



National Pollutant Discharge Elimination System (NPDES)

Storm Water Management Program

Site Registration Form

for

West Virginia

Municipal Separate Storm Sewer Systems (MS4s)

General Permit WV0116025

The site registration application (SRA) is for local governments or other regulated entities to submit the required information necessary for their Stormwater Management Program (SWMP) for compliance under the National Pollutant Discharge Elimination System (NPDES) MS4 General Permit to discharge stormwater runoff from a small municipal separate storm sewer system (MS4).

An authorized signature as required by 47CSR10 is needed to complete the application. All information should be included on this form or if needed, additional information can be attached at the end of the SRA.

Two (2) copies of the site registration application form shall be mailed to the address below.

**West Virginia Department of Environmental Protection
Division of Water and Waste Management – MS4 Program
601 57th Street, SE
Charleston, WV 25304**

Section I. General Information

MS4 Operator

Part II A.

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

City of Benwood

1.b. Mailing Address:

430 Main Street, Benwood, WV 26301

Local staff contact, person responsible for overall program implementation and coordination.
(This is the person DEP will contact as the need arises for more information and/or details about your stormwater management program or general questions concerning stormwater in your community.)

1.c. Name: Sean Lake
1.d. Title: Collective System Supervisor
1.e. Phone: 304-232-4320
1.f. E-mail address: slake@benwoodwv.gov

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 July 11, 2014. 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 _____
(Mayor or Principle Executive Officer)

2.b. Print name Walter Yates

2.c. Title Mayor

2.d. Date _____

Section II. Storm Sewer System

Description of storm sewer system

- 4.a. Area (in acres) that drains into the MS4 from outside the corporate or jurisdictional boundaries: 705 acres
- 4.b. Area (in acres) within current corporate or jurisdictional boundaries: 1,190 acres
- 4.c. For all MS4s, population (using the most recent U.S. Census data) for area served: 1,420
(Universities: give current enrollment plus staff and faculty. Transportation agencies: give population of your MS4 in urbanized areas. Prisons; give current inmate plus staff population.)

Part IV.B.

- 4.d. Latitude and Longitude of representative outfall:
Longitude – Degrees: 40 Minutes: 01 Seconds: 18
Latitude – Degrees: 80 Minutes: 43 Seconds: 37

Part IV.B.

- 4.e. Describe the physical location of your representative outfall. If a street address is not possible use cross street descriptions. On Boggs Run approximately 165' northeast from the intersection of Blanche Avenue and Roosevelt Avenue.

Part IV.B.

- 4.f. Describe your monitoring plan to include the frequency and parameters. Stormwater samples will 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 measureable storm event (greater than 0.1 in rainfall). Samples for each six month period will be collected at least three months apart. Grab samples will be taken during the first thirty minutes of the discharge. Where collection of a grab sample during the first thirty minutes is impractical, a sample will be taken during the first hour of the discharge and the City will submit an explanation with the monitoring report on why a grab sample during the first thirty minutes was impractical. Samples will be taken for the following:

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 Phosphorous	365.4	0.01

All samples will be collected and preserved in accordance with the methods listed in the preceding table. A certified laboratory will be used to do the analysis. A chain of custody will be kept with the results. Results will be submitted electronically through the WVDEP electronic Discharge Monitoring Report (eDMR) and a set of results will be kept on file. The Total Nitrogen value reported on the eDMR will be the sum of the following parameters: Total Kjeldahl Nitrogen, Nitrate Nitrogen and Nitrite Nitrogen. If all three constituents of the total nitrogen are not detected at the method detection limit (MDL), the City of Benwood will sum the actual MDLs for each constituent and report the results as less than the calculation. When calculating the sum of the constituents for total nitrogen, the City of Benwood will use the actual analytical results when these results are greater

than or equal the MDL for a particular constituent and use zero for a constituent if one or two of the constituents are less than the MDL. The methods and detection levels in the previous table will be used unless the City of Benwood to use an EPA-approved method with a detection level equal to lower than those specified.

