose of a Stormwater Quality Management Plan (SQMP) in Phase II of the U.S. EPA stormwater program originates from the 1990 Clean Water Act (CWA) which aims to preserve, protect and improve the Nation's water resources from polluted stormwater runoff. An SQMP requires the institution of controls on the unregulated sources of stormwater discharges, otherwise referred to as non-point source pollutants that have proven to be the greatest cause to the impairment of our Nation's water resources.

The established Huntington Stormwater Management Board will continue to serve as the managers and overall governing authority of the City of Huntington's SQMP. In addition to the Board, the Mayor, the Huntington Utility Departments, and the City's Street and Sanitation Department will also be included as major stakeholders in the implementation and maintenance of this Plan.

The Huntington SQMP includes six minimum control measures (MCMs), aimed to preserve, protect and improve the City's water resources with respect to polluted stormwater runoff:

(1) Public Education & Outreach
(2) Public Participation & Involvement
(3) Illicit Discharge Detection & Elimination
(4) Construction Site Stormwater Runoff Control
(5) Post-Construction Runoff Control
(6) Pollution Prevention & Good Housekeeping for Municipal Operations

These MCMs, as well as their associated programmatic indicators for measuring the success of the outlined procedures, are described in more detail throughout this SQMP Part C document.

CHAPTER 1: PUBLIC EDUCATION & OUTREACH

This MCM addresses public education and outreach. An informed and knowledgeable community is crucial to the success of a storm water management program because an educated public ensures greater support and compliance with the program itself. The following programmatic indicators will be utilized to measure the success of this MCM.

1.1 Constituent Awareness

The initial survey, created to evaluate constituent awareness of water quality issues and level of participation in storm water quality activities, was distributed in 2004. The survey should be redistributed to compare with current awareness and participation.

1.2 Storm Water Website Activity

The City's storm water website should be developed and updated regularly. Website activity should be tracked and inquiries made to the site should be addressed regularly.

1.3 Children's Activity Book

An activity book should be distributed annually to all 4th grade students to increase awareness of storm water quality issues.

1.4 Brochures & Fact Sheets

Periodic distribution of educational materials at community events will help increase constituent awareness of storm water issues.

1.5 Educational Displays

Educational displays and/or booths with handout materials should be set up at local and countywide festivals and events throughout the year.

1.6 Stormwater Presentation to the City Council

It is important to ensure that City officials are aware of storm water quality issues in order to gain support for the needs of a successful MS4 program. An annual presentation should be made to the City Council with a consideration made to bring in an outside speaker(s) with a special interest in storm water management.

1.7 News articles

Educational articles related to storm water quality and management should be published regularly in local newspapers and newsletters.

1.8 Social networking

Social networking is increasing in its applicability for increasing public awareness and involvement in community improvement efforts. Sites, such as Facebook, Twitter and YouTube should be utilized to increase public interest in the City's storm water management and other environmental activities.

Table 1. Measurable Goals & Implementation of the Programmatic Indicators for MCM 1

Programmatic Indicator	Measurable Goal	Implementation
1.1 Constituent awareness	• Achieve 5% increase in awareness based on survey results.	• Initial survey conducted in 2004. • Redistribute survey in 2011 and reassess.
1.2 Stormwater website activity	• Increased number of visitors to the website. • Increased number of inquires to the website.	• Establish and continually update the website. • Record and compare number of visitors and inquiries on a yearly basis.
1.3 Children's activity book	• Activity books distributed to 4th graders every year.	• Purchase Allen County Activity Book, distribute to each 4th grade student. • Record and compare number of activity books distributed on yearly basis.
1.4 Brochures & fact sheets	• Increased number of brochures & fact sheets distributed.	• Create educational materials or obtain from IDEM/INDNR/EPA. • Attend at least two (2) community events and distribute to the public. • Record approx. number of materials distributed.
1.5 Educational displays	• Increased number of educational displays made available to the public.	• Identify high traffic areas and community events where an educational display can be shown. • Record quantity displays shown on a yearly basis.
1.6 Stormwater presentation to the City Council	• Ensure presentation made twice every year.	• Organize presentation of stormwater topics and state of the MS4 program to present to City Council. • Present at least twice per year; record attendance.
1.7 News articles	• Ensure articles related to stormwater topics published.	• Select or write articles about stormwater topics. • Publish in as many local papers as possible. • Document publishing.
1.8 Social networking	• Increased activity from social networking venues.	• Develop Facebook page; record and compare number of "Likes" at end of each year. • Develop Twitter account; record and compare number of followers at end of each year. • Develop YouTube video; record and compare number of views at end of each year.

