

Huntington Stormwater Utility



National Pollutant Discharge Elimination System (NPDES)

Stormwater Management Program Site Registration Application

WV Municipal Separate Storm Sewer Systems (MS4s)

General Permit WV0116025

Registration: WVR030033

March 31, 2016

Revised August 16, 2016

Section I. General Information

MS4 Operator

Part II A.

1.a. Name of City, County or other public entity that operates a small MS4:

Huntington Stormwater Utility

1.b. Mailing Address:

P O Box 7578, Huntington, WV 25777

Local staff contact, person responsible for overall program implementation and coordination.

1.c. Sherry Wilkins

1.d. Director

1.e. 304-781-1952

1.f. sherry.wilkins@huntingtonswu.com

Certification

47CSR10

By completing and submitting this application, I have reviewed and understand and agree to the terms and conditions of #WV0116025 small MS4 General Permit issued on June 22, 2009. I understand that provisions of the MS4 general permit are enforceable by law. Violations of any term and condition of the general permit and/or other applicable law or regulations can lead to enforcement action.

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.

2.a. Authorized signature Sherry Wilkins
(Mayor or Principle Executive Officer)

2.b. Print name Sherry Wilkins

2.c. Title Director

2.d. Date August 16, 2016

Co-permittees (Complete this section if co-permitting with another MS4 entity)

None

Section II. Storm Sewer System

Description of storm sewer system

Area (in acres) that drains into the MS4 from outside the corporate or jurisdictional boundaries:
1.4 million

- 4.b. Area (in acres) within current corporate or jurisdictional boundaries: 11,814 acres
4.c. For all MS4s, population (using the most recent U.S. Census data) for area served: 49,138.

Part IV.B.

- 4.d. Latitude and Longitude of representative outfall:
Longitude- Degrees: 82 Minutes: 26 Seconds: 30.97
Latitude- Degrees: 38 Minutes: 24 Seconds: 24.34

Part IV.B.

- 4.e. Describe the physical location of your representative outfall. If a street address is not possible use cross street descriptions.

The representative outfall is located on the North side of Fourpole creek near 8th Street. This is located in a dense residential neighborhood adjacent to a major roadway.

Part IV.B.

- 4.f. Describe your monitoring plan to include the frequency and parameters.

Sampling the representative outfall; along Fourpole Creek at 8th Street will occur twice per year in accordance with the MS4 general permit. [Stormwater samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previous measurable storm event (greater than 0.1 in rainfall)] Stormwater samples will be collected during normal business hours and during the “first flush” of rainfall runoff.

Parameter	EPA Method No.	Method Detection Limit (mg/l)
Total Kjeldahl Nitrogen	351.4	0.03
Nitrate Nitrogen	300.0	0.002
Nitrite Nitrogen	300.0	0.004
Total Nitrogen	*	*
Total Phosphorus	365.4	0.01

*Total nitrogen shall be reported as the total of Total Kjeldahl Nitrogen, Nitrate, and Nitrite.

It should be noted that the parameters of impairment listed for the Guyandotte River are mining related impacts; Dissolved Aluminum, pH, Fe, and Mn. Therefore they will not be included in the list of parameters tested at the representative outfall on Fourpole Creek.

Storm Sewer Infrastructure

Provide the most accurate number possible.

5.a. Storm sewers, in feet	22 miles
5.b. Open ditches, in feet	Unknown
5.c. Outfalls	95+
5.d. Catch basins	More than 2,400
5.e. Detention* facilities	None
5.f. Retention** facilities	None
5.g. Treatment facilities	None
5.h. Regional stormwater facilities	None

- 6.a. Does your MS4 receive stormwater discharges from WVDOT storm sewer system, roads or right-of-ways? Yes
- 6.b. Does your MS4 discharge into WVDOT storm sewer systems or right-of-ways? Yes
- 7. Is your MS4 interconnected with another MS4? (Does stormwater flow into or out of your storm sewer system to or from another MS4?) Yes, Marshall University, WV Division of Highways, and the unincorporated urbanized area of Cabell County.
- 8. Does your municipality contain combined sewer systems? Yes
- 9.a. What percentage is drained by Combined Sewer System? 90 - 95%
- 9.b. What percentage is drained by separate storm sewer system? 5-10%

Industrial Facilities owned by the MS4 entity

Part II.C.b.6.d.

- 10.a. Does your MS4 own and/or operate an industrial facility that discharges stormwater into the MS4?

There are no *municipal* industrial facilities that discharge into the MS4 system.

- 10.b. If yes, how many?

None.

Map Requirements

Please provide a legible map that identifies the following information: See accompanying map.

- 12.a. City, County or jurisdiction boundaries
- 12.b. State or Federal operated vocational/college/university campuses and military institutions
- 12.c. Urban area as defined by the 2000 Census, use 2010 Census data if available. ***The entire city of Huntington is located within an Urbanized Area as shown on the US Census Bureau maps.***
- 12.d. Municipal, County, or State wastewater treatment plants and their associated outfalls

- 12.e. Landfills
- 12.f. Municipal, County or State operated vehicle or fleet maintenance garages
- 12.g. Any other Municipal, County or State operated industrial activities, these could include; salt storage areas, parks and recreational areas, chemical storage areas, etc.
- 12.h. Arterial, Municipal, or State roads
- 12.i. Stormwater discharge points and receiving streams. *HSU is currently in the process of identifying the locations of stormwater outfalls along the Ohio and Guyandotte River. All of the KNOWN outfalls on the Ohio and Guyandotte are combined sewer overflows and are not MS4 stormwater outfalls.*
- 12.j. Streams and waterways within the MS4
- 12.k. Delineation of watershed area that drains into your MS4

Part.II.C.b.3.a.iv.

- 12.l. Submit paper maps folded to 8.5" x 11".

Part.II.C.b.3.a.iv.

- 12.m. Multiple maps must be of the same scale, 1:1000 or 1:2000.

Receiving Streams and Impaired Waterbodies/TMDLs

13. Locations & Pollutants of Concern

Name of receiving stream*	Catagory	Impaired? Yes or No	Parameters of impairment**	Has a TMDL been established? Yes or No
Ohio River	4a	Yes	Dioxin, Bacteria, PCBs	Dioxin, Yes. Bacteria and iron, no.
Guyandotte River (lower)	4a	Yes	CNA-Biological	Yes (Fecal Coliform and Iron)
Fourpole Creek Includes: Hisey Fork, Medley Fork, and Grapevine Branch	4a	Yes	CNA-Biological, Aluminum	Yes, Fecal Coliform
Pats Branch	4	Yes	Cu, Fl	No
Krouts Creek	5	Yes	CNA-Biological	No
Twelve pole Creek	5	Yes	CNA-Biological, Fecal Coliform, Iron	No

Fourpole Creek outfalls have been mapped. All known outfalls on the Ohio and Guyandotte River are combined sewer outfalls. All outfalls on the Ohio River must first pass through the floodwall pump stations. As outfall locations are verified, the storm sewer map will be updated. Other receiving stream information will be verified by field reconnaissance.

Dioxin, Copper, Fluoride and PCB's

Copper, Fluoride and PCB's are not found in urban stormwater runoff. Therefore, these pollutants are not addressed. A TMDL for Dioxin was developed in 2000, therefore it no longer is on the 303(d) list. Huntington received no wasteload allocation for Dioxin.

The WVDEP TMDL for Dioxin states the following:

The Ohio River upstream of the Kanawha River accounts for approximately nineteen percent of the total dioxin load at the harmonic mean flow, while the Kanawha River accounts for the remaining 81 percent of the Ohio River dioxin load. Even though the Ohio River meets water quality standards at the harmonic mean flow, a proportionate reduction (19 percent or 152 ug/day) in its dioxin load will be required to assist in meeting the water quality standard downstream. The remaining reduction need to meet water quality standards, 3452 ug/day or 87 percent of the Kanawha's dioxin load at harmonic mean flow, will be obtained from sources within the Kanawha River Basin.

The TMDL document further reiterates that the source of Dioxin is from upstream of ORM 266 (Pt. Pleasant). This point is well upstream of Huntington. Further, the reasonable assurance that this TMDL for the Ohio River can be met, will come from the commitment of EPA and ORSANCO to continue to search and to narrow its search for 2,3,7,8-TCDD (Dioxin) in the Upstream Ohio River from this segment.

Therefore, HSU will not monitor for Dioxin. Resources can be utilized elsewhere to effect water quality improvements.

Aluminum & Iron

Aluminum is the second most abundant cation at the earth's surface and is particularly abundant in clay and clay loam soils. Aluminum-rich clay minerals dominate the composition of all West Virginia upland soils. The stormwater control practices that address erosion and sediment control will manage aluminum pollution from being discharged off of construction sites.

Iron is also found in abundance in West Virginia soils. The stormwater control practices that address erosion and sediment control will manage iron pollution from being discharged off of construction sites.

CNA-Biological

A determination of biological impairment for West Virginia streams relates to the narrative water quality criterion addressed in §47 CSR 2-3.2.i. of WV Code. The criterion prohibits the presence of waste in state waters that cause or contribute to significant adverse impacts on the chemical, physical, hydrologic, and biological components of aquatic ecosystems. This is referred to as 'Conditions Not Allowable' and is denoted in the 303(d) list as 'CNA'. Biological impairment is caused by numerous pollutants, several of which are directly related to stormwater runoff from urban areas.