Storm Sewer Infrastructure

Provide the most accurate number possible.

5.a. Storm sewers, in feet	2,000*
5.b. Open ditches, in feet	1,000*
5.c. Outfalls	6*
5.d. Catch basins	100*
5.e. Detention facilities	0
5.f. Retention facilities	0
5.g. Treatment facilities	0
5.h. Regional stormwater facilities	0

* - estimates

- 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?) If yes, describe. Yes, the Cities of Wheeling and McMechen abut Benwood and stormwater becomes intermingled.
8. Does your municipality contain combined sewer systems? Yes
- 9.a. What percentage is drained by Combined Sewer System? 98%
- 9.b. What percentage is drained by separate storm sewer system? 2%

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? Yes.
- 10.b. If yes, how many? One

(Item 11 is intentionally empty)

Map Requirements

Please provide a legible map that identifies the following information: See map attached to end of report.

- 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
- 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
- 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

Part III.D.1

List all named receiving waters within your MS4 jurisdiction. Indicate those identified as impaired pursuant to Clean Water Act Section 303(d). For a listing of West Virginia's impaired water bodies and the source of impairment please use WVDEP's most recent 303d list found at this website:

http://www.dep.wv.gov/WWE/watershed/IR/Pages/303d_305b.aspx

Part III.D.1.a.

13. Locations & Pollutants of Concern

Name of receiving stream	WV Code	Integrated Report Category	TMDL Code	303D List or TMDL	Parameters of impairment	303d List Cycle/TMDL Approval Date
Ohio River	WVO-us	5		303d 303d	Dioxin Bacteria	2012 draft
Boggs Run	WVO-86	5	OUS-15	303d TMDL TMDL	CNA-Biological Iron Fecal Coliform	2012/2009
McMechen Run		5	N/A	N/A	N/A	N/A

Please add additional pages if needed to list your Receiving Waterbodies and any impairments.

****IMPORTANT****

MS4s that discharge into a receiving water which has been listed on the West Virginia Section 303(d) list of impaired waters, and with discharges that contain the pollutant(s) for which the water body is impaired, ***must document in the SWMP how the BMPs will control the discharge of the pollutant(s) of concern.*** They must demonstrate that there will be no increase of the pollutants of concern. As you work your way through, describing the various practices, consider how that BMP will address or control the pollutant of concern.

If your MS4 discharges into a water body with an approved TMDL, and that TMDL contains requirements for control of pollutants from the MS4 stormwater discharges, then your SWMP must include BMPs ***specifically targeted to achieve the wasteload allocations prescribed by the TMDL.*** A monitoring component to assess the effectiveness of the BMPs in achieving the wasteload allocations must also be

included in the SWMP. Monitoring shall be specific for the pollutants of concern and be of sufficient frequency to determine if the stormwater BMPs are adequate to meet wasteload allocations. Monitoring can entail a number of activities including but not limited to: outfall monitoring, in-stream monitoring, and/or modeling.

- 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.

Fecal Coliform

1. Educate residents and businesses on pet waste on website.
 - By educating our citizens and businesses, we expect to control or decrease fecal contamination to impaired streams
2. Establish a hot-line (phone number) on website for reporting sewage leaks/sewage odors.
 - Citizens and businesses can report any illicit discharges on our hotline, and the city can respond to mitigate discharges, thereby controlling or reducing fecal contamination to impaired waters. Hotline calls will validate that citizens are aware of illicit discharges (fecal, sedimentation-Fe).
3. Perform inspections for illicit connections, illicit discharges, and improper disposal into the separate storm sewer system.
 - Inspections of the stormwater system may catch discharges in their incipient stage, or failing infrastructure that can be repaired before complete failure, preventing fecal discharges into impaired waters.