CHAPTER 2: PUBLIC PARTICIPATION & INVOLVEMENT

This MCM addresses public participation and involvement in MS4 activities. The public can provide valuable input and assistance to a regulated small MS4's municipal storm water management program and therefore, the public should be given opportunities to play an active role in both the development and implementation of the program. An active and involved community is crucial to the success of an MS4 program because it allows for: broader public support by giving citizens partial responsibility for the program, quicker implementation, a broader base of expertise and economic benefits, and a lead into other programs. The following programmatic indicators will be utilized to measure the success of this MCM.

2.1 Storm Drain Stenciling

Storm drain stenciling directly and indirectly involves the public in the prevention of non-point source pollution because of the involvement of citizens in stenciling activities as well as those citizens who spot and are able to identify stenciled drains as storm water drains. Stenciling kits should be made available, for loan, at the City Building.

2.2 Streamside & Litter Cleanup

Individual efforts by community groups, such as Cub Scouts, are known to occur with respect to streamside and litter cleanup activities. These efforts should be encouraged and supported by the City of Huntington with respect its MS4 Program and this SQMP. The MS4 Operator and other employees should assist in its implementation and organization as necessary.

2.3 Tree Planting

Trees help to improve water quality and moderate runoff. Depending on the species of tree and local soil conditions, trees can absorb a considerable amount of storm water, as well as utilize water-polluting nitrates, phosphorus and potassium as food. The City should conduct an annual tree planting program or event that focuses on public participation.

2.4 Household Hazardous Waste Collection

The primary purpose of operating a household hazardous waste collection program is to minimize the effects of improper dumping of wastes into MS4 conveyances by providing citizens with a well-publicized and feasible option for proper disposal. The City has established a program that allows homeowners and businesses within the community to drop off items that are flammable, explosive or corrosive on a weekly basis.

2.5 Incident Reporting

An incident reporting phone line, as well as a webpage, should be established and maintained to facilitate the public with a means of reporting illicit discharges and spills, as well as to inquire, share concerns about or request information concerning local construction activities.

Table 2. Measurable Goals & Implementation of the Programmatic Indicators for MCM 2

Programmatic Indicator	Measurable Goal	Implementation
2.1 Storm drain stenciling	• Increased number of storm drains stenciled.	• Designate a portion of the City to be stenciled or identify a previously stenciled area that needs to be restenciled. • Track and record those areas that have been stenciled.
2.2 Streamside & litter cleanup	• Ensure cleanup event held every year and encourage increasing participation.	• Organize or assist in the implementation of an annual streamside and litter cleanup event. • Track and record number of participants and amount of litter collected.
2.3 Tree planting	• Ensure tree planting event held every year and encourage increasing participation.	• Organize or assist in the implementation of annual tree planting event on Arbor Day. • Investigate sponsorship for purchase of trees. • Track and record number of participants and number of trees planted.
2.4 Hazardous household waste collection	• Increased participation and increased quantity of hazardous household waste collected	• Continue to maintain and expand the program. • Increase public outreach and awareness of the program. • Track and record quantity of waste collected.
2.5 Incident reporting	• Ensure timely response to reporting and inquiries, as well as continued advertisement of the phone line and webpage.	• Establish an incident reporting phone line as well as an incident reporting page on the MS4's storm water website. • Advertise the incident reporting phone line and webpage. • Track and record number of reports and/or inquiries submitted.