Urban stormwater runoff contributes pollutants such as sediment and fecal coliform bacteria to nearby streams through an increased volume in untreated flows that can disrupt the hydrologic and biological components of aquatic ecosystems. HSU believes that implementation of the runoff volume reduction Stormwater Management methodology at new and re-development is an excellent way to reduce CNA-Biological impairments.

Fecal Coliform & Bacteria

The Guyandotte River fecal coliform impairment is believed to be the result of discharges from sources other than MS4 outfalls, including; CSO outfalls, failing septic systems and wildlife. Accordingly, no specific activities are necessary for the MS4 discharges to the Guyandotte River other than normal BMP's.

- 14.a. List and quantify the BMPs you plan to implement to address each impairment. For each BMP describe how it is expected to control the pollutant of concern.

BMP 1(c) Signage throughout the City about proper Pet Waste Disposal. This will address the Fecal Coliform impairments.

BMP 1(d) Public discussion and talks at special events. The watershed model used at public events demonstrates what happens with pet waste and why it's important to pick up after pets.

The whole of the Illicit Discharge Detection and Elimination (IDDE) program will address fecal coliform, iron and sediment pollution. The IDDE program addresses these types of illicit discharges with the goal to remove these pollutants from entering receiving waterbodies.

The whole of the Construction Site (Sediment and Erosion control) program will address iron, sediment and aluminum pollution. Controlling sediment laden runoff from construction sites will help to keep these pollutants from entering receiving waterbodies.

The whole of Controlling Run-off from New Development and Redevelopment will address iron, sediment, CNA-Biological, aluminum and fecal coliform by reducing the *volume* of runoff that enters the separate storm sewer system. Volume reductions are the most effective means of reducing stormwater pollution. By reducing the volume of runoff, pollution never enters receiving water bodies.

Part III.D.1.b & Part III.D.2

- 14.b. Describe your monitoring plan for impaired waterbodies and those with TMDLs. Give locations and frequencies.

HSU has developed a monitoring program to sample on Fourpole Creek twice annually. HSU will analyze the data collected to determine the effectiveness of its programs. Data analysis means that the data from the samples is analyzed to determine whether or not the pollutant of concern is decreasing or staying the same. The following parameters will be analyzed:

1. Fecal Coliform
2. Aluminum

HSU will sample Fourpole Creek two times per year at three locations. The locations will be upstream before entering the corporate boundaries of Huntington, the representative outfall location and a location, yet to be determined, just before entry into the Ohio River. Parameters sampled will be fecal coliform and aluminum.

The Ohio and Guyandotte Rivers will not be sampled during this permit cycle because HSU is not aware of stormwater only outfalls on these rivers. Also, these are large volume rivers and it is not feasible or practical to sample in the river, unless on a boat.

- 14.c. If visual documentation of removal of pollutant sources, is a component of your plan please describe fully. For example, do you plan to use before and after photos?

Any visual documentation of pollutant removal will be documented in writing and with photographs if appropriate. There are some chemical pollutants that are not visible in a discharge or the stream, therefore photographs won't be useful. For the illicit discharges with pollutants that are not visible to the eye, sample analysis results will be used to determine pollutant removal.

Evaluating the effectiveness of your SWMP for impaired waterbodies/TMDLs

- 14.d. Explain how your approach is expected to achieve wasteload allocations for waterbodies with established TMDLs. Discuss flow monitoring, outfall monitoring, in-stream monitoring, modeling, and/or other methodology to evaluate effectiveness.

HSU will follow the General Permit's "Pathway to Compliance" for meeting wasteload allocations;

- a) Mapping
- b) Public Education
- c) BMP and MCM Implementation
- d) Monitoring
- e) Enforcement of IDDE, construction site runoff and new development and redevelopment minimum control measures.

- 14.e. Explain how will you determine if your SWMP and mix of BMP's need to be modified to meet wasteload allocations?

Lack of cooperation, if experienced, from those who are identified as causing pollution (violators of the Huntington Stormwater Utility Ordinances and regulations) may lead HSU to determine a need to modify the SWMP.

Section III. Minimum Control Measures

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

Part II.C.b.1.

Responsible Person

Identify the responsible person(s) for implementing this MCM. (There may be more than one person or different departments that provide outreach to various targeted groups. If so, discuss.)

- 15.a. Name: Sherry Wilkins
- 15.b. Title: Director
- 15.c. Department: Stormwater Utility
- 15.d. Address: P O Box 7578, Huntington, WV 25777
- 15.e. Phone number: 304-781-1952
- 15.f. Email address: sherry.wilkins@huntingtonswu.com

- 15.a. Name: Chad Minnick
- 15.b. Title: Stormwater Coordinator
- 15.c. Department: Stormwater Utility
- 15.d. Address: P O Box 7578, Huntington, WV 25777
- 15.e. Phone number: 304-781-1948
- 15.f. Email address: chad.minnick@huntingtonswu.com

Part II.C.b.1.

- 15.g. State your overall objective for this minimum control measure.

The overall objective is to educate the citizens and visitors of Huntington about the nature of polluted runoff and the part they can play to reduce pollution in our receiving streams, in order to improve stormwater runoff to impaired streams and meet wasteload allocations of the TMDL.

- 15.h. State and describe your BMPs. Indicate if BMP are part of your existing program.

BMP 1(a) – Stormwater Informational Inserts enclosed in customer sewer and stormwater bills

The Stormwater fee is *included* on the Sanitary Board sewer bill. This is an existing and ongoing BMP. Topics of inserts will include impacts of stormwater runoff, impervious surfaces, pet waste, vehicle maintenance, landscaping and rain water reuse. HSU has approximately 18,000 customers within the corporate boundary that will receive these inserts.

Measurable Goals – One insert in the Sanitary Board bills

Frequency – A minimum of one insert per year.

BMP 1(b) – Stormwater Information and Documents posted on the City of Huntington website

The City of Huntington website contains a webpage with HSU documents. This is an existing and ongoing BMP. The MS4 annual report, the approved SWMP, information for developers, and an informational brochure are posted. Once the revised SWMP is approved, it will be posted. The website also contains pertinent Stormwater Ordinances.

Measurable Goals – HSU will document that information is made available to the public on the City’s website. HSU will review the website annually and provide updated stormwater information when necessary.

Frequency - Ongoing

BMP 1(c) Signage posted in and around Ritter Park and surrounding areas about proper Pet Waste Disposal

This is an existing BMP. Signs that state pet waste is harmful, and to pick up after your pet will convey to dog walkers that pet waste should be properly disposed. This will help to reduce the amount of fecal coliform entering Fourpole Creek.

Measurable Goals – HSU will document the signs posted in various places around Ritter Park.

Frequency – HSU will add 5 additional pet waste signs in 2017, and place these in other areas of the City

BMP 1(d) – Public Discussion and talks at Special Events

This is an ongoing and existing BMP. Public discussion by HSU staff will occur at special events throughout the year on how residents can manage stormwater on their property. Talks will include discussion about water pollution, rain barrels and rain gardens. Special events where the public attend include large regional venues, earth day celebrations and neighborhood association meetings.

Measurable Goals – Participation in one public event and/or meeting per year.

Frequency - HSU will participate at least once per year in a public event.

BMP 1(e) – Information brochures targeted to businesses

This is an existing BMP. Stormwater information directed to the public, businesses, contractors and developers will be made available at city hall where building permits are issued. Topics will include proper use and storage of products used in vehicle operations, impacts of illicit discharges, stormwater stewardship, construction and post construction information.

Measurable Goals – HSU will provide a supply of at least two different brochures with a stormwater stewardship message targeting developers and various business owners.

Frequency – Brochure supply will be checked at least once per year and replenished if necessary.

- 15.i. Is another entity sharing responsibility for the BMP? If so, who? No other entity is sharing responsibility for public education and outreach.

MCM Components

Part II.C.b.1.a.i

- 15.j. Describe your education and outreach strategy targeting the general public.

The strategy is to educate the public, businesses and developers with printed information as well as face to face discussion. Topics of discussion include general stormwater stewardship, erosion & sediment control, stormwater practices at new & re-development, lawn and garden care, vehicle maintenance, and other appropriate stormwater messages for our community.

Part II.C.a.ii

- 15.k. Describe your education and outreach strategy targeting businesses including home-based and mobile businesses.

The same strategies as above will be utilized. However, HSU has developed specialized brochures that target businesses. These brochures will be available at City Hall where the building permits and business licenses are provided. They are also distributed at large regional venues, with a targeted audience of businesses, landscapers and the home improvement minded public. Mobile based businesses are required to obtain a business license to conduct business in Huntington.

Part II.C.b.1.a.iii.

- 15.l. Describe your education and outreach strategy targeting homeowners, landscapers, and property managers.

The same strategy as described above will be used to target all audiences. Public discussion by HSU staff occurs at special events throughout the year. Talks include discussion about water pollution, rain barrels, rain gardens, yard care, pesticide & fertilizer use and storage, carpet cleaning, auto repair, runoff reduction techniques, and stormwater facility maintenance. HSU participates in a large regional venue every year, which draws a large audience of residents and landscapers. HSU also has specialized brochures that target these businesses.