Iron (Fe)

Iron impairments will be controlled through the construction ordinance with Erosion and Sediment Controls (ESC). Iron in sediments will be controlled or mitigated by:

1. Giving site operators specific information/requirements (ESC) when applying for permits
2. Performing inspections of the construction site

CNA Biological

- * Benwood will educate via website on fecal and the use (minimization) of salt for deicing, and resulting chlorides in streams to address the biological impairment. Through education for fecal and salt use, the City expects to control the biological impairment

Dioxin

No known historical or current industrial sources.

14.b. Describe your monitoring plan for impaired waterbodies and those with TMDLs. Give locations and frequencies. We plan to use modeling to address monitoring concerns for the TMDLs of Fecal Coliform and Iron (Fe).

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?

Yes. 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.

By implementation of the BMPs for Fecal Coliform and Iron (Fe), we expect to control wasteload allocations. Modeling will be used to address monitoring to TMDL waterbodies.

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

By tracking and reviewing our BMPs measurable goals, and modeling information, we will decide if our BMPs and approach needs to be changed to meet wasteload allocations.

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: Sean Lake
15.b. Title: Collective System Supervisor
15.c. Department: Public Works
15.d. Address: 430 Main Street, Benwood, WV 26301
15.e. Phone number: 304-232-4320
15.f. Email address: Slake@benwoodwv.gov

Part II.C.b.1.

- 15.g. State your overall objective for this minimum control measure. To provide an education program to residents and businesses and aimed at reducing or eliminating behaviors and practices that contribute to stormwater pollution.
- 15.h. State and describe your BMPs. Indicate if BMP are part of your existing program.
1. BMP – Stormwater Page on City's Website
- Create a web page dedicated to the City of Benwood Stormwater Program. Site will include current annual report, approved copy of the SWMP, schedule of upcoming program events, stormwater hotline number, design information, and other educational materials for public review.
- 15.i. Is another entity sharing responsibility for the BMP? If so, who? No.

MCM Components

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

- 15.j. Describe your education and outreach strategy targeting the general public. On the website, Benwood will provide information on general impacts of stormwater pollution, impacts from impervious surfaces, vehicle maintenance, and pet waste.

Part II.C.a.ii

- 15.k. Describe your education and outreach strategy targeting businesses including home-based and mobile businesses. On the website, Benwood will provide information on use and storage of products used in vehicle operation and repair, cleaning supplies, and related wastes.

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

- 15.l. Describe your education and outreach strategy targeting homeowners, landscapers, and property managers. On the website, Benwood will provide information on pesticide/fertilizer use and storage, yard care techniques, and impervious surfaces.

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. On the website, Benwood will provide information on Erosion and Sediment Controls (ESC), impacts of increased stormwater flows, and requirements of stormwater ordinances.

Schedule

Part II.C.a.1

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

1. BMP –Stormwater Page on City’s Website

Implementation Schedule:

- Work with web page programmer on creation of a stormwater page on the existing City website (www.benwoodwv.gov) within six months following SWMP approval.
- Have a functional website within twelve months following SWMP approval.
- Report messages provided on the website in the Annual Report.

Measurable Goals

Part II.B.4

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

1. BMP –Stormwater Page on City’s Website

Measurable Goal:

- ~~X~~ • Count website views on the stormwater website.

Tracking

Part II.C.b.1.c.

- 15.p. Describe your plan to track the activities associated with this MCM. Benwood will track number of website views (hits) and will document, file, and provide in Annual Report.

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. Benwood will look at the measurable goals (website hits and hotline callers) and website information to determine if additional BMPs are needed, or existing efforts should be changed or modified.