CHAPTER 3: ILLICIT DISCHARGE DETECTION & ELIMINATION

This MCM addresses illicit discharge detection and elimination activities. Federal regulations define an illicit discharge as any discharge that is not composed of entirely storm water. Illicit discharges can enter the system through either direct or indirect connections. The result is untreated discharges that contribute high levels of pollutants to receiving water bodies. It is important to recognize the adverse effects that illicit discharges can have on receiving waters and to increase the ability to detect and eliminate illicit discharges by gaining a thorough awareness of the entire storm water sewer system.

3.1 MS4 Conveyance Map

The MS4 conveyances map should be continually updated as necessary and should include the locations of all outfalls in the City, as well as the names and locations of water bodies that receive discharges from those outfalls. In particular, all known conveyance systems with a pipe diameter of twelve inches or larger and open ditches with a two foot or larger bottom width should be mapped.

3.2 Development of a Regulatory Mechanism

The development of a mechanism, such as an ordinance, to regulate non-storm water discharges will increase the success of an MS4 program. Such an ordinance should prohibit illicit connections and discharges to the MS4, and will help establish legal authority to carry out all inspection, surveillance, monitoring and corrective actions necessary to ensure compliance with the ordinance.

3.3 Development of a Detection & Elimination of Illicit Discharges Plan

The development of a plan to detect and address illicit discharges is the key to this MCM. It allows the MS4 Operator to systematically find and remove illicit discharges, and is divided into a three step process: (1) Locate the problems within priority areas; (2) Find the source; and (3) Remove or correct the illicit connections.

High priority areas to be investigated first include older sections of the City, commercial and industrial areas, high density areas and unsewered areas. Dry weather (at least 72 hours after a rainfall event) screening should be conducted for outfalls. The presence of flow can indicate an illicit discharge. Locate the source through visual inspection or through smoke and/or dye testing. Once an illegal discharge is located and confirmed through sampling, the necessary steps should be taken to remove or correct it.

3.4 Public Education & Participation

Public education and participation programs pertaining to illicit discharge and detection should be implemented in accordance with MCM 1 and MCM 2.

3.5 Annual Training

MS4 personnel should receive training on testing equipment as well as the policies and procedures to be used in illicit discharge detection and elimination.

Table 3. Measurable Goals & Implementation of the Programmatic Indicators for MCM 3

Programmatic Indicator	Measurable Goal	Implementation
3.1 MS4 Conveyance Map	• Continuous updating of the MS4 conveyance map.	• Update the MS4 mapping as new additions and rework is conducted for the collection system.
3.2 Development of regulatory mechanism	• Continued successful implementation of the Illicit Discharges ordinance.	• Develop the regulatory mechanism, or ordinance. • Track and record activity associated with implementation of the ordinance, including all inspection, monitoring, and corrective action taken.
3.3 Development of Detection & Elimination of Illicit Discharges Plan	• Continued successful implementation of the Plan.	• Develop the Plan document. • Track and record activity associated with the Plan, including all illicit discharges and connections detected/removed.
3.4 Public education & outreach	• Increased public awareness of illicit discharge detection.	• Include information about the importance of illicit discharge detection and elimination in public education and involvement materials and activities.
3.5 Annual training	• Ensure employees receive training on a yearly basis.	• Implement training on illicit discharge detection and elimination every year.

CHAPTER 4: CONSTRUCTION SITE RUNOFF CONTROL

This MCM addresses construction site storm water management in areas undergoing new development or redevelopment. This is necessary because polluted storm water runoff from construction sites often flows to MS4 conveyances and ultimately discharges into receiving waters untreated.

4.1 Development of a Regulatory Mechanism

An ordinance, titled “Erosion and Sediment Control” will be developed and implemented as the regulatory mechanism for construction site runoff control.

4.2 Site Plan Review Process

The City will review all non-MS4 operated project construction plans submitted and will inspect the sites during construction, while also giving the SWCD an opportunity to review plans within a predetermined time period prior to City approval. After the City gives approval, the construction site operator is responsible to submit the Notice of Intent (NOI) letter to IDEM.

