

Section I. General Information

MS4 Operator: Part IIA.

1.a. Name of City: City of Moundsville
No. WVR030013

General Permit Registration

1.b. Mailing Address: 800 6th Street, Moundsville WV 26041

County: Marshall

1.c. Staff Contact: Larry R. Bonar 1.d. Title: Superintendent


1.e. Phone: 304-845-4360, fax: 304-845-8973

1.f. E-mail: lrbonar@moundsvillewwtp.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 August 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: Deanna J. Hess

2.c. Title: City Manager, Chairperson of the Moundsville Stormwater Utility Board

2.d. Date: April 2, 2015

Co-permittees: NA

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: 64,000 Acres.

4.b. Area (in acres) within current corporate or jurisdictional boundaries: 2,112 acres.

4.c. For all MS4s, population (using the most recent U.S. Census data) for arear served: 9,318.

Part IV.B.

4.d. Latitude and Longitude of representative outfall:

Longitude- Degrees/Minutes/Seconds: 080.73834 W

Latitude- Degree/Minutes/Seconds: 39.91 333 N

Part IV. B.

4.e. Physical location of representative outfall: Located approximately 25 feet from the south edge of 12th Street, across from the intersection of 12th and Parriott Avenue. Sampling point is in the concrete trough after the last headwall. The outlet services residential and commercial customers.

Part IV.B.

4.f. Monitoring Plan (frequency and parameters):

The testing of one representative outfall will be conducted twice per year. The first sampling will occur from January-June and the second sampling will be conducted from July-December. Sampling events will be at a minimum of 30 days apart.

Stormwater samples shall be collected during the first flush of rainfall runoff, at least twenty minutes, but not more than fifty minutes after a rainfall of at least 0.5 inches has begun, preceded by a period of dry weather of at least 48 hours between rain events. If no testing has been conducted by the end of the six months period due to no rain events meeting the criteria listed above sampling will be conducted on a rain event which as close as possible match the criteria listed above. If no testing is possible it will be stated in the annual report and the reason for no testing.

Parameters Tested: A grab sample will be taken for the following parameters:

- 1). TKN (E.P.A method #351.4 and a MDL (mg/l) of 0.03 or less.
- 2). Nitrate Nitrogen (E.P.A. method 300.0 and MDL (mg/l) of 0.002 or less.
- 3). Nitrite Nitrogen (E.P.A. method 300.0 and MDL (mg/l) of 0.0004 or less.
- 4). Total Phosphorus (E.P.A. method 365.4 and a MDL (mg/l) of 0.01 or less.

Storm Sewer Infrastructure:

5.a. Storm sewers, in feet	NA
5.b. Open Ditches, in feet	26,676
5.c. Outfalls	115
5.d. Catch basins	785
5.e. Detention facilities	1
5.f. Retention facilities	2
5.g. Treatment facilities	0
5.h. Regional stormwater facilities	0

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? Yes, Little Grave Creek flows through the City of Glendale and into the City of Moundsville. Ohio River flows past Glen Dale then Moundsville.

8. Does your municipality contain combined sewer systems? Yes.

9.a. What percentage is drained by combined sewer system? 70 %.

9.b. What percentage is drained by separate storm sewer system? 30%.

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? Three (3).

(Item 11 is intentionally empty).

Map Requirements

Please provide a legible map that identifies the following information:

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. 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.
- 12.1. 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 on their website.

Part III.D.1.a.

13. Locations & Pollutants of Concern

Name of receiving stream	Impaired?	Parameters of impairment	Has a TMDL been established? Yes or No
Ohio River (WVO-US)	Yes	Dioxin,Bacteria, Iron	Yes , 2002
Grave Creek (WV)-83	Yes	Biological, Fecal Coliform, Iron	Yes, 2009
Middle Grave Creek (WVO-83-A)	Yes	Biological, Fecal Coliform, Iron	Yes, 2009
Little Grave Creek (WVO-84)	NO	None	No CONTINUED:

Parrs Run	No	None	No
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No additional pages needed.

14.a. Listed BMPs implemented to address the above listed impaired streams:

- 1). Continue to maintain pet waste stations at City Parks and Walking Trails for the length of this permit cycle. Replace stations themselves if needed and furnish bags as needed to Moundsville Recreational Department to keep stations supplied with bags. This will allow citizens using the parks and walking trails a proper place to dispose of pet waste. Record number of bags installed in pet waste stations. Inquire Recreational Department employees if stations appear to be working. Record all comments.
- 2). Continue to do public education on affect and proper disposal of pet waste annually. Have education material at City Building (our Departments’ bulletin board at City Building), have article in our quarterly news letters to Utility Customers, put material on our web site and have educational material at annual Moundsville Business & Home Show. Investigate and arrive at new educational methods to inform the public on this topic. Will record and report in annual storm water report any new methods used. Keep track and record number and type of material distributed to public, record comments made to our Department or the City on material or pet waste stations.
- 3). Maintain and continue to use the Stormwater Hotline to track complaints and calls on pollution. Advertise hotline twice a year to educate citizens on reporting pollution to our Department. Use local newspapers, web site, quarterly flyers, home show, and Department’s bulletin board at City Building to educate public. Document type of advertisement, what media used to advertise and record and track any comments received from public.
- 4). Conduct training for City employees on illegal discharges and inspections on an annual basis. Record date of training, name of trainer, material used and attendance at training.
- 5). Conduct public education on illegal discharges using flyers, home show, bulletin board and web site.
- 6). Conduct quarterly dry weather outfall inspections. Inspect 25 outfalls per quarter, note any discharges. Make a list of outfalls discharging during dry weather, sample and investigate cause of discharge. Correct illegal connections, if on private property contact owner to have connection removed. Keep records of inspections and findings. Record number of notices and corrections made.
- 7). Develop and install signs throughout neighborhoods in Moundsville which speaks to picking up and disposing pet waste properly. Install 10 signs per year throughout permit or until we determine that each neighborhood has adequate signage. Begin in areas of Moundsville that has impaired streams. Document design of signs, installation (location) of signs and number of signs installed, comments from citizens (report line, surveys, public comments).
- 8). Continue to work with Moundsville Sanitary Department on separation and corrections of illegal sanitary sewers. Use smoke testing, dye and tractor camera, public comments to find cross connections. Repair cross connections. Report smoke testing/camera work and findings and corrective action taken on yearly report.

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

14.b. Monitoring Plan for impaired streams with TDMLs in coverage area:

- 1). Receiving stream: Ohio River, Impairments: Dioxin, Bacteria and Iron.

a). Do dry weather background check in 2016 and 2018 to compare previous back ground check to determine if water quality is improving for impairments. Test the Ohio River above our first known stormwater outfalls and below our last known stormwater outfall. Collect samples once a week for 5 weeks. Testing will be for iron and bacteria. Dioxin will be tested once of the five weeks (due to the cost). Send samples to REIC Labs for analysis. Use proper sampling and testing procedures. Record and keep data.

b).Outfall monitoring, use visual and sample testing (where economical feasible) for each parameter of impairment. Record flow measurements by stop watch and bucket method. Test for iron and bacteria. Conduct sampling and testing of one representative outfall that is determine to convey the most stormwater to the river. If there is no detection of impairment source, will conduct the testing on the next most active outfall for that stream, will move to another outfall each year if the previous tested sample shows no or limited concentration of the parameter that would lead to the impairment. Conduct testing of outfalls where the supervisor determines that safety of the employee is not compromised. If outfall is not tested the location and reason for not testing will be documented.

c). Investigate (tractor camera, smoke and dye testing, etc.) and look for possible sources (illegal connections, broken or cross connected main sewer lines, etc.) of contaminates and discharge points into the stormwater collection system. When found reach agreement with owner to remove/repair source of contamination, make repairs and use enforcement action if needed. Use sampling at customers discharge point and visual observation to verify source of pollutant. Document all procedures, findings, actions and maintain records.

2). Grave Creek, Impairments: Biological, Fecal Coliform and Iron.

a). Do dry weather background check in 2016 and 2018 to compare previous back ground check to determine if water quality is improving for impairments. Test Grave Creek above our first known stormwater outfalls and below our last known stormwater outfall. Collect samples once a week for 5 weeks. Testing will be for iron and fecal coliform. No test for Biological due to cost. Send samples to REIC Labs for analysis. Use proper sampling and testing procedures. Record and keep data.

b).Outfall monitoring, use visual and sample testing (where economical feasible) for each parameter of impairment. Record flow measurements by stop watch and bucket method. Test for iron and bacteria. Conduct sampling and testing of one representative outfall that is determine to convey the most stormwater to the river. If there is no detection of impairment source, will conduct the testing on the next most active outfall for that stream, will move to another outfall each year if the previous tested sample shows no or limited concentration of the parameter that would lead to the impairment. Conduct testing of outfalls where the supervisor determines that safety of the employee is not compromised. If outfall is not tested the location and reason for not testing will be documented.

c). Investigate (tractor camera, smoke and dye testing, etc.) and look for possible sources (illegal connections, broken or cross connected main sewer lines, etc.) of contaminates and discharge points into the stormwater collection system. When found reach agreement with owner to remove/repair source of contamination, make repairs and use enforcement action if needed. Use sampling at customers discharge point and visual observation to verify source of pollutant. Document all procedures, findings, actions and maintain records.

3). Little Grave Creek: Impairments: None.