Part II.C.b.1.a.iv

- 15.m. Describe your education and outreach strategy targeting engineers, contractors, developers, review staff, and land use planners.

The same strategy as described above will be used to target all audiences. Public discussion by HSU staff occurs at special events throughout the year. Talks include discussion about water pollution, runoff reduction techniques, and stormwater facility maintenance. HSU has created a technical information handout that contains the requirements for development and redevelopment within the corporate boundaries of Huntington. This information is specifically targeted to engineers, contractors, developers and planners. It is available to the public and especially for engineers, contractors, developers, and land use planners on the City's website. It is also available upon request, and the City's Business Services Liaison also has this information to provide to new development requests.

Schedule

Part II.C.a.1

- 15.n. Provide a schedule for implementing each component, including dates for interim and full implementation.

BMP 1(a) – Stormwater Informational Inserts enclosed in customer sewer and stormwater bills

Implementation Schedule – Once per year

BMP 1(b) - Stormwater Information and Documents posted on the City of Huntington website

Implementation Schedule – Ongoing, and will continue to revise and update as necessary

BMP 1(c) Signage posted in and around Ritter Park and surrounding areas about proper Pet Waste Disposal

Implementation Schedule – Ongoing. Will increase the number of signs posted in 2017

BMP 1(d) – Public Discussion and talks at Special Events

Implementation Schedule – Will continue annually

BMP 1(e) – Information brochures targeted to businesses

Implementation Schedule – Will continue annually and add one new stormwater topic in 2017 and one new topic in 2018

Measurable Goals

Part II.B.4

15.o. List and fully describe your Measurable goal(s) for this MCM.

BMP 1(a) – Stormwater Informational Inserts enclosed in customer sewer and stormwater bills

Measurable Goal – A minimum of one insert per year. Inserts will contain various stormwater topics including impacts of stormwater runoff, impervious surfaces, pet waste, vehicle maintenance, landscaping and rain water reuse.

BMP 1(b) - Stormwater Information and Documents posted on the City of Huntington website

Measurable Goal – Ongoing, and will continue to revise and update as necessary The City of Huntington website contains a webpage with HSU documents. The MS4 annual report, the approved SWMP, information for developers, Ordinances and an informational brochure are posted. Once the revised SWMP is approved, it will be posted. The website will be reviewed at least once per year for updates if necessary. HSU will document that information is made available to the public on the City's website. HSU will review the website annually and provide updated stormwater information when necessary.

BMP 1(c) Signage posted in and around Ritter Park and surrounding areas about proper Pet Waste Disposal

Measurable Goal – HSU will add a minimum of 5 signs in 2017. HSU will photograph several of the existing signs in Ritter Park as documentation of signs. When new signs are added in 2017, these will also be documented with photographs.

BMP 1(d) – Public Discussion and talks at Special Events

Measurable Goal – Participation in one event per year. Public discussion by HSU staff will occur at special events throughout the year on how residents can manage stormwater on their property. Talks will include discussion about water pollution, rain barrels and rain gardens. Special events where the public attend include large regional venues, earth day celebrations and neighborhood association meetings.

BMP 1(e) – Information brochures targeted to businesses

Measurable Goal – HSU will provide a supply of at least two different stormwater brochures at City Hall where building permits are obtained. Topics will include proper use and storage of products used in vehicle operations, impacts of illicit discharges, stormwater stewardship, construction and post construction information. HSU will check the supply of brochures at least once per year and replenish if necessary.

Tracking

Part II.C.b.1.c.

15.p. Describe your plan to track the activities associated with this MCM.

Activities will be documented within a file system on a computer hard drive. And, copies of various contracts, trinkets, and brochures will be maintained on file.

Evaluation

Part II.B.7 & Part II.C.b.1.b.

15.q. Explain how you plan to gauge the effectiveness of your public education and outreach efforts.

The effectiveness of the program will be tracked via responses to surveys administered during public events, calls to the HSU stormwater hotline, and documentation of activities that are illegal and that may negatively impact receiving water bodies.

Public Involvement and Participation – MCM #2

Part II.C.b.2.

Responsible Person:

Identify the responsible person(s) for implementing this MCM. There may be more than one person or different departments responsible for various projects. If so, discuss.

- 16.a. Name: Sherry Wilkins
- 16.b. Title: Director
- 16.c. Department: Huntington Stormwater Utility
- 16.d. Address: P.O. Box 7578, Huntington, WV 25777
- 16.e. Phone number: 304-781-1952
- 16.f. Email address: sherry.wilkins@huntingtonswu.com

- 16.a. Name: Chad Minnick
- 16.b. Title: Stormwater Coordinator
- 16.c. Department: Huntington Stormwater Utility
- 16.d. Address: P.O. Box 7578, Huntington, WV 25777
- 16.e. Phone number: 304-781-1948
- 16.f. Email address: chad.minnick@huntingtonswu.com

16.g. State your overall objective for this minimum control measure.

The objective for this MCM is to engage the public in stormwater related activities and to provide input into HSU's stormwater program.

16.h. State and describe your BMPs. Indicate if the BMP is part of the existing program.

BMP 2(a) – Participation in Fourpole Creek Watershed Association

This is an existing BMP. HSU participates in regular meetings with the FCWA to pursue opportunities to work together on various projects.

Measurable Goals – HSU will attend a minimum of four meetings per year

Frequency – Four meetings per year

BMP 2(b) – Rain Barrel Demonstration Training

This is an existing BMP. HSU will conduct at least one rain barrel demonstration training per year. This may include demos at large public events, neighborhood association meetings, earth day events and other similar events that become known.

Measurable Goals – HSU will conduct one rain barrel demonstration per year

Frequency – Once per year

BMP 2(c) – Stormwater Utility Board meetings

This is an existing BMP. HSU has *monthly* board meetings that are open to the public and advertised in the local newspaper. These Board meetings are open to the public and there is always a place on the agenda for the public to speak and make comments about the Stormwater program and ongoing projects. There are at least 10 Board meetings per year.

Measurable Goals – At least 10 Board meetings advertised and held per year.

Frequency – Ten meetings advertised and held each year.

16.i. Is another entity sharing responsibility for the BMP? If so, who?

Fourpole Creek Watershed Association and the WVDEP.

MCM Components

Part II.C.b.2.

16.j. Describe at least two methods you plan to use to engage the public in your SWMP.

Advertise monthly Board meetings where the public is invited to participate in HSU's stormwater management program.

Rain barrel demonstrations at public events, neighborhood association meetings, and any other venue appropriate.

16.k. Describe how you will accommodate public participation in the decision making process for your SWMP.

Members of the public have an opportunity to comment on HSU's stormwater management programs every month at the Board meetings. The public may also contact HSU directly.

Part II.C.b.2.b

16.l. Describe your communication process for notifying groups of opportunities to become involved in stormwater activities in your watershed(s).

Communication is via the City's website, social media accounts, emails and phone calls.

Part II.C.b.2.c

16.m. List the URL of your *Stormwater* website.

www.cityofhuntington.com . Documents can be found in the "Document Center" of the website.

Schedule

Part II.C.a.1

16.n. Provide a timeline of implementation of each component of your program for this MCM, including dates for interim and full implementation.

BMP 2(a) – Participation in Fourpole Creek Watershed Association

Implementation Schedule – This is an ongoing BMP. HSU will attend a minimum of four meetings per year.

BMP 2(b) – Rain Barrel Demonstration Training

Implementation Schedule – This is an ongoing BMP. HSU will conduct one rain barrel demonstration per year, as events are made available.

BMP 2(c) – Stormwater Utility Board meetings

Implementation Schedule – This is an ongoing and continuing BMP. Monthly Board meetings are advertised each month. At least 10 Board meetings per year.

Measurable Goals

Part IV.A. & Part II.B.4

16.o. List and fully describe your measurable goal(s) for this MCM.

BMP 2(a) – Participation in Fourpole Creek Watershed Association

HSU participates in regular meetings with the FCWA to pursue opportunities to work together on various projects.

Measurable Goals – HSU will attend a minimum of four meetings per year

BMP 2(b) – Rain Barrel Demonstration Training

HSU will conduct at least one rain barrel demonstration training per year. This may include demos at large public events, neighborhood association meetings, earth day events and other similar events that become known.

Measurable Goals – HSU will conduct one rain barrel demonstration per year

BMP 2(c) – Stormwater Utility Board meetings

HSU has *monthly* board meetings that are open to the public and advertised in the local newspaper. There are at least 10 Board meetings per year.

Measurable Goals – At least 10 Board meetings advertised and held per year.

Tracking

Part II.B.7.

- 16.p. Describe your plan for tracking activities associated with this MCM.
Activities will be tracked in files on a computer hard drive.

Evaluation

Part II.B.7

- 16.q. Explain how you plan to gauge the effectiveness of your Public Involvement and Participation program.

HSU will determine the effectiveness by the number of people that are interested in participating in the events we offer. The effectiveness of the program will be gauged by the public participation received during the public Board meetings. It will also be gauged by tracking the number of comments and the amount of public participation received during the course of the SWMP revision and through email correspondence with public groups during event announcements.