MS4 projects need to be reviewed by the SWCD and will include the submittal of additional items. These include identifying traffic phasing plans (if the project has the potential to alter vehicular traffic routes), utility relocation areas, material hauling and transportation routes, borrow pits, temporary staging and materials stock pile areas, and temporary disposal areas for waste materials.

The site plan review process should be generally described in the Ordinance with more detail provided by the City’s Stormwater Development Standards Manual.

4.3 Public Participation

The MS4 Operator should establish procedures for receipt and consideration of public inquiries, concerns and requests for information regarding local construction activities. These procedures will, at a minimum, implement a tracking process in which submitted public information, both written and verbal, documenting it and giving it to the appropriate staff.

4.4 Annual Training

Employees should receive training on proper construction site plan review, inspection and enforcement in relation to storm water related policies, programs and procedures.

Table 4. Measurable Goals & Implementation of the Programmatic Indicators for MCM 4

Programmatic Indicator	Measurable Goal	Implementation
4.1 Development of a regulatory mechanism	• Reducing the amount of TSS leaving individual construction sites by 80%. • Continued implementation of the ordinance.	• Implement construction site inspection in accordance with the regulations outlined by the ordinance. • Note any changes made to update the ordinance.
4.2 Site plan review process	• Continued site plan review and implementation of the development standards manual.	• Implement construction site inspection in accordance with the development standards manual. • Update the standards manual, as necessary.
4.3 Public participation	• Increased public awareness of procedures for making inquiries and/or requests for information regarding local construction activities.	• Address the construction site inquiry and request-for-information procedures in public education venues. • Track and document submitted inquiries and responses.
4.4 Annual training	• Ensure employees receive training on a yearly basis.	• Implement training on construction site plan review and inspection every year.

CHAPTER 5: POST-CONSTRUCTION SITE RUNOFF CONTROL

This MCM addresses post-construction storm water management in areas that have undergone new development or redevelopment. This is necessary because runoff from these areas has been shown to significantly affect receiving waterbodies. Many studies indicate that prior planning and design for the minimization of pollutants in post-construction storm water discharges is the most cost-effective approach to storm water quality management.

5.1 Development of a Regulatory Mechanism

An ordinance, titled "Control of Post Construction Storm Water Runoff" will be developed and implemented as the regulatory mechanism for construction site runoff control.

5.2 Site Plan Review Process

The City will review all non-MS4 operated post-construction storm water pollution prevention plans submitted and will inspect the sites after construction, while also giving the SWCD an opportunity to review plans within a predetermined time period prior to City approval.

MS4 projects need to be reviewed by the SWCD and will include the submittal of additional items. These include the use of any combination of storage, infiltration, filtering or vegetative practices to reduce the impact of pollutants in storm water runoff on receiving waters. These practices will have to meet several requirements, as detailed by the City's Stormwater Development Standards Manual.

The site plan review process should be generally described in the Ordinance with more detail provided by the City's Stormwater Development Standards Manual.

5.3 Annual Training

Employees should receive training on proper construction site plan review, inspection and enforcement in relation to storm water related policies, programs and procedures.

5.4 Development of an Operational & Maintenance Plan for Structural BMPs

A written operational and maintenance plan for all major structural stormwater BMPs should be developed and implemented, while also being detailed in the City's Stormwater Development Standards Manual. Major structural BMPs include, but are not limited to detention and retention basins.

In situations where the BMP is privately owned, operation and maintenance is the responsibility of the private owner. In accordance with a maintenance agreement that will be established in the Post-Construction Runoff Control Ordinance, the private owner will be required to properly maintain and operate the BMP in accordance with the Stormwater Development Standards Manual.