- a). No testing will be conducted unless circumstances warrants investigation and monitoring.
- b). Place pet waste signs at walking trail. Place pet waste station on walking trail and maintain.
- c). Conduct public education program towards pet waste. Use newspaper, pamphlets, public speaking. Do on a yearly basis.
- d). Include outfalls in quarterly dry weather outfall inspections. Conduct illicit discharge investigation if any discharges are found during dry weather. Contact owner, have connection removed and verify. Conduct yearly verification of compliance, record findings and verification.
- e). Advertise hotline for citizens to call with any concerns or questions.
- f). Educate city employees on illegal discharges and inspections.

4). Middle Grave Creek: Impairments: Biological, Fecal Coliform *and Iron*.

- a). Do dry weather background check in 2016 and 2018 to compare previous back ground check to determine if water quality is improving for impairments. Test Middle Grave Creek above our first known stormwater outfalls and below our last known stormwater outfall. Collect samples once a week for 5 weeks. Testing will be for iron and fecal coliform. No test for Biological due to cost. Send samples to REIC Labs for analysis. Use proper sampling and testing procedures. Record and keep data.
- b). Outfall monitoring, use visual and sample testing (where economical feasible) for each parameter of impairment. Record flow measurements by stop watch and bucket method. Test for iron and bacteria. Conduct sampling and testing of one representative outfall that is determine to convey the most stormwater to the river. If there is no detection of impairment source, will conduct the testing on the next most active outfall for that stream, will move to another outfall each year if the previous tested sample shows no or limited concentration of the parameter that would lead to the impairment. Conduct testing of outfalls where the supervisor determines that safety of the employee is not compromised. If outfall is not tested the location and reason for not testing will be documented.
- c). Investigate (tractor camera, smoke and dye testing, etc.) and look for possible sources (illegal connections, broken or cross connected main sewer lines, etc.) of contaminates and discharge points into the stormwater collection system. When found reach agreement with owner to remove/repair source of contamination, make repairs and use enforcement action if needed. Use sampling at customers discharge point and visual observation to verify source of pollutant. Document all procedures, findings, actions and maintain records.

Public Education and Outreach on Storm Water Impacts – MCM

Part II.C.b.1

Responsible Persons

- 15.a. Name: Larry Bonar, Duane Campbell, Tim Minor and Earl Shaw
- 15.b. Title: Superintendent, Lab Manager, Assistant Superintendent, Safety Director
- 15.c. Department: Sanitary/Stormwater Board, City of Moundsville
- 15.d. Address: 800 6th Street, Moundsville WV 26041
- 15.e. Phone number: 304-845-4360
- 15.f. Email address: www.moundsvillewwtp.com, lrbonar@moundsvillewwtp.com

Part II.C.b.1.

15.g. The program has chosen a mixture of BMPs to address pesticides, mercury, dioxins, fecal coliform, pathogens, Iron, suspended solids and other pollutants found in an urban area. This MCM will target home owners, students, industry, commercial and the general public. An informed and knowledgeable community is essential to the success of the stormwater management plan and for a cleaner environment. As the citizens becomes aware of their personal responsibilities and knowledge of watershed issues the stormwater program should achieve its desired goal of a cleaner environment and a more enjoyable place to live.

15.h. BMPS for Public Education and Outreach:

1). Continue having stormwater information/pictures, dates of monthly stormwater related events on the Board's website and maintain a link from the City of Moundsville Website. Develop new information for the web site and change items. This will be done in house. Document the number of hits on the website, report number of related e-mails, document the subjects covered and dates changed. Continue through permit cycle.

2). Develop stormwater articles for the local newspaper. Items covered would include but not limited to the history of the Clean Water Act, watershed education, dos and don'ts of yard fertilizers, household chemicals and pet waste etc.. This will be done by in house staff. Measurable Goals: Measurable Goal: Document the articles and subject developed, date of publication, comments received. Have articles developed and published in local paper by 1st quarter of 2016.

3). Make articles developed in #2 into flyers and have them available to the public at the City building and other bill paying department of the City. This will also be done in house. Measurable Goals: Document the subject of the flyers and number of brochures picked up by the public. By 2nd quarter of 2016.

4). Continue using the display that was developed for the annual Moundsville Home and Business Show. Continue doing the home show. Booth will be occupied by Board's employees. Measurable Goal: Document description and date of event, a short description of subjects covered, record number of attendees (if possible) and number of informational brochures picked up by the public and any comments made. Conduct survey of attendants on knowledge of stormwater and program.

5) Develop new materials for public education and for the City of Moundsville Council and officials. This will educate the general public, City Council and other elected officials of the City. Topics will include but not limited to items concerning stormwater, accomplishments of the stormwater program, and requirements of the stormwater program. Will do information packet annually. Measurable Goals: document subject, dates, who received the packet, comments and the number of packets given out.

6). Continue to present watershed and stormwater education to the local High School Hista Club. This will be conducted by the City Safety Director. Measurable Goals. Record date, number of students attending and a short narrative of subject(s) covered. Plan on doing this presentation yearly.