Illicit Discharge Detection and Elimination – MCM #3

Part II.C.b.3.

Responsible Person

Identify the responsible person(s) for implementing this MCM. If there is more than one person or department responsible for implementation of this MCM, please discuss.

- 17.a. Name: Sherry Wilkins
17.b. Title: Director
17.c. Department: Huntington Stormwater Utility
17.d. Address: P.O. Box 7578, Huntington, WV 25777
17.e. Phone number: 304-781-1952
17.f. Email address: sherry.wilkins@huntingtonswu.com

- 17.a. Name: Chad Minnick
17.b. Title: Stormwater Coordinator
17.c. Department: Huntington Stormwater Utility
17.d. Address: P.O. Box 7578, Huntington, WV 25777
17.e. Phone number: 304-781-1948
17.f. Email address: chad.minnick@huntingtonswu.com

- 17.g. Is another entity sharing responsibility for the MCM? No

Control Objective & BMPs

17.h. State your overall objective for this MCM.

The objective for this MCM is to minimize and remove illicit discharges to the separate storm sewer system. This will be accomplished by implementing a program to locate illicit discharges to the separate storm sewer system, and illegal dumping into the separate storm sewer system.

17.i. State and describe your BMPs. Indicate if any BMPs are part of your existing program.

BMP 3(a) Separate Storm Sewer Map (Existing)

HSU will label 303d and TMDL receiving water on the HSU storm system map as well as the TMDL study areas. HSU will continue to add newly constructed storm system components and connections to the storm system map.

Measurable Goal:

1. Label all 303d and TMDL receiving waters on the storm sewer system map.
2. HSU will document the number of stormwater management structures constructed each year.

Implementation Schedule

1. HSU will label the receiving waters as 303(d) or TMDL on the separate storm sewer system map. Completed.
2. Document the number of stormwater management structures constructed each year. Continue annually.

BMP3(b) Delineation of impervious surfaces in Wayne County portion of Huntington

HSU will delineate all of the non-residential parcels of impervious surfaces for the Wayne County portion of Huntington that is a separate sewer system.

Measurable Goals

1. Delineate on the storm sewer map, impervious surfaces of non-residential parcels for the Wayne county portion of Huntington.

Implementation Schedule

1. Impervious surfaces of non-residential parcels will be completed within 24 months of SWMP approval.

BMP 3(c) Field Assessments

HSW will conduct at least one field assessment per year.

Measurable Goals

HSW will conduct at least one field assessment per year. Priority outfalls will be inspected during dry weather. Screening for illicit connections during field assessments shall be conducted in accordance with the CWP manual entitled: "Illicit Discharge Detection and Elimination". Field assessment results will be correlated with the parameters of impairment of impaired streams and streams with an established TMDL.

Implementation Schedule

One field assessment will be conducted each year during dry weather. This will take place before December 31 of each year.

BMP 3(d) Annual review of IDDE Ordinance

HSU will review the IDDE Ordinance annually for possible updates that may be needed.

Measurable Goals

HSU will review the IDDE Ordinance on an annual basis

Implementation Schedule

HSU will review the IDDE Ordinance on an annual basis before December 31 of each year. Any proposed changes will go before the Stormwater Utility Board and then to City Council for enactment.

MCM Components

Part II.C.b.3.a.

17.j. Do you have a current map of your municipal storm sewer system?

HSU has an incomplete map of the storm sewer system in a GIS database. Each year updates are made as financial resources are made available.

Part II.C.b.3.a.i

17.k. All known storm sewer outfalls?

HSU has mapped all of the known stormwater outfalls on Fourpole Creek. HSU is continuing to conduct field inspections to locate stormwater only outfalls on the Guyandotte and Ohio River.

17.l. Receiving waters? The MS4 map include receiving waters.

17.m. Structural BMP's owned, operated or maintained by the permittee?

The map includes the Huntington Floodwall system. The floodwall is part of the Huntington Stormwater System. There are no other structural BMPs owned or operated by the HSU.

17.n. The location and type of all other stormwater conveyances located within the boundaries of the permittees MS4 watershed?

No, not all of the stormwater conveyances are on the separate storm sewer map. As conveyances become known, they will be added to the map.

17.o. Updating the known connections to the municipal separate storm sewer authorized after July 22, 2009?

HSU updates the map as we become aware of new connections.

17.p. Geographic areas that discharge stormwater into the permittees MS4, which may not be located within the municipal boundary?

No. HSU will include geographic areas that discharge stormwater into the separate storm sewer system as they are made known.

Part II.C.b.3.b.

17.q. Do you have an IDDE Ordinance?

Yes, Article 969

Part II.C.b.3.b.

17.r. Describe your Ordinance review and update procedure, including milestones of IDDE Ordinance review.

The IDDE Ordinance will be reviewed annually, and if any updates are determined to be necessary, draft updates. Any revisions will be brought before the Huntington Stormwater Utility Board for their approval, and then to City Council for enactment.

Does your IDDE Ordinance prohibit the following:

Part II.C.b.3.ii

17.s. Discharges from hyperchlorinated water line flushing? Yes or No. If not, how are these discharges handled when they occur?

Yes. Section 969.05

17.t. Lawn watering and other irrigation runoff? Yes or No. If not, have you addressed lawn watering in your public education and outreach activities?

No. Lawn watering and irrigation runoff have not been a concern for illicit discharges because most of the residential areas are located in the combined sewer areas and lawn watering is not a significant pollution problem. HSU will address lawn watering and irrigation runoff public education and other public outreach activities.

17.u. Street, parking lot, and sidewalk wash water, and external building wash down? Yes or No. If not, have you addressed these types of runoff in your public education and outreach activities?

No, HSU will address these types of runoff in our public outreach and education activities

Part II.C.b.3.b.v.

17.v. Does your IDDE Ordinance include escalating enforcement procedures and actions?

Yes.

Part II.C.b.3.b.v.

17.w. Briefly describe your enforcement strategy.

The process for responding to reports of suspected illicit discharges is as follows:

1. All illicit discharges and spills will be logged in HSU's tracking system.
2. HSU staff who receive a complaint or report of an illicit discharge will notify the IDDE coordinator in writing the same day.
3. The IDDE coordinator, upon consulting with the HSU Director, will determine if any appropriate agency needs to be notified. If incomplete information is received from the initial complaint, HSU staff arriving on site to investigate will gather and update information in the incident response when they arrive on site.
4. HSU will dispatch staff to investigate the illicit discharge within 72 hours.
5. Field staff responding to the complaint will gather necessary equipment before leaving the office (e.g., a digital camera, Illicit Discharge Incident Tracking Form, water quality test kits, sample collection containers, etc.).
6. Field staff will arrive onsite, take photos, talk to property owners, interview witnesses, collect water quality samples, etc. The goal is to collect as much detailed information as possible. This is especially important if the situation necessitates escalating enforcement actions that potentially lead to litigation.
7. If necessary, a citation for a civil infraction will be issued if this is the third violation for the property owner, business, or contractor. Daily civil penalties shall also be assessed for each violation as outlined above.

Escalating enforcement actions listed in Article 969 shall be taken in the following order of precedence:

1. **First Violation:** written notice to cease and desist activity, notification of violation and warning, including education on preventing further illicit discharges.
2. **Second Violation:** written notice to cease and desist activity, and notice of violation and order of corrective action.
3. **Third Violation:** written notice to cease and desist activity, and citation for civil infraction shall be issued in accordance with the provisions of Article 969.

If the violator does not adequately respond to paragraph 1-3 above, HSU may pursue other additional remedies as authorized by Article 969.

Part II.C.b.3.c .

- 17.x. Describe your field assessment activities, including how many assessments you plan to conduct each year.

The tool used by HSU is an Outfall Reconnaissance Inventory (ORI). The ORI involves inspections of streams, in the separate storm system service area to locate outfalls and observe if there is water flowing from them during dry weather. Manholes located upstream of outfalls may also need to be surveyed during the ORI if a suspected illicit discharge is encountered. Outfalls will be inspected during dry weather to identify areas with flowing water that may indicate an illicit discharge.

In some cases, visual or olfactory observations of dry weather flow may be obvious enough to indicate that there is an illicit discharge occurring. If not, water quality sampling can be used to determine if the flow is from an illicit source.

Certain water quality parameters can indicate the likely presence or absence of a specific type of discharge. Some of these parameters can be measured in the field with test kits or probes; others must be analyzed in a laboratory. A wide variety of water quality parameters can be measured for an IDDE program, and many references exist that describe these parameters. HSU will conduct one assessment per year.

Part II.C.b.3.c.i.

17.y. Describe how you will locate “priority areas”.

Priority areas are located based on land use and general zoning of the parcels. Commercial and industrial areas are targeted as priority areas. *All sewersheds* located within the corporate boundaries of Huntington discharge into impaired waterbodies. By prioritizing the commercial and industrial areas, HSU is more likely to locate illicit discharges.

Part II.C.b.3.c .iii

17.z. Describe your procedures for characterization of illicit discharges.