Table 5. Measurable Goals & Implementation of the Programmatic Indicators for MCM 5

Programmatic Indicator	Measurable Goal	Implementation
5.1 Development of a regulatory mechanism	• Reducing the amount of TSS leaving individual post-construction sites by 80%. • Continued implementation of the ordinance.	• Implement site inspection in accordance with the regulations outlined by the ordinance. • Note any changes made to update the ordinance.
5.2 Site plan review process	• Continued plan review and implementation of the development standards manual.	• Implement post-construction site inspection in accordance with the development standards manual. • Update the standards manual, as necessary.
5.3 Annual training	• Ensure employees receive training on a yearly basis.	• Implement training on post-construction site storm water pollution prevention plan review and inspection every year.
5.4 Development of an O&M Plan for structural BMPs	• Successful O&M of structural BMPs	• Implement O&M requirements of BMPs as outlined by established procedures. • Regularly inspect privately owned BMPs to ensure compliance.

CHAPTER 6: POLLUTION PREVENTION & GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

This MCM addresses pollution prevention and good housekeeping for municipal operations. This is a key element of the MS4 Program because it requires the MS4 Operator to examine and subsequently alter actions of municipal employees to help ensure a reduction in the amount and type of pollution generated by City operations. Programmatic indicators described briefly below are discussed in greater detail by the City's municipal Stormwater Pollution Prevention Plan (SWPPP).

6.1 Maintenance Activities, Schedules & Inspection of BMPs

This programmatic indicator addresses procedures for inspection, waste material removal and record keeping. It includes litter cleanup, stormwater structure and conveyance cleaning and maintenance, pavement sweeping, roadside shoulder and ditch stabilization, roadside vegetation care, and outfall scouring inspection and remediation.

6.2 Controls for Minimizing Pollutants from Operational Areas

This addresses procedures for reducing or eliminating the discharge of pollutants for the City's municipal operations. It includes procedures for salt and sand storage and application, designated snow disposal areas, containment facilities for accidental pollution, spill prevention and response, vehicular maintenance area BMPs, operational waste water controls, and minimization of pesticide and fertilizer usage.

6.3 Waste Disposal from MS4 Systems & Operational Areas

Proper waste disposal from MS4 systems and operational areas within the City should be implemented. All materials removed from separate storm sewer systems and operational areas, including dredge spoil, accumulated sediments, floatables and other debris must be recycled or reused or disposed of in accordance with applicable solid waste disposal regulations adhered to by the Huntington City Landfill. Hazardous waste will be disposed of in accordance with Federal, State and Local regulations.

6.4 Flood Management & Storm Water Quality Standards

The City has existing storm water infrastructure and structural BMPs that were built to manage storm water runoff. Currently, this includes two retention basins, one located in Memorial Park and the other in the industrial park area near Hauenstein Road. The City should review flood management facilities to determine if storm water quality control measures can be retrofitted into the existing design.

6.5 Annual Training of MS4 Personnel

Employees should receive training for established SWPPP procedures and the functions of implemented structural BMPs.

Table 6. Measurable Goals & Implementation of the Programmatic Indicators for MCM 3

Programmatic Indicator	Measurable Goal	Implementation
6.1 Maintenance activities, schedules & inspection of BMPs	• Reduction in the amount of storm water pollution caused by municipal operations.	• Implement activities in accordance with the SWPPP. • Track and document all associated activity.
6.2 Controls for minimizing pollutants from operational areas	• Reduction in the amount of storm water pollution caused by municipal operations.	• Implement activities in accordance with the SWPPP. • Track and document all associated activity.
6.3 Waste disposal from MS4 systems & operational areas	• Reduction in the amount of storm water pollution caused by municipal operations.	• Implement activities in accordance with the SWPPP. • Track and document all associated activity.
6.4 Flood management and storm water quality standards	• Improved storm water quality of existing structural BMPs, accomplished through applicable pollutant control retrofitting work.	• Review existing storm water flood control measures and implement storm water quality control retrofitting where deemed appropriate. • Document retrofitting activity.
6.5 Annual training of MS4 personnel	• Ensure employees receive training on a yearly basis.	• Implement training on SWPPP implementation and structural BMP functions every year. • Track and document training activities.