7). Maintain signs at public parks, recreational areas speaking to proper disposal of pet waste. This will go along with items # 1,2,3,4 and 5 towards educating the public concerning pet waste. Measurable Goals: Document public comments concerning signs, document any sign replacements if needed.

8). Continue to advertise hot line for information and citizen reporting of pollutants, system failure and dry weather overflows. Advertise report line annually. Calls will be recorded by staff. Measureable Goals: Document of placement of contact information in local paper and other sources. Maintain calls and subject on a reporting sheet and report number of calls.

9). Continue to maintain stormwater educational posters at local schools and public locations. Document posters subject, location and any new locations where posters would be located, record any comments from public.

10). Continue to do quarterly informational flyers and send them to all Stormwater Utility Customers. Document subject, number of brochures sent, and any comments received concerning brochures and subjects.

11). Annually develop (if needed) and send information for a specific commercial industry. Carpet cleaning, gas stations, vehicle repair shops and store parking lots would be examples. Document subject and information developed, number of packets sent out and to who, record any comments received.

12). Maintain stormwater bulletin board at City Building throughout permit cycle. Have available to public informational flyers, annual stoprmwater report and other items pertaining to stormwater and stormwater program.

15.i Is another entity sharing responsibility for the BMP? No If so, who? NA

MCM Components

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

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

The strategy will consist of newspaper media, internet and informational exhibits to inform the public with stormwater issues and program being conducted by the City of Moundsville. This will also give them a chance to participate and get involved with the program. Information will include but not limited to practical dos and don'ts to prevent pollution, background information pertaining to the need of having a program and the goals that we which to achieve by having the stormwater program.

Part II.C.a.ii

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

Will use the same approach as above but will be more specific the educational material developed for commercial business. Topics would include proper grease disposal, oil and chemical disposal, storage and other areas which will be discovered as we work through the program. Target audience would be but not limited to Carpet cleaning business, gas stations, vehicle repair shops, auto body shops and commercial establishments with Parking lots.

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

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

Will develop and discuss information concerning fertilizer storage and use, disposal of hazardous materials, watering and prescription drug disposal. The strategy will concentrate on the everyday things that they can do to insure a successful program.

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.

Educate this target audience on requirements that they will need to follow to conduct business in the City of Moundsville. Areas covered will include construction site runoff, post construction runoff control, erosion and settlement, design for the first inch of capture for rain events, LID and other topics which will ensure a successful stormwater program. Give each developer, contractor who inquires about building in Moundsville the packet that we developed for site construction in Moundsville. Packet includes regulations for site control for erosion and sediment, a cd with E&S Control BMP Manual, Developing your Stormwater Pollution Prevention Plan, guidelines. For smaller construction the packet includes guidelines and a E&S Control Best Management Practice for Small Construction Site Manual.

Schedule

Part II.C.a.1

15.n. See each BMP for Public Education and Outreach.

Measurable Goals

Part II.B.4

15.0. See each BMP for Public Education and Outreach.

Tracking

Part II.C.b.1.c.

15.p. See each BMP for Public Education and Outreach.

Evaluation

Part II.C.b.1.c.

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

We will track public input from meetings, phone calls and through our web site. Will track attendance at all meetings, information requests, and contact with citizens concerning the stormwater program. Hold an annual meeting with City Manager, Safety Manager, Department Heads to review past and current BMPs, public or employee comments and to review the general and effective state of our SW program. Will review any calls or comments from the public or general public. Will record discussions, and solutions to problems, corrections or BMPs which appears to not be delivery the results needed. Conduct survey on our SW program. Will select at a minimum of 2 ways to conduct survey (by mail, web site, at a local event where the general public will attend.) Example would be the Marshall County Chamber of Commerce Home and Business Expo. Will develop survey for attendees to complete and will analyze results. Have survey materials available at City owned sites to be completed and returned. Will compile results and report in yearly report. Will use results to compare year to year progress. Will report all findings and changes in annual SW report.

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: Larry Bonar, Tim Minor, Duane Campbell and Earl Shaw

16.b. Title: Superintendent, Assistant Superintendent, Lab Manager, Safety Director.

16.c. Department: Moundsville Stormwater Board, City of Moundsville

16.d. Address: 800 6th Street Moundsville WV 26041

16.e. Phone number: 304-845-4360

16.f. Email address: www.moundsvillewwtp.com

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

Objective of this MCM is to get the public/business community involved in the program. The result that we wish to achieve would be that the citizens and business community will begin to feel that this is their program and that the program is worth the effort and cost. Stormwater education through participation.

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

1). Continue to post public notice of upcoming meetings and events in print media and posting meeting notices at the City Building and Water Department Office where the citizens pay their utility bills. Will document publication dates and announcements.

2). Continue to place on monthly Stormwater meeting agenda a block of time for the general public to address Department, ask questions, and make comments. Document date of meetings, advertisement of meetings, material covered and number of attendance and any input by the attendees. Will conduct this BMP monthly.