1. Illicit discharges will be characterized by either sample analysis, field observations, odor, and visual appearance.
2. Field observations will be made at the illicit discharge location to determine the potential for harm to receiving streams.
3. Any discharge that is characterized as an imminent threat will be immediately contained and the DEP contacted.

Part II.C.b.3.c .iv

17.aa. Describe your procedures for tracing the source of the discharge.

Consult a map of the storm sewer system if available. Tracing the source of the discharge is conducted by three primary methods.

- a. Catch Basin and manhole investigation – following the illicit further upstream in the system.
- b. Drainage area Investigations: Drainage area investigations can be divided in two parts: office and field assessments. Office assessments prioritizing certain mapped drainage basins are based on screening factors. Land use can also be determined in the office.
- c. On-Site Investigations: Once a catch basin or drainage area investigation has pinpointed a particular property or several properties that may be contributing to the observed illicit discharge, HSU can conduct video inspection, dye testing or smoke testing to determine the source.

Part II.C.b.3.c.v

17.bb. Describe your procedures for removing the source of the discharge.

1. When an illicit discharge has been identified, the responsible party will be notified immediately or within five days. If waters of the State are threatened, HSU will notify the responsible party as soon as possible.
2. If appropriate, HSU will notify authorities (e.g., WVDEP or the local fire department) that an illicit discharge has been identified and will relay what actions that are being taken to stop the discharge.
3. Use escalating enforcement and legal actions if the discharge is not eliminated as outlined in Article 969.
4. Conduct follow-up inspections.

C.b.3.d.

17.cc. Describe how you will inform public employees, businesses and the general public of hazards associated with illegal discharges and improper disposal of waste.

HSU will publish a brochure for municipal employees, businesses and the general public that describe the hazards of illicit discharges and spills. The brochure will also be posted on the City's website. The information provided to the public employees and businesses will describe action they can take if they suspect an illicit discharge or spill. Municipal employees receive training once per year on the hazards of illegal discharges. HSU also has an illicit discharge phone number that is advertised for the public to call in the event they witness or have knowledge of an illicit discharge.

Part II.C.b.3.f.

17.dd. Describe your plan to training your staff on the identification and reporting of illicit discharges. Include the number of training sessions planned for each year.

Municipal employees are trained once per year in recognizing illicit discharges and how to report them to the proper HSU staff. HSU also provides print material to Utility and municipal employees who may see illicit discharges in the field.

Schedule

Part II.C.a.1

17.ee. Describe how and when you will implement each component of program, including dates for interim and full implementation.

Implementation for each BMP and their components are described above in 17.i. All BMP's that are described above are currently ongoing and fully implemented. HSU will continue to implement these

programs as described. The separate storm system map is updated on an continual basis and will ultimately result in a map will all conveyances and outfalls mapped.

Measurable Goals

Part II.B.4

17.ff. List and fully describe your Measurable goal(s) for this MCM:

The measurable goals are described above in 17.i.

Tracking:

Part II.C.b.3.d.ii & Part II.C.b.3.e.

17.gg. Describe your procedures for tracking activities related to each component of this MCM.

HSU will maintain documentation of all activities for this MCM by utilizing a filing system on computer hard drives. Copies of all investigation reports will be will be maintained in a file.

Evaluation

Part II.B.7

17.hh. Fully explain how you plan to gauge the effectiveness of your IDDE program.

The program's effectiveness will be evaluated through tracking the number of HSU stormwater connections approved, the number of staff trained on IDDE, the number of field assessment activities completed, the number of phone calls and emails received by HSU from customers with concerns on stormwater, and the number of illicit connections and spills investigated and corrections achieved.

Construction Site Run-off Control – MCM #4

Part II.C.b.4.

Responsible Person:

Identify the responsible person(s) for implementing this MCM. There may be more than one person or different departments responsible for various projects. If so, discuss.

18.a. Name: Sherry Wilkins

18.b. Title: Director

18.c. Department: Huntington Stormwater Utility

18.d. Address: P.O. Box 7578, Huntington, WV 25777

18.e. Phone number: 304-781-1952

18.f. Email address: sherry.wilkins@huntingtonswu.com

18.g. Is another entity sharing responsibility for this MCM? If so, who? No

Control Objective & BMPs

18.h. State your overall objective for this minimum control measure.

To minimize the discharge of sediment from construction sites by educating contractors, engineers, and architects on the proper design and implementation of erosion and sediment control BMP's, and requiring/regulating the same through a sediment and erosion control stormwater permit program, and conducting construction site inspections.

- 18.i. State and describe your BMPs. Indicate which BMPs are part of your existing program.

BMP 4(a) Sediment and Erosion Control Permitting process (Existing)

HSU will continue to require all construction projects located within the MS4 to obtain a Sediment Erosion Control stormwater permit before construction. Plans, drawings and calculation submitted with the Erosion & Sediment Control stormwater permit application will be reviewed to ensure proper discharge of stormwater and that all requirements under the MS4 are being met.

Measurable Goals

1. HSU will continue to receive and conduct plan review for sediment and erosion control stormwater permit applications for construction sites that are one acre and greater. HSU will document the number of E & S stormwater permit applications approved.

Implementation Schedule

1. *Continue* to document the number of E & S stormwater permit applications approved.

BMP 4 (b) Construction site erosion and sediment control Plan Review (Existing)

Continue review of proposed site plans for proper erosion and sediment control design. Provide comments to plans and review any revisions. Issue approval once all requirements are satisfied for construction site work. This BMP is ongoing and implemented as new sites are developed in the City.

Measurable Goals

1. HSU will document applications, reviews and approved site plans.
2. HSU will verify that approval has been obtained under the DWWM WV/NPDES construction stormwater permit for sites greater than one acre.

Implementation Schedule

1. HSU will *continue* to receive application, review and approve sediment & erosion control plans.
2. HSU will *continue* to verify WVDEP NPDES approval for sediment and erosion control plans.

BMP 4 (c) Construction Site Inspections (Existing)

HSU will continue to perform inspections at construction sites for compliance with the approved HSU Erosion and Sediment control permit.

Measurable Goals

1. HSU will conduct at least one inspection at a construction site during construction for compliance with the approved sediment and erosion control permit.
2. HSU will document comments received from the public regarding construction site concerns.

3. HSU will document all issued Notices of Violation and/or citations issued to permittees who fail to comply with the approved Erosion and Sediment Control permit.

Implementation Schedule

1. HSU will *continue* to document construction site inspections.
2. HSU will *continue* to document comments received from the public regarding construction site concerns.
3. HSU will *continue* to document all issued warning and/or Notices of Violation and/or citations to permittees or unpermitted development sites who have failed to comply with the approved Erosion and Sediment control permit.

BMP 4 (d) Training targeting Contractors, Engineers, and Site Managers (Existing)

Continue to educate contractors, engineers, and site managers on the protocol for application submission, proper installation and maintenance for sediment and erosion control BMPs by distributing educational information.

Measurable Goals

1. HSU will document the individuals and dates to which the stormwater informational materials were provided.

Implementation Schedule

1. Document the individuals and dates to which the HSU stormwater informational packet was provided. This will be done as often as necessary every year.

MCM Components

Part II.C.b.4.a.

18.j. Do you have an Ordinance to control construction site run-off? Yes

Construction Site Ordinance – Article 970, Erosion and Sediment Control

Part II.C.b.4

18.k. Does your program regulate disturbance of on acre or more and also less than one acre if part of a larger common plan? Does your Ordinance regulate disturbances of less than one acre? If so, what is the size threshold?

Yes. The Ordinance authorizes regulation of sites 5,000 square feet and greater. This includes sites that are one acre and greater and those that are part of a larger common plan of development. Redevelopment is included in development, therefore, redevelopment is regulated.

Part II.C.b.4.a.i-ix.

18.l. Does your Ordinance contain the nine required components?

The contents of the “nine required components” from the 2009 General Permit are referenced on page 20, sections 5.a.-7 of the 2014 General Permit.

The Huntington Stormwater Utility Ordinance contains the following components: sediment and erosion control BMPs; requirements for construction site operators to implement these BMPs and to control waste; demonstration of appropriate NPDES registration; authority for site plan review; authority for site inspections, and enforcement authority.

HSU collects an application fee when the sediment and erosion control application is submitted and has instituted a monthly stormwater fee that will fund inspections and enforcement.

HSU will provide one educational and training measure for construction site operators per permit cycle.

18.m. Describe the plan review process for your construction site run off program.

HSU has developed an application form and checklist for developers to utilize when developing their sediment and erosion control plan. HSU schedules a pre-application meeting if necessary to discuss permit requirements. The application, fee, narrative, and drawings are then submitted to HSU. The plans are reviewed by HSU staff and/or a contracted engineer. If there are deficiencies or comments to the plan, they are sent to the applicant in writing. WVDEP construction stormwater permit is verifies prior to HSU approval. Any revisions from the applicant are submitted and reviewed again before issuing final approval for the sediment and erosion control permit.

18.n. Describe the inspection process of your construction site run off program.

HSU will enter the site during active construction and periodically thereafter to inspect all of the sediment & erosion control BMP's, write an inspection report, and provide it to the permittee. Violations are recorded on the inspection report. If violations have not been corrected within the stated timeframe, a Notice of Violation will be issued. Enforcement actions will be escalated to a citation if necessary.