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: Sean Lake
16.b. Title: Collective System Supervisor
16.c. Department: Public Works
16.d. Address: 430 Main Street, Benwood, WV 26301
16.e. Phone number: 304-232-4320
16.f. Email address: Slake@benwoodwv.gov
- 16.g. State your overall objective for this minimum control measure. Offer opportunities for the public to participate in stormwater management and implementation.
- 16.h. State and describe your BMPs. Indicate if the BMP is part of the existing program.
- * 1. BMP – ORSANCO's Ohio River Sweep Program
 - Participate in the Ohio River Sweep Program (June of each year) by providing information on the website and furnishing bags for participants.
 - 2. BMP – Place Stormwater Management Program and Annual Reports on the Website
 - Place documents on the website and ask for comments.
- 16.i. Is another entity sharing responsibility for the BMP? If so, who? No.

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.

Promote the ORSANCO River Sweep Program by placing information on the website and furnishing trash bags to participants. Post our Stormwater Management program (SWMP) on the website for review and comment.

Part II.C.b.2.a

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

*

Public can review and comment on the Stormwater Management Program (SWMP) on the website. Benwood will consider public comments when reviewing and/or updating SWMP.

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).

Benwood will communicate primarily through the website to advertise of publicize events, meetings, or issues related to stormwater management. Additionally, brochures may be mailed to supplement website information.

Part II.C.b.2.c

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

City will make stormwater page and list URL in upcoming Annual Report.

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.

1. BMP – ORSANCO's River Sweep Program

Implementation Schedule:

- Provide information on website by April of each year and bags at the event in June.

2. BMP –Comments on the Stormwater Management Program

Implementation Schedule:

- Provide SWMP and Annual Reports on stormwater page of City's website three months following creation of the stormwater page.

Measurable Goals

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

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

1. BMP –ORSANCO's River Sweep Program

Measurable Goal:

- Track number of participants at event.

2. BMP –Comments on the Stormwater Management Program

Measurable Goal:

- Benwood will summarize (quantify) website comments on Stormwater Management Program and consider when reviewing/updating program.

Tracking

Part II.B.7.

- 16.p. Describe your plan for tracking activities associated with this MCM. Benwood will document website comments/responses and file; participation events, with number of participants, will be documented and filed; both activities will be part of the annual report.

Evaluation

Part II.B.7

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

The effectiveness of the Public Involvement and Participation program will be measured by number of comments received on program on website and number of participants in annual event.

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: Sean Lake
17.b. Title: Collective System Supervisor
17.c. Department: Public Works
17.d. Address: 430 Main Street, Benwood, WV 26301
17.e. Phone number: 304-232-4320
17.f. Email address: slake@benwoodwv.gov
17.g. Is another entity sharing responsibility for the MCM? If so, who? No.

Control Objective & BMPs

17.h. State your overall objective for this MCM. Develop a program to prohibit improper disposal, detect and remove illicit connections, and eliminate illicit discharges to the storm sewer system.

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

- ☒ 1. BMP – Storm Drain Mapping
- Create a map of the MS4 that includes all known outfalls, stormwater collection system, receiving streams, geographical areas that discharge to the MS4 and structural BMPs.
2. BMP - Screening of Stormwater System Outfalls for Dry Weather Discharges
- Inspect and sample outfalls during dry weather once per year.
3. BMP – Staff Training
- Conduct annual staff training on the proper procedure for identifying, reporting, and removing illicit discharges.

MCM Components

Part II.C.b.3.a.

17.j. Do you have a current map of your municipal storm sewer system? No Yes

Do your map components include/do you plan to include: Benwood plans to include the following:

Part II.C.b.3.ai

- 17.k. All known storm sewer outfalls? Yes.
17.l. Receiving waters? Yes.
17.m. Structural BMP's owned, operated or maintained by the permittee? Yes.
17.n. The location and type of all other stormwater conveyances located within the boundaries of the permittees MS4 watershed? Yes.
17.o. Updating the known connections to the municipal separate storm sewer authorized after July 22, 2009? Yes.

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

Part II.C.b.3.b.

17.q. Do you have an IDDE Ordinance? No.

Part II.C.b.3.b.