3). Continue and advertise a stormwater response/complaint program. Log calls and final outcomes. Advertise the program in the local paper in the first half and second half of each year during the permit cycle. Document other means of advertising the report line.

4). Continue to promote the Annual River Sweep program. Contact the County to inquire if we can assist on any cleanup programs which they may sponsor. Document the number of cleanup programs conducted and amount of trash collected.

5). Institute a storm drain marking program. Purchase markers; obtain a youth group to participate. Will do approximately 25-50 markers per year or more if able. Document the date, group that participated, location and number of markers.

6). Continue to include current SWMP and most recent report on our website and paper copies available to the public at the Moundsville City Building. Report number of contacts and plans/reports handed out. Maintain BMP throughout permit cycle.

7). Continue to attend Watershed Association meetings. Document dates and name of associations.

8). Investigate the participation of a rain barrel class. If enough interest will hold a rain barrel class for the public.

16.i. Is another entity sharing responsibility for the BMP? No If so, who? NA

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.

1). Through public meetings, to provide an opportunity for the public to comment or participate in the stormwater program.

2) Develop activities that groups can get involved in the actual program.

Part II.C.b.2.a

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

We will record and act on all comments received from the citizens that are affected by the program. All Stormwater Board meetings are advertised in media print and posted at the most active areas of city government, the notice contains the phrase that the meeting is open to the public.

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).

Through print media and public posting of meetings and events. Include dates of meetings and agenda on our web page. Post meeting notices/agenda on the Board's bulletin board at the City Building.

Part II.C.b.2.c

16.m. List the URL of your *Stormwater* website. www.moundsvillewwtp.com

Schedule

Part II.C.a.1

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

See each BMP for Public Involvement and Participation.

Measurable Goals

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

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

See each BMP for Public Involvement and Participation

Tracking

Part II.B.7

16.p. Describe your plan for tracking activities associated with this MCM.

See each BMP for Public Involvement and Participation

Evaluation

Part II.B.7.

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

Will gauge the public attitude and acceptance of the program by monitoring and evaluating future comments and involvements at meetings, events and phone calls. Conduct a survey of customers to determine public awareness and attitude of the public towards the program. Will review any calls or comments from the public or general public. Will record discussions, and solutions to problems, corrections or BMPs which appears to not be delivery the results needed. Will select at a minimum of 2 ways to conduct survey (by mail, web site, at a local event where the general public will attend.) Example would be the Marshall County Chamber of Commerce Home and Business Expo. Will develop survey for attendees to complete and will analyze results. Have survey materials available at City owned sites to be completed and returned. Will compile results and report in yearly report. Will use results to compare year to year progress. Will report all findings and changes in annual SW report.

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: Larry Bonar, Tim Minor, Duane Campbell, Earl Shaw

17.b. Title: Supt., Asst. Supt., Lab Manager, Safety Director

17.c. Department: Stormwater Board, City of Moundsville

17.d. Address: 800 6th Street, Moundsville WV 26041

17.e. Phone number: 304-845-4360

17.f. Email address: www.moundsvillewwtp.com

17.i. Is another entity sharing responsibility for the MCM? No If so, who? NA

Control Objective & BMPs

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

To identify and remove any discharge to a MS4 that is not composed entirely of stormwater. To educate citizens, business community and employees on pollution detection and the stormwater program. This in turn should help the impaired streams in our area by having the public, commercial and industrial customers aid us in finding illicit discharges in our coverage area.

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

- 1). Continue to improve and update the City wide stormsewer map. Documentation of improvements and updates for map of the stormwater conveyance system located in the City of Moundsville. Throughout permit cycle.
- 2). Review current ordinances and develop new ordinances as needed. Document the additional ordinances if needed and include date of passage.
- 3). Continue to enforce ordinances and penalties. Document number of enforcement actions taken.
- 4). Continue to promote household hazardous waste recycling. Document number of brochures, information and contacts with the public.
- 5). Continue to conduct the Illicit discharge detection program. Continue to eliminate cross connections in our systems by using our tractor and handheld cameras, smoke testing, dye testing and citizen complaints and comments. Document number of discharges corrected and number of cross connections removed. Document number of smoke testing, camera use and results.
- 6). Continue to work with the Moundsville Sanitary Board concerning the separation projects related to the LTCP. Document any smoke testing, tractor camera work and findings.
- 7). Continue to perform dry weather screening of stormwater outfalls. Conduct 25 inspections per quarter (in summer and fall). Record and report screening events and findings. Conduct inspections throughout 5 year permit cycle.
- 8). Continue to look for stormwater outlet, update outlet inventory as needed. Update annually or as needed if new outfall(s) are discovered.
- 9). Continue to maintain list of current commercial/businesses to determine possible illicit discharges. Use current data collected for CSO and IU programs. Include results of audit and continue to update data as needed.
- 10). Continue to record any new connections to the stormwater system. Have on file copy of plans, description of stormwater structures, pictures and additional pertinent facts. Report number of new connections, description and any action needed.
- 11). Continue to send informational letter(s) to commercial businesses concerning Sec. 922.16 that they are to notify the City of Moundsville Stormwater Department whenever they have a spill that may reach the storm sewers. Include training for the responsibilities that they have as far as our ordinance. Follow up in a timely manner to ensure compliance if needed. Record number of letters sent and responses, also record number of follow up inspections and results. Will conduct annually throughout the permit cycle.
- 12). Continue to conduct public and employee education on IDDE program. Document training dates, subjects, number of attendees, City Department attending training, date and type of forum used for public education. Will conduct annually throughout the permit cycle.