18.o. Describe the enforcement process of your construction site run off program.

If a violation is observed during an inspection, a warning is written on the inspection report and provided to the permittee. If the violation is not corrected in the stated time frame, a Notice of Violation is issued. If the violation is still not corrected within a defined amount of time, a citation is issued where the person(s) responsible would be assessed a penalty in accordance with the Ordinance.

If a non-compliance issue at a construction is deemed to be serious, HSU may require corrective action to begin immediately. In the event that the corrective action has not been completed in the stated time frame HSU may stop work at the site.

Part II.C.b.4.b.

18.p. Discuss how your program will address the regulation of both private and public sector construction site run-off.

The Construction stormwater Ordinance (Article 970) does not differentiate between public and private sector construction pollution. The process for public projects is the same as described above in 18.m. Construction projects by Marshall University and the WV Division of Highways are regulated under their respective MS4 permits.

Schedule

Part II.C.b.4.a.

- 18.q. The Ordinance shall be reviewed on an annual basis. Describe your Ordinance review and update procedures.

HSU staff will review the Erosion and Sediment Control Ordinance once per year. Any revisions deemed necessary will be brought before the Stormwater Utility Board for their approval, and then to City Council for their review and enactment.

- 18.r. If your Ordinance does not contain the standards required by the permit, provide a schedule for implementation and measureable goals for getting these components into your Ordinance. Include a mid-point and full implementation date.

HSU's Construction stormwater Ordinance meets the requirements of the MS4 permit.

Measurable Goals

Part IV.A. & Part II.B.4

- 18.s. List and fully describe your measurable goal(s) for this minimum control measure.

BMP 4(a) Sediment and Erosion Control Permitting process (Existing)

Measurable Goals

1. HSU will continue to receive and conduct plan review for sediment and erosion control stormwater permit applications for construction sites that are one acre and greater. HSU will document the number of E & S stormwater permit applications approved.

Implementation Schedule

1. Continue to document the number of E & S stormwater permit applications approved.

BMP 4 (b) Construction site erosion and sediment control Plan Review (Existing)

Measurable Goals

1. HSU will document applications, reviews and approved site plans.
2. HSU will verify that approval has been obtained under the DWWM WV/NPDES construction stormwater permit for sites greater than one acre.

Implementation Schedule

1. HSU will *continue* to receive application, review and approve sediment & erosion control plans.
2. HSU will *continue* to verify WVDEP NPDES approval for sediment and erosion control plans.

BMP 4 (c) Construction Site Inspections (Existing)**Measurable Goals**

1. HSU will conduct at least one inspection at a construction site during construction for compliance with the approved sediment and erosion control permit.
2. HSU will document comments received from the public regarding construction site concerns.
3. HSU will document all issued Notices of Violation and/or citations issued to permittees who fail to comply with the approved Erosion and Sediment Control permit.

Implementation Schedule

1. HSU will *continue* to document construction site inspections.
2. HSU will *continue* to document comments received from the public regarding construction site concerns.
3. HSU will *continue* to document all issued warning and/or Notices of Violation and/or citations to permittees or unpermitted development sites who have failed to comply with the approved Erosion and Sediment control permit.

BMP 4 (d) Training targeting Contractors, Engineers, and Site Managers (Existing)**Measurable Goals**

1. HSU will document the individuals and dates to which the stormwater informational materials were provided.

Implementation Schedule

1. Document the individuals and dates to which the HSU stormwater informational packet was provided. This will be done as often as necessary every year.

Tracking**Part II.B.7.**

- 18.t. Describe your plan for tracking activities associated with this minimum control measure.

HSU will track applications, reviews and approvals via a filing system. HSU will document the number of construction site inspections conducted. HSU will document the number of warnings, NOV's and citations issued. HSU will document the individuals and dates to which informational materials were provided.

Evaluation**Part II.B.7**

- 18.u. Explain how you plan to gauge the effectiveness of your Construction Site Run-off Control program.

The effectiveness of the Construction Site Run-off Control program will be gauged by the number of HSU Erosion and Sediment Control permits issued, the number of construction site inspections completed by the HSU staff along with the number of NOV's issued, number of citations given, the number of comments and/or complaints HSU receives on construction sites from the public, and the number of individuals that HSU has provided the stormwater informational packet to.

Controlling Run-off from New Development and Redevelopment – MCM #5

Part II.C.b.5

Responsible Person(s):

Identify the responsible person(s) for implementing this MCM. There may be more than one person or department responsible for various portions of this control measure, If so, discuss.

- 19.a. Name: Sherry Wilkins
- 19.b. Title: Director
- 19.c. Department: Huntington Stormwater Utility
- 19.d. Address: P.O. Box 7578, Huntington, WV 25777
- 19.e. Phone number: 304-781-1952
- 19.f. Email address: sherry.wilkins@huntingtonswu.com
- 19.g. Is another entity sharing responsibility for this MCM? If so, who? No.

Control Objectives & BMPs

- 19.h. State your overall objective for this MCM.

The objective of the post construction program is to control the release of pollution into receiving streams by managing stormwater on-site from new and re-development projects. HSU is currently and will continue to require new and redevelopment to manage the first inch of rainfall on site, by utilizing the runoff volume reduction method. By utilizing the runoff volume reduction method at development sites, HSU is reducing the amount of pollution that is entering impaired waterbodies and those waterbodies that have wasteload allocations under a TMDL.

MCM Components

Watershed Protection Elements

Part II.C.b.5.ai.

- 19.i. Have you incorporated the six watershed protection elements into your subdivision ordinance or equivalent document?

Five of the six watershed protection elements are included in either an Ordinance, policy, or comprehensive plan.

Name the document(s) where each element is found & give the review date for the document. * If there is no review, describe how you will incorporate the element into your document(s).

Watershed Protection Elements	Name of document that contains the element	*Review Date
1. Minimizing impervious surfaces	Incorporated into the existing stormwater management policy. The use of Green Infrastructure and Low Impact Development practices are required by our policy. <i>Minimizing impervious surfaces will be included in forthcoming post construction regulations.</i>	Annually reviewed
2. Preserving ecologically sensitive areas	Plan 2025, the City of Huntington's comprehensive plan. <i>Preserving ecologically sensitive areas will be included in forthcoming post construction regulations.</i>	Reviewed and updated once every ten years Post construction regulations will be reviewed annually
3. Reducing thermal impacts	Incorporated into the existing stormwater management policy. HSU currently requires developments to utilize the runoff volume reduction method of stormwater management, thus reducing thermal impacts. <i>Reducing thermal impacts will be included in forthcoming post construction regulations.</i>	June 2016 Post construction regulations will be reviewed annually
4. Reducing or avoiding hydromodification	Hydromodification to waters of the State is regulated by the Army Corps of Engineers. The City of Huntington is built out to the point that new hydromodification is virtually impossible. <i>Reducing or avoiding hydromodification will also be included in forthcoming post construction regulations.</i>	Post construction regulations will be reviewed annually
5. Tree protection	The City has an Urban Forestry ordinance that protects trees. <i>Tree protection will be included in forthcoming post construction regulations.</i>	Reviewed by the Urban Forestry Committee Post construction regulations will be reviewed annually
6. Protection of native soils, prevention of compaction of soils	Incorporated into the existing stormwater management policy. <i>Protection of native soils and prevention of compaction will be included in forthcoming post construction regulations.</i>	Annually reviewed

NOTE: All six of the watershed protection elements will be in the forthcoming post construction regulations.

Part II.C.b.5.a.i.B

19.j. List your quantifiable objectives for each watershed protection element, including time frames to achieve them.

1. The quantifiable objective for the Watershed Protection Element 1, Minimizing Impervious Surfaces, is to encourage developments to decrease the impervious cover on their sites. HSU currently requires new and redevelopment to utilize the runoff volume reduction method of stormwater management at sites, which effectively minimizes impervious surfaces.

Once HSU has completed the impervious surface mapping of the entire City, all non-residential parcels will be billed the HSU Water Quality Fee based on the amount of impervious surface on their parcel, as described in and

currently governed by Article 935.06. An added incentive to reducing the amount of impervious surface on any non-residential parcel will be to reduce the amount of the Water Quality Fee.

2. The quantifiable objective for the Watershed Protection Element 2, Preserve Ecologically Sensitive Areas, is to inventory, restore and protect stream banks using “Natural Stream Design” methods, where appropriate, when HSU projects disturb 300 linear feet or more of stream banks in accordance with US Army Corps of Engineering permitting requirements.

3. The quantifiable objective for the Watershed Protection Element 3, Reduce Thermal Impacts, is to reduce the effects of stormwater runoff from new developments and redevelopment projects to the waters of the state by requiring all new and redevelopment projects to utilize the runoff volume reduction method of stormwater management at sites, which effectively reduces thermal impacts to receiving waters.

4. The quantifiable objective for the Watershed Protection Element 4, Reducing or Avoiding Hydromodification, is to reduce the effects of stormwater runoff from new developments and redevelopment projects to the waters of the state by requiring all new and redevelopment projects to utilize the runoff volume reduction method of stormwater management at sites. The US Army Corps of Engineers regulates hydromodification to waters of the United States, which very effectively causes development to avoid hydromodification completely.