17.r. Describe your Ordinance review and update procedure, including milestones of IDDE Ordinance review. Within 12 months of approval of the SWMP, the City of Benwood will update the Stormwater Ordinance to the requirements of the Permit. An annual review will occur to determine if amendments are required and the City will submit provide information on changes with the following Annual Report.

Does your IDDE Ordinance prohibit the following: (for updated Ordinance)

Part II.C.b.3.ii

17.s. Discharges from hyperchlorinated water line flushing? Yes. If not, how are these discharges handled when they occur?

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

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

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

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

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

17.w. Briefly describe your enforcement strategy.

Strategy will include escalating enforcement as follows:

- First Event - Written warning
- Second Event – Ticket with fine.
- Third Event – Ticket with larger fine.
- Fourth and Following Events – Escalating fines/possible jail time.

For emergency situations, the City will correct the situation and back charge the property owner for the corrective action.

Part II.C.b.3.c.

17.x. Describe your field assessment activities, including how many assessments you plan to conduct each year. Two field assessments will be conducted per year to detect any illicit discharges to the Benwood separate stormwater system and receiving streams.

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

17.y. Describe how you will locate “priority areas”. Priority areas will be located based on business/industrial use of land and storage of large quantities of (chemical) materials that could potentially be spilled into the stormwater system.

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

17.z. Describe your procedures for characterization of illicit discharges. Discharges will be visually inspected to determine nature-odor, color, size of spill or potential for additional release, and presence of any materials in flow that could be attributed to business/industrial operations. Sampling of discharge may be performed, if warranted, to further define discharge. Any pollution reported or discovered will be investigated within 15 days if not an emergency spill that must be immediately contained.

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

17.aa. Describe your procedures for tracing the source of the discharge. Visual inspections will be conducted first, and manholes opened if necessary. Water samples will be collected if needed. Mobile camera or smoke testing will be used only if other procedures are not sufficient.

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

17.bb. Describe your procedures for removing the source of the discharge. Property owners or business operators will be notified of illicit discharges in order to correct or eliminate the discharge. The city may remove sources of discharges if immediate action is needed, and seek reimbursement from responsible party. Authorities, such as the WVDEP or others, will be notified if removal is beyond the capabilities and resources of the city.

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. Public and businesses will be informed of hazards of illegal discharges through the city website. If there is an immediate threat to public health or environment, the city will inform the public and businesses through radio or television announcements.

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 field staff who are responsible for IDDE will be trained annually.

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.

1. BMP – Storm Drain Mapping

Implementation Schedule:

- Create a map within the first year following approval of the SWMP. Mapping will be updated annually.

2. BMP - Screening of Stormwater System Outfalls for Dry Weather Discharges

Implementation Schedule:

- Perform observations along receiving stream during the dry period from August through October beginning within 12 months of SWMP approval.

3. BMP -Staff Training

Implementation Schedule:

- Provide public works staff training within 12 months of SWMP approval. Continue program annually.

Measurable Goals

Part II.B.4

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

1. BMP -Storm Drain Mapping

Measurable Goal:

- Create a system map meeting the requirements of the Permit and update annually.

2. BMP - Screening of Stormwater System Outfalls for Dry Weather Discharges

Measurable Goal:

- Inspect twice per year.

3. BMP -Staff Training

Measurable Goal:

- Train public works staff on the importance of reporting and removing illicit discharges.

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. Benwood will document passage of ordinance and place on website, and thereafter, document annual review/update-these records will be filed for hard copy or retained electronically. IDDE inspections will be documented and filed. Annual training will be documented and filed. All activities will be detailed in the annual report to WVDEP.

Evaluation

Part II.B.7

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

Effectiveness of IDDE program will be measured by passage of ordinance and annual review, completion and documentation of the IDDE inspections, and number of staff trained annually.