MCM Components

Part II.C.b.3.a.

Do you have a current map of your municipal storm sewer system? Yes. Have map on computer, will have paper map made. Also have stormwater lines on sanitary map. Will be able to use our current CAD system to maintain map in the future. Should have paper map completed by July 2016.

Do your map components include/do you plan to include:

17.k. All known storm sewer outfalls? Yes, have completed known outlets to date, have locations recorded, and co-ordinates.

17.l. Receiving waters? Yes. Have identified receiving waters.

17.m. Structural BMP's owned, operated or maintained by the permittee? Yes, in our field work we have identify CB, MH, Chambers, Culverts, ditches that is associated with the storm sewer system. We are including structure's type (brick, concrete, etc.), size, type (flat top, curb, etc.), # of pipes (size and type), and condition of structure, location and GPS coordinates. We are planning to number structures for tracking of maintenance, etc.

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

Yes. Will maintain a list and description of all publicly and privately owned Stormwater conveyances in our coverage area. Our map will be on digital format to where changes could be edited, added or removed as needed. Keep files on all current and future SW conveyances in our area. We are currently updating our sanitary collection system and archiving the information will do the same for SW. Will collect needed information from inspections, plan reviews, maintenance agreements, and Building Inspector notices or inquiries. Will record and report number of changes in yearly SW report.

17.o. Updating the known connections to the municipal separate storm sewer authorized after July 22, 2009? Will record and track connections as they occur.

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



Part II.C.b.3.b.

17.q. Do you have an IDDE Ordinance? Yes.

Part II.C.b.3.b.

17.r. Describe your Ordinance review and update procedure, including milestones of IDDE Ordinance review. The ordinance was passed in 2010. Ordinance will be reviewed yearly or sooner if circumstances warrant a change. Will use information gathered during the year from situations that come up while conducting stormwater program, to determine if changes are needed. Will work with the City's Attorney; seek advice and ordinances from other MS4s, present to City Council for approval.

Does your IDDE Ordinance prohibit the following:

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? Will be a topic for MCM #1.

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? Will be a topic for MCM #1.

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.

Will attempt to resolve circumstances that needs addressed by negotiating with the violator. We have a cease and desist order to prevent a violation or potential violation. If not able to reach solution our ordinance allows us to enter upon the subject property and make corrections as needed and then charge for the service.

Part II.C.b.3.c.

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

Continue to conduct outfall inventory and characteristics, update annually or as needed. Continue to update condition of system. Observe and sample (if needed) selected outfalls (most potential of illicit discharge) during wet weather. Select known areas and conduct smoke testing, dye testing and camera work to discover cross connections and illicit hook ups. Record and analyze information received from Hotline. Record results and document any action taken. Plan to do 1-3 per year.

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

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

We are currently working on our LTCP for CSOs. We will use the findings of our LTCP and knowledge of our system to determine the worse areas for our system. We have conducted smoke testing/tractor camera and dye testing to determine piping which has large numbers of cross connections of and areas of infiltration. Will use citizens’ complaints and calls concerning basement flooding to locate potential trouble areas. We will also use our knowledge of our current system and will address any concerns that we find during mapping of our system. Use information from citizens that call in, advertise in paper and educate the citizens on the hotline.

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

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

Visualization, observation, field sampling and testing, lab testing, amount of flow, IU records.

Part IIC.b.3.c.iv

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

Once we determine a potential problem we will use dye testing, smoke testing, and tractor or push camera, sampling/testing, visual observation, mapping and records to determine the type and source of the discharge.

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

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

Contact customer involved, discuss with that person/business the illegal discharge. Work with customers to come up with a workable solution. If the problem is the responsibility of the customer and they do not act in a timely manner will use enforcement procedures that is outlined in our ordinances. If solution is the responsibility of the Stormwater Board, we would take appropriate action to resolve the problem.

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.

Work with the Cities Safety and Training Director to develop training for all employees. Encourage and pay for employees involved in the program to obtain outside training if available. Educate business and the general public through newspapers, brochures, ads, web site, mailings, etc. on illegal discharges and improper disposal of waste.

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.