5. The quantifiable objective for the Watershed Protection Element 5, Tree Protection, is to require new and re-development to preserve trees on development sites when and where feasible.

6. The quantifiable objective for the Watershed Protection Element 6, Protect Native Soils, is to require new and re-development sites to protect native soils when doing earthwork on a site. HSU will also inventory, restore and protect streambanks, using “Natural Stream Design” methods, where appropriate, when HSU projects disturb 300 linear feet or more of stream banks, and in accordance with the US Army Corps of Engineers permitting requirements.

19.k. State and describe your BMPs. Indicate if any BMPs are part of your existing program.

BMP 5(a) Development of Post Construction Regulations

HSU will develop regulations that will require the management of the first one inch of rainfall at new and redevelopment sites that will supplement HSU’s current policy that requires runoff volume reduction at new and re-development of one acre or greater and sites that may be less than one acre but part of a larger common plan of development.

Measurable Goal

Development of Regulations for Post Construction stormwater management at new and re-development

Implementation Schedule

June 2016 - Development of draft regulations. (This has been completed) July 2016, Regulations brought before the Stormwater Utility Board for their approval. December 2016 Post construction regulations finalized and approved.

BMP 5(b) Review and approval of post construction stormwater management practices at new and re-development (Existing)

Measurable Goal

1. Receive, review and approve plans and drawings for stormwater management at new and re-development sites. HSU requires the runoff volume reduction of 1” rainfall capture at new developments of one acre or

greater, or part of a larger common plan of development. Re-development is required to use the same runoff volume reduction method, but may receive a reduction of the one inch based on the incentive criteria that is met. Maximum reductions will not exceed 0.75”.

2. Require stormwater practice operation and maintenance agreements at new and re-development sites. Maintenance agreements are signed by the applicant and maintained on file at HSU offices.

Implementation Schedule

1. HSU will *continue* to receive application, review and approve post construction stormwater management practices at new and re-development sites.

2. HSU will *continue* to require signed maintenance agreements at new and re-development sites.

Site Design Standards

Part II.C.b.5a.ii.A.1.

19.l. Do you have an ordinance or other enforcement mechanism for the required site design standards? If not, what is your schedule of implementation? Include mid-term and full implementation dates for Ordinance review and enactment.

Yes. However, HSU is currently in the process of writing post-construction regulations that are more detailed and enforceable.

Part II.C.b.5.ii.A.2.i,ii

19.m. Does your Ordinance have provisions for reducing pollutant loadings for stormwater discharges from Hot Spots? If the project is a potential hot spot and cannot meet water quality treatment with on-site controls, are there provisions for proper disposal of stormwater discharges at a treatment/disposal facility?

HSU's policy and current Ordinances does not specifically mention hot spots, but these types of facilities are not approved without the appropriate stormwater management practice in place that will meet water quality treatment. HSU has the authority to refuse developments that refuse to meet pollution requirements for hot spots. HSU is currently writing post construction stormwater regulations that will address Hot Spots.

Part II.C.b.5.ii.A.2.iii

19.n. Do you know where drinking water source protection areas are located within your MS4 watershed? Describe how this information will be kept confidential, and made available to WVDEP only when requested.

Yes. West Virginia American Water has an intake on the Ohio River. This is common knowledge throughout Huntington. HSU will only provide this information upon verification of the requesting party.

19.o. Describe your program for reducing impervious surfaces.

HSU's water quality fee will provide incentive for non-residential parcels to reduce the amount of impervious surface in order to reduce their water quality fee. Customers with less impervious surface will pay less.

In addition, HSU requires the runoff volume reduction methodology which is based on managing the amount of stormwater created by impervious surfaces. The more impervious surfaces, the more stormwater management that is required, thus a higher cost. The incentive is for developers to reduce the amount of impervious so that they're managing less stormwater, which has a lesser cost.

- 19.p. If you choose mitigation/payment in lieu for those projects that cannot implement the one inch runoff reduction requirements, please provide a time frame for creating an inventory of appropriate mitigation projects, and your process to develop standards to value, evaluate, and track transactions.

HSU does not intend to offer a mitigation or payment in lieu program.

Part II.C.b.5.ii.B.(1)

- 19.q. Describe the planning process for new development and redevelopment projects in your MS4.

Pre-application discussions and/or meetings take place with the developer in the early planning stages.

Plans and drawings are submitted to the HSU for technical review

Comments or corrections and resubmittal if necessary after review is completed and discussed with developer.

Approval is issued after corrections made and maintenance agreement is signed.

Part II.C.b.5.ii.B(2)&(3)

- 19.r. Describe your plan review and approval process for new development and redevelopment projects.

All new and re-development projects that are one acre or greater, or part of a larger common plan of development, submit plans and drawings to HSU. An engineering review will take place to determine if the development is complying with the runoff volume reduction stormwater requirements. Deficiencies and/or comments are then sent to the applicant in writing. The applicant responds with revisions. If the revisions are satisfactory, HSU will create a maintenance agreement for signature. Once the maintenance agreement is signed, the HSU writes an approval letter for the proposed development.

Part II.C.b.5.ii.C

- 19.s. Describe your maintenance procedures for structural stormwater control practices including a detailed discussion about maintenance agreements & your ability to enforce them.

Stormwater management structures are privately owned. Maintenance agreements are required to be signed by the applicant before approval is issued. The agreement specifies the maintenance to be accomplished depending on the type of stormwater management facility that is constructed at the site. Each agreement is specific to the development. If the stormwater management facility is not being adequately maintained, a Notice of Violation is written. HSU is currently writing stormwater management regulations that will address maintenance non-compliance and strengthen our

enforcement of the agreements. The post construction regulations are anticipated to be completed by December 2016.

II.C.b.5.ii.D

- 19.t. Describe your method of inventory and tracking of stormwater control practices for this MCM.

ALL projects and their stormwater control facilities are maintained in an inventoried filing system starting at the beginning of the permit process. ALL stormwater control facilities that HSU permits are verified and placed into a GIS mapping database. Data points include location and type of stormwater control facility. Inspection results, including photos, maintenance activities, inspections and data from inspections are maintained in the development's facility file.

Part II.C.b.5.ii.E

- 19.u. Describe your inspection protocol for ensuring stormwater control BMPs/practices function as designed and constructed: How many per year? How often?

During construction, the applicant is required to have a qualified individual on site (can be a professional engineer) document that the practice was installed correctly. When construction is complete, as-built drawings are submitted. After the construction phase, HSU staff will conduct inspections. If the inspections reveal non or mal-functioning structures, the applicant is notified to repair. All stormwater management facilities will be inspected at least once before August 11, 2019. The total number of stormwater management facilities that have been permitted will determine how many are inspected per year. As the number grows larger, a larger amount will need to be inspected every year. HSU will inspect all stormwater management facilities at least once per permit cycle.

Part II.C.b.5.b.

- 19.v. Does your MS4 have requirements for street design, parking, and parking lots? If so, which departments regulate this?

Yes. The City Public Works Department follows WVDOT standards for street design and on-street parking. The City's Development and Planning Department has regulations concerning parking design that are found within the Zoning Ordinances in sections 1343 and 1387. Street design improvement standards are described in section 1389.04.

Schedule

Part II.C.b.5

- 19.w. Describe how and when you will implement each component of this minimum control measure. Include mid-point and full implementation dates for Ordinance revisions, implementation of plan review and approval, inspection and enforcement procedures, and for developing/acquiring and using a tracking system.

All components exist and fully implemented except for the finalization and approval of post construction regulations. HSU anticipates completion and approval of the post-construction regulation by December 2016.

Measurable Goals

Part IV.A

19.x. List and describe your measurable goals for this MCM.

BMP 5(a) Development of Post Construction Regulations

Measurable Goal

HSU will develop and finalize post construction regulations that will require the management of the first one inch of rainfall at new and redevelopment sites and sites that may be less than one acre but part of a larger common plan of development. The regulation will supplement HSU's current policy that requires runoff volume reduction at new and re-development of one acre or greater. December 2016 Post construction regulations finalized and approved.

BMP 5(b) Review and approval of post construction stormwater management practices at new and re-development (Existing)

Measurable Goal

1. HSU will *continue* to receive, review and approve plans and drawings for stormwater management at new and re-development sites. HSU requires the runoff volume reduction of 1" rainfall capture at new developments of one acre or greater, or part of a larger common plan of development. Re-development is required to use the same runoff volume reduction method, but may receive a reduction of the one inch based on the incentive criteria that is met. Maximum reductions will not exceed 0.75".
2. HSU will *continue* to require stormwater practice operation and maintenance agreements at new and re-development sites. Maintenance agreements are signed by the applicant and maintained on file at HSU offices.

Evaluation

Part II.B.7

19.y. Describe how you plan to gauge the effectiveness of your program for this MCM.

HSU will gauge the effectiveness of this MCM by tracking the number of post construction projects that are reviewed and approved that meet our regulatory requirements.

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

Part II.C.b.6

Responsible Person(s):

Identify the responsible person(s) for implementing this MCM. There may be more than one person or different departments responsible for various projects. If so, discuss.