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: Sean Lake
18.b. Title: Collective System Supervisor
18.c. Department: Public Works
18.d. Address: 430 Main Street, Benwood, WV 26301
18.e. Phone number: 304-232-4320
18.f. Email address: slake@benwoodwv.gov

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. Minimize the amount of pollutants that leave construction sites of one acre or greater or less than one acre if part of a larger common plan.
- 18.i. State and describe your BMPs. Indicate which BMPs are part of your existing program.
1. BMP – City Construction Site Inspection
 - Provide construction site inspections and documentation to ensure the BMPs required and approved erosion and sediment control plans are being met.
 2. BMP – City Site Plan Review
 - Review site plans for construction projects within the City. Approval of the plans will not occur until stormwater issues have been addressed.

MCM Components

Part II.C.b.4.a.

- 18.j. Do you have an Ordinance to control construction site run-off? No, but will be completed within 12 months of approval of the SWMP.

Part II.C.b.4

- 18.k. Does your program regulate disturbance of one acre or more and also less than one acre if part of a larger common plan? It will. Does your Ordinance regulate disturbances of less than one acre? No. If so, what is the size threshold?

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

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

Part II.C.b.4.b.

- 18.m. Describe the plan review process for your construction site run off program. Construction applications/permits will be reviewed by the Utilities Superintendent and the city clerk's office for stormwater compliance. If there are any deficiencies, applicant will be notified and required to address outstanding items, and then plans will be reviewed again.
- 18.n. Describe the inspection process of your construction site run off program. Construction sites will be inspected prior to work beginning, during construction (and storm event if possible), and after completion to insure erosion and sediment controls are in place, effective, and the site is stabilized after work is done.
- 18.o. Describe the enforcement process of your construction site run off program. If violations of the construction ordinance are found by inspectors, site operator will be notified of the issue. Work will be stopped if immediate action is required. A written notice may be issued, but at the minimum, the violation will be documented. If violation is not corrected within 24 hours, upon a reinspection, a ticket or fine may be issued. If not corrected within 48 hours, the city may opt to correct the deficiency and bill owner/operator for fees incurred.

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. Both public and private sector construction will be held to the same standards as far as ordinance requirements of plan review, inspection, and corrective actions. If a public employee is responsible for violations, they may be retrained at the discretion of the Utilities Superintendent.

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. Ordinance, when developed, will be reviewed annually by Utilities Superintendent and Director of Public Works for recommendations to the Mayor. Updates will be referred to City Council by the Mayor for approval.
- 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. Draft Ordinance will be created within 9 months of approval of the SWMP and full implementation will occur within 12 months of approval of the SWMP.

Measurable Goals

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

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

1. BMP –City Construction Site Inspections

Measurable Goal:

- Document the number of construction site inspections.
- Document the number of construction site violations.

2. BMP –City Site Plan Review

Measurable Goal:

- Document the number of site plans reviewed.

Tracking

Part II.B.7.

- 18.t. Describe your plan for tracking activities associated with this minimum control measure. Document construction site inspections and site plan reviews and file.

Evaluation

Part II.B.7

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

Tracking the number of construction site inspections that are performed and the number of violations found and number of site plans reviewed.

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: Sean Lake
19.b. Title: Collective System Supervisor
19.c. Department: Public Works
19.d. Address: 430 Main Street; Benwood, WV 26301
19.e. Phone number: 304-232-4320
19.f. Email address: Slake@benwoodwv.gov

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 overall objective is to continue to develop an ongoing program to reduce pollutants in stormwater runoff from new development and redevelopment activities. This program will be focused on increased ground water recharge to help reduce the stormwater discharges to receiving streams.

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? No, but will incorporate once Ordinance created. 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	Storm Water Ordinance*	Annually
2. Preserving ecologically sensitive areas	Storm Water Ordinance (reference to West Virginia Stormwater Management and Design Guidance Manual)*	Annually
3. Reducing thermal impacts	Storm Water Ordinance*	Annually
4. Reducing or avoiding hydromodification	Storm Water Ordinance*	Annually
5. Tree protection	Codified Ordinance*	Annually
6. Protection of native soils, prevention of compaction of soils	Storm Water Ordinance*	Annually

* - Future Ordinance

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.