Use the Illicit Discharge Detection and Elimination video and material we purchased from Excal Visual Inc. Do employee training annually. This will be part of regular safety training conducted by the City Safety Director to all City employees. The Board encourages and pays for their employees to attend outside training when available. The Board's employees has attended training at the WVETC, Ripley WV, WV Rural Water Association training and yearly conference, attended WV WEA/AWWA yearly conference training sessions, WVDEP training sessions and other training session sponsored by other companies.

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.

See each BMP for Illicit Discharge Detection and Elimination.

Measurable Goals

Part II.B.4

17.ff. See each BMP for Illicit Discharge Detection and Elimination.

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.,

- 1) Record all calls, type of problem, action taken and results.
- 2). Verify construction projects that we achieved desire result. Use smoke testing, observations, dye testing and camera to verify.
- 3). Record inspections and any needed actions of inspections and final outcome. Conduct and record any follow up inspections needed.
- 4). Do survey of customers on public education to determine effectiveness of program.
- 5). Document smoke testing/camera work and dye testing efforts when looking for new areas to work on.
- 6). Use report lines, dry weather inspection, smoke testing to locate needed areas that have a cross connections.

Evaluation

Part II.B.7

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

- 1) Using above mentioned survey. Will either do survey by mail or at a local event where the general public will attend. Have survey materials available at City owned sites or on web page to be completed and returned. Example would be the Marshall County Chamber of Commerce Home and Business Expo.
- 2). Track and review public comments received (from report line) and from City employees, compile and use to determine effectiveness of program.
- 3). Use visual inspections of outfalls and other structures to determine improvements.
- 4). Compile an annual report to include number and type of spills, location, and corrective action, number of inspections, findings and results. Include in report any illicit connections found and removed. Annual report will allow us to see what improvements or progress we are making from year to year.
- 5).Do dry weather background check in 2016 and 2018 to compare previous back ground check to determine if water quality is improving for impairments (Do dry weather testing on impaired streams with TDMLs.. Will use sampling results to compare year to year progress. Will report all findings and changes in annual SW report.

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: Larry Bonar, Tim Minor, City of Moundsville Building Inspection Department.

18.b. Title: Superintendent, Assistant Superintendent.

18.c. Department: Stormwater and Building Inspection Dept.

18.d. Address: 800 6th Street Moundsville WV 26041

18.e. Phone number: 304-845-4360

18.f. Email address: www.moundsvillewwtp.com

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

Control Objective & BMPs

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

To control and reduce pollutants from (sediments, erosion) construction sites entering the stormwater collection system and eventually to local streams.

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

- 1). Continue to enforce ordinances and existing State Code for soil erosion and sediment control. Review current ordinances, add new ordinances if needed. Conduct review and start develop new ordinances (if needed). Record results of review and action taken.
- 2) Conduct annual reviews of Ordinances and make changes as needed. Record review results, date and action taken.
- 3). Continue to work with the City of Moundsville Building Inspection Department concerning requirements, application, inspections and enforcements. Record meetings, subjects, number of permits issued that met the 1 acre requirements. Record number of inspections, results and actions taken as needed. Review process and document any changes. Review process annually for needed changes, document changes and report in annual report.
- 4). Review record keeping for approval of projects, inspections and enforcements. Make additional changes if needed, conduct review annually and document changes. Report review date, participants, changes needed and actions taken, include in annual report.
- 5). Continue to give out packets speaking to the requirements, reference requirements for erosion and sediment controls, requirements for control of construction site waste and enforcement penalties to contractors and developers.
- 6). Continue site plan review as needed. Record number of reviews, action taken and results.

- 7). Maintain list of sites within coverage area, with description of site, effective streams and stormwater structures and potential problems during construction. Give list to needed City Departments. Document number of sites and description of findings in annual report.
- 8). Continue to do inspections for construction sites (large and Small. Document number of inspections, meetings, findings and actions of inspections.
- 9). Continue to use public input for complaints. Advertise hotline and seek additional comments from the public. Document number of calls and actions to resolve issue.

MCM Components

Part II.C.b.4.a.

18.j. Do you have an Ordinance to control construction site run-off? Yes. Sec. 922.13

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? Yes.

Does your Ordinance regulate disturbances of less than one acre? Yes.

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

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

Part II.C.b.4.b.