- 20.a. Name: Sherry Wilkins
20.b. Title: Director
20.c. Department: Huntington Stormwater Utility
20.d. Address: P.O. Box 7578, Huntington, WV 25777
20.e. Phone number: 304-781-1952
20.f. Email address: sherry.wilkins@huntingtonswu.com
20.g. Is another entity sharing responsibility for this MCM? If so, who? None

Control Objectives & BMPs

- 20.h. State your overall objective for this MCM.

The objective for this MCM is operation and maintenance and good housekeeping at municipal facilities. The Huntington Stormwater Utility, or the City of Huntington does not have municipal operations that are located within the separate storm sewer system drainage area. The public works garage and the salt storage area of the city are located within the combined sewer area of the City. The Huntington Sanitary Board conducts street sweeping throughout the entire city. Road salt is applied on City owned streets by the Public Works Department. Road salt on the State owned roads is applied by the WV Division of Highways.

Approximately 90% of the City of Huntington (Huntington Sanitary Board) sanitary sewer system is a combined sewer. The area that is drained by a combined sewer is not part of the MS4. HSU cannot expend resources on industrial –type facilities that are located in the combined area, when those discharges, by design, flow to the wastewater treatment facility. During rain events, when the sewer lines are surcharged, combined sewer overflows are activated and discharge to the Ohio River. These discharges are covered under the Huntington Sanitary Board’s NPDES permit.

According to 40 CFR 122.26(b)(8), “municipal separate storm sewer means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

- (i) Owned *or operated* by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law)...including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the Clean Water Act that discharges into waters of the United States.
- (ii) Designed or used for collecting or conveying stormwater;
- (iii) ***Which is not a combined sewer***; and
- (iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

- 20.i. State and describe your BMPs. Indicate if any BMPs are part of your existing program.

BMP 6(a) Street Sweeping (Existing)

Measurable Goal

The Huntington Sanitary Board conducts street sweeping off all City streets at least once per year. Street sweeping is conducted in both the combined and the separate storm system area of the city. At the end of the season, the number of curb miles swept and tons of debris removed are tabulated and documented.

Implementation Schedule

Streets are swept at least once per year in the spring, summer and fall.

BMP 6(b) Employee Training (Existing)

Measurable Goal

At least once per year, HSU provides training to employees of the City's public works department, field employees of the Sanitary Board and field employees of the Stormwater Utility. Employees are trained on the importance of protecting water quality and how they can do this in their job activities, MS4 general permit requirements, operation and maintenance standards, inspection procedures, selecting appropriate BMPs, procedures for preventing and/or minimizing impacts to water quality, and procedures for reporting water quality concerns such as illicit discharges.

Implementation Schedule

Employees receive stormwater training at least once per year. New HSU employees whose construction, operations, or maintenance job functions may impact water quality will receive training within 3 months of their hire date.

MCM Components

Part II.C.b.6

20.j. List the municipal facilities and their locations owned by your MS4.

None.

The list of the entities in the 2009 SRA was erroneous. Except for the Wastewater Treatment plant and the two city public works areas, the entities on the list do not meet the criteria for municipal facilities as they do not discharge any particular certain type of pollutant or more frequently than any other type of building.

The Sanitary Board office, Floodwall Building, police station, and the Fire stations are buildings that do not generate pollutants that discharge into the MS4. The activities conducted there do not constitute the building a "municipal facility".

The Dietz Hollow landfill has been closed since the mid 1990's. All leachate and stormwater runoff from the landfill flow into the sanitary sewer and not the MS4.

The public works garage and the salt storage area, which are owned by the City are located in the combined sanitary sewer system. Stormwater runoff flows into the combined sewer system and not the MS4.

Part II.C.b.6.a

20.k. Briefly describe your operation and maintenance program for each municipal facility.

N/A

Part II.C.b.6.a

20.l. Does each site have a pollution prevention plan? Is there a spill response plan included in the pollution prevention plan? If not, provide a time frame for developing pollution prevention plans at all MS4 owned municipal facilities, including mid-point and full completion dates.

N/A

Part II.C.b.6.b

20.m. Have you identified all the lands owned or operated by your MS4? (Such as parks, road right-of-ways, maintenance yards, and water/sewer/stormwater infrastructure.)

HSU has not identified all the roads and road right-of-ways that are located in or discharge into the MS4. All of the separate storm sewered areas are not clearly known or mapped. HSU is investigating and subsequently mapping the separate storm sewered areas within the corporate boundaries of Huntington.

The Wastewater Treatment Facility is covered under its own NPDES permit. Parks within the corporate boundaries of Huntington are owned and operated by the Greater Huntington Parks and Recreation District (GHPRD). The GHPRD owns parks throughout Cabell County and are not a component of municipal government. Harris Riverfront Park is owned by the Federal Government and operated by the GHPRD and does not discharge into HSU's MS4 – it discharges directly in the Ohio River. There are no *industrial* activities that take place at Harris Riverfront Park.

As stated above in 20.j., the public works garage and salt storage area discharge stormwater to the combined sewer system and not the MS4.

Part II.C.b.6.b

20.n. Describe your overall pollution control approach policy and procedures for these lands.

All roads in the City, including those within the separate sewered areas and discharge into the MS4, are swept once per year by a street sweeper. This project began in the summer of 2015.

Part II.C.b.6.c

20.o. Describe your training program including your target employees, and how often training occurs.

HSU conducts employee training once per year. Training is described above in 20.i.

20.p. For any industrial facilities owned or operated by your MS4, list each facilities registration number under the WV NPDES General Permit for Storm Water Discharges Associated with Industrial

Activities or the individual WV NPDES permit number. If your industrial facilities are not covered under another NPDES permit, you must will prompted to provide additional information below.

None. Huntington Sanitary Board permit number for the wastewater treatment plant is WV0023159.

Schedule

Part II.C.b.6

20.q. Describe how and when you will implement each component of your program for this minimum control measure. Include mid-point and full implementation dates.

BMP 6(a) Street Sweeping (Existing)

Implementation Schedule

Streets are swept at least once per year in the spring, summer and fall. The number of curb miles swept and tons of debris removed are tabulated and documented.

BMP 6(b) Employee Training (Existing)

Implementation Schedule

Employees receive stormwater training at least once per year. New HSU employees whose construction, operations, or maintenance job functions may impact water quality will receive training within 3 months of their hire date. The date of the training will be documented. The topics of the training will be documented. This will continue annually. Document the number of new hires trained.

Part II.C.b.6

20.r. Describe the inspection schedule for ensuring municipal facilities are in compliance with pollution prevention plans.

N/A

Measurable Goals

Part IV.A

20.s. List and fully describe your measurable goals for this MCM.

BMP 6(a) Street Sweeping (Existing)

Measurable Goal

The Huntington Sanitary Board conducts street sweeping off all City streets at least once per year. Street sweeping is conducted in both the combined and the separate storm system area of the city. At the end of the season, the number of curb miles swept and tons of debris removed are tabulated and documented. Streets are swept at least once per year in the spring, summer and fall.

BMP 6(b) Employee Training (Existing)

Measurable Goal

At least once per year, HSU provides training to employees of the City's public works department, field employees of the Sanitary Board and field employees of the Stormwater Utility. Employees are trained on the importance of protecting water quality and how they can do this in their job activities, MS4 general permit requirements, operation and maintenance standards, inspection procedures, selecting appropriate BMPs, procedures for preventing and/or minimizing impacts to water quality, and procedures for reporting water quality concerns such as illicit discharges. Employees receive stormwater training at least once per year. New HSU employees whose construction, operations, or maintenance job functions may impact water quality will receive training within 3 months of their hire date.

Tracking

Part II.B.7 & Part II.C.b.6.a.iii

- 20.t. Describe your plan for record keeping and tracking of facilities, employee training, pollution prevention plans, and inspections for this MCM.

Street sweeping activities are tracked in CityWorks, an asset management database system. Training sessions are documented by the sign-in sheets of the employees that attend. All sign-in sheets are maintained by HSU.

Evaluation

Part II.B.7

- 20.u. Explain how you plan to gauge the effectiveness of your good housekeeping/ municipal operations program efforts?

HSU can determine effectiveness of street sweeping by the amount of debris that is removed from the streets. Effectiveness can also be gauged by the number of employees that are trained each year.

Industrial Stormwater Coverage for Municipal Operations

If your facility/s discharges stormwater from any industrial operation that is not covered under another NPDES permit, you must now obtain coverage for those discharges.

- 20v. For each facility, provide the name and contact information of the operator if applicable.

N/A

- 20w. For each outlet, list the latitude and longitude to the nearest second and the River Mile Point (if known).

N/A

Outlet Number	Longitude	Latitude	River Mile
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20.x. List the Standard Industrial Classification (SIC) Code designated for your facility/s.

N/A

20.y. List the nature of activity at the industrial facility.

N/A

20.z. Is there a wet pond at your facility that collects runoff from areas on which industrial activities occur?
If so, how many acres drain into it?

N/A

20.aa. Is there a dry pond at your facility that collects runoff from areas on which industrial activities occur?
If so, how many acres drain into it?

N/A

20.bb. Do any of your storm water outlets discharge through an oil water separator? If yes, provide the outlet numbers.

N/A

Based on your responses to this section, a Discharge Monitoring Report may be issued.