Develop and implement Storm Water Ordinance that includes the six watershed elements twelve months after approval of the SWMP and review/update annually.

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

1. Inventory Structural BMPs

- Make a list of structural BMPs in the City and update annually.

2. Inventory List of Maintenance Agreements with Developers

- Make a list of maintenance agreements with developers for structural BMPs and update annually.

3. Train Staff on Inspections

- Create a checklist for site inspections and train staff annually on how to perform.

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? No. If not, what is your schedule of implementation? Include mid-term and full implementation dates for Ordinance review and enactment. Nine months following approval of the SWMP, a draft Ordinance will be provided to the City administration for review. Approval of the Ordinance by City Council will occur twelve months following approval of the site application form.

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? When created, it is anticipated that the Ordinance will address 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. When created, yes.

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? Yes. Describe how this information will be kept confidential, and made available to WVDEP only when requested. Information will be available at the City Building and will only be made available to WVDEP employees requesting in person.
- 19.o. Describe your program for reducing impervious surfaces. During site plan reviews, developments that have high amounts of impervious surfaces will be requested to reduce the amount of impervious areas to assist with reduction in size of stormwater control measures to meet the one-inch capture requirements. The City also informs developers on the use of green infrastructure initiatives that are available.

- 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. Benwood will control one inch runoff at project site through ordinance.

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

- 19.q. Describe the planning process for new development and redevelopment projects in your MS4. When applications are requested for development, stormwater requirements and stormwater information will be provided along with application. Developers will be also directed to the city website and ordinances/stormwater page for further information. Stormwater / Utilities Superintendent and city clerk contacts will be provided to clarify further questions.

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

- 19.r. Describe your plan review and approval process for new development and redevelopment projects. In order to receive approval for all proposed developments and redevelopments disturbing greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, within the corporation limits, the City requires the following:

- 1) A final site plan must be submitted for review.
- 2) If necessary, a re-approval process takes place when changes to a proposed plan are desired.
- 3) Document that a submittal of 'as-built' certifications within 90 days of completion of a project or penalties will occur.
- 4) Define the post-construction verification process to ensure that stormwater standards are being met, which includes enforceable procedures for bringing noncompliant projects into compliance.
- 5) Educate both internal staff and external project proponents on the requirements of long-term stormwater controls.

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. City will maintain any city owned structural control practices, and document inspections performed within the permit term. City will also inspect any private structural stormwater control practices within the city jurisdiction within the permit term to insure they function properly and maintained.

Privately owned structural control practices will be required to have a maintenance agreement to maintain structures. Agreements and properly functioning structures will be enforced by ordinance.

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

- 19.t. Describe your method of inventory and tracking of stormwater control practices for this MCM. Inventorying of structural control practices will be performed and listed/filed and place/updated on map annually.

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? Inspection protocol will be to inspect by checklist once per permit term all practices to ensure proper function / operation.

Part II.C.b.5.b.

- 19.v. Does your MS4 have requirements for street design, parking, and parking lots? No. If so, which departments regulate this? Public Works will regulate once applicable.

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.
1. Inventory Structural BMPs
 - Make a list of structural BMPs in the City within six months from approval of the SWMP and update annually.
 2. Inventory List of Maintenance Agreements with Developers
 - Make a list of maintenance agreements with developers for structural BMPs within six months from approval of the SWMP and update annually.
 3. Train Staff on Inspections
 - Create a checklist for site inspections within six months from approval of the SWMP and train staff annually on how to perform.

Measurable Goals

Part IV.A

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

1. Inventory Structural BMPs
 - Document the list of structural BMPs in the City has been developed and updated.
2. Inventory List of Maintenance Agreements with Developers
 - Document the list of maintenance agreements with developers has been developed and updated.
3. Train Staff on Inspections
 - Document inspection trainings.