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

For projects larger than one (1) acre: The City of Moundsville Building Inspection Department would provide a packet to a contractor or developer which contains an opening letter that explains the process and a list of contact numbers that may be needed during the permitting process, a flow chart that explains the process, registration form, instructions and a copy of self-inspection forms for the construction site, a CD which contains the WV DEP Erosion and Sediment Control BMP Manual and the manual for Developing Your Stormwater Pollution Prevention Plan and a copy of our ordinance for erosion and sediment control at a construction site. After receiving the packet the Contractor/Developer would complete the registration form and include the fee when they turn it into our Department. We are offering a Pre Submittal meeting with the interested parties, our Department and an Engineer contracted by us to meet with them on site and answer any questions and to discuss the stormwater requirements during construction. Then we will host a Preliminary Plan Meeting with the Contractor/Developer, City Departments and all Utilities involved. At this meeting the interested parties would have a preliminary plan available for review(the plans would include, stormwater BMPs for erosion and sediment control during construction, proposed site improvements, size of project, boundary dimensions with streets, building and dumpster location, grading with 2 or 5 foot contours, impervious surfaces such as parking lots, access points, and sidewalks, pervious areas such as grass and landscaping, proposed utility locations for stormwater, sanitary, water, electric, telephone, gas, cable and other utilities), BMPs for 1 inch capture, watershed protection, maintenance contracts and what permits have been obtained from State, Federal or City, and other pertinent information needed for the project. If needed we will have a certified Engineer at the meeting to assist us with any questions. We currently have three Engineering firms that we work with and

would be available to assist us. They are E&R Penn from New Martinsville, Burgess and Niple from Parkersburg and Stegman & Schellhase Engineering from Wheeling. After receiving the plans and review we would make contact with the company and approve the plans, with changes if needed. Once the plans has been approved by our Department we would notify the Moundsville Building Inspection Department that the plans are approved and they would issue a Building Permit.

For Projects less than 1 acre: : The City of Moundsville Building Inspection Department would provide a packet to a contractor or developer which contains an opening letter explaining the process, a site registration form, a written manual for guidelines for small construction site BMPs for erosion and settlement control at construction sites, a form which the contractor/developer would sign to acknowledge receipt of the guidelines and agree to abide by them and to acknowledge the right for our Department or acting agent access to the construction site. Once we receive the registration form, the other documents and the fee we would approve the stormwater permit, contact the Building Inspection permit and they would issue a building permit.

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

During the review process we inform all parties that we require inspections based on type of work and length of work. Inspect site on regular intervals based on size of project. After inspection of the site a report is written on the findings, company representative present during inspection and action(s) needed or enforcement action taken. Pictures will be taken if needed. We have the previous Engineering Companies available if needed to assist us.

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

The ordinance gives us the authority to stop work if needed. All efforts are made to correct the situation without enforcing this part. The ordinances also have an escalating enforcement procedures and penalties.

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.

Will conduct the same inspection and requirements for both. Will include same standards and requirements for construction site run off control in all public contracts as well as private. For public jobs we will have stormwater requirements in the bid package that contractors will use to bid on the job. For private jobs will use the before mentioned packet with all needed information of requirements, the Building Inspectors and the Planning Commission will hand out to perspective contractors, architects and engineers when they make initial contact.

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.

Will do annual evaluation of ordinances, will include all City Departments involved, if additions are needed, will gather info and samples of other MS4 communities, make changes if needed, have the Board's attorney and City attorney review ordinance, present and explain to City Council for vote on ordinance. If outside assistance is needed will contract with outside attorneys to gather needed information.

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.

Ordinance has been passed and contains the regulations for Erosion and Sediment control at construction sites. We are currently enforcing the sediment and erosion ordinance and regulations.

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).To control E&S pollution from construction sites through being involved with Contractors/Developers through the packets which list the requirements of the program to control these pollutants and inspections of the construction sites.
- 2).Educate contractors/developers and the general public in E&S pollution and controls.

Tracking

Part II.B.7.

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

- 1). Work with City of Moundsville Building Inspection Department on E&S program for construction sites.
- 2).Record all Packets given out by Building Inspection Department., record all meetings with contractors/developers, keep in project file application, inspection reports, meetings, pictures, enforcement actions and outcomes. Include in annual report number of packets given out, number of projects that was approved, number of inspections and actions if needed and outcome of project.
- 3). Record and report any calls from Stormwater Report Line concerning problems with construction sites.
- 4). Record and report any comments on E&S program by contractors, developers and general public.

Evaluation

Part II.B.7

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

Document proper construction and stormwater practices in design and construction of develop(s) in the coverage area. Through inspections and documentation of inspections. Through inspection of receiving stream and stormwater public structures in the collection system. After the first year hold annual meeting with staff, City Manager, Safety Manager, Department Heads to review past and current BMPs, public or employee comments and to review the general and effective state of our SW program. Will review any calls or comments from the public or general public. Will record discussions, and solutions to problems, corrections or BMPs

which appears to not be delivery the results needed. Will use sampling results to compare year to year progress. Will report all findings and changes in annual SW report.

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: Larry Bonar, Tim Minor, Building Inspection Department, Planning.

19.b. Title: Superintendent, Assistant Superintendent

19.c. Department: Sanitary/Stormwater Utility.

19.d. Address: 800 6th Street, Moundsville WV 26041

19.e. Phone number: 304-845-4360

19.f. Email address:www.moundsvillewwtp.com, lrbonar@moundsvillewwtp.com

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



Control Objectives & BMPs

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

To ensure proper design of stormwater controls to reduce flow and pollutants entering streams and rivers.

MCM Components