Evaluation

Part II.B.7

- 19.y. Describe how you plan to gauge the effectiveness of your program for this MCM. Effectiveness of this MCM will be gauged by the inventories of the structural BMPs and maintenance agreements with developers and the training sessions of staff on inspections of the structural BMPs.

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: Sean Lake
20.b. Title: Collective System Supervisor
20.c. Department: Public Works
20.d. Address: 430 Main Street, Benwood, WV 26301
20.e. Phone number: 304-232-4320
20.f. Email address: Slake@benwoodwv.gov

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

Control Objectives & BMPs

20.h. State your overall objective for this MCM. Reduce polluted runoff from municipal operations.

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

1. Stormwater Pollution Prevention Plan for City-Owned Properties
 - Create a pollution prevention plan and maintenance standards/procedures-review/update annually.
2. Train Employees on SWPPP
 - Train employees annually on plan/procedures.
3. Inspect City-Owned Properties
 - Inspect facilities once per year

MCM Components

Part II.C.b.6

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

City Garage – Marshall Street

Part II.C.b.6.a

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

Vehicle and equipment repair and storage, fueling of vehicles, salt storage.

Part II.C.b.6.a

20.l. Does each site have a pollution prevention plan? No. Is there a spill response plan included in the pollution prevention plan? N/A. If not, provide a time frame for developing pollution prevention plans at all MS4 owned municipal facilities, including mid-point and full completion dates. Mid-

point will be six months following approval of the SWMP and full completion will be twelve months following approval of the SWMP.

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.) Yes.

Part II.C.b.6.b

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

For parks and streets, grass clipping and brush/debris will be removed to compost or solid waste landfill.

Part II.C.b.6.c

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

Employees for utility and street departments will be trained annually; other administrative staff will be trained to recognize and report pollution to utilities/street department.

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 will be prompted to provide additional information below.

Collection System – WV0020648

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.

1. Stormwater Pollution Prevention Plan for City-Owned Properties

Implementation Schedule:

- Create a SWPPP for each of the municipal facilities within the City within 12 months of receiving the approved SWMP and update annually.

2. Train Employees on SWPPP

- Trained annually after development of SWPP.

3. Inspect City-Owned Properties

- Complete within one year of stormwater management plan approval, and annually thereafter with the use of a checklist by qualified employee

Part II.C.b.6

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

Once per year at public works garage.

Measurable Goals

Part IV.A

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

1. Stormwater Pollution Prevention Plan for City-Owned Properties

- Develop SWPP/procedures and review/update annually.

2. Train Employees on SWPPP

- Train employees annually.

3. Inspect City-Owned Properties

- Inspect facilities annually.

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.

SWPPP/procedures will be maintained at public garage and electronically; review/update of SWPPP/procedures will be documented/filed. Hard copies of employee training and inspections will be filed. All numbers for measurable goals will be documented in annual report to WVDEP.

Evaluation

Part II.B.7

20.u. Explain how you plan to gauge the effectiveness of your good housekeeping/ municipal operations program efforts? By development of SWPPP/procedures, number of employees trained, and inspections of facility which will assess understanding of training.

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. Garage area drains discharge to waste treatment plant.

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

Remainder:

Sean Lake
430 Main Street
Benwood, WV 26301
(304) 232-4320
Slake@benwoodwv.gov

20.w. For each outlet, list the latitude and longitude to the nearest second and the River Mile Point (if known).
None

Outlet Number	Longitude			Latitude			River Mile
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds	

20.x. List the Standard Industrial Classification (SIC) Code designated for your facility/s.

Garage – 5013
Salt Storage – 2819

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

City Building and Park – Garage, office buildings, pool, park.

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? No.

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? No.

20.bb. Do any of your storm water outlets discharge through an oil water separator? If yes, provide the outlet numbers. No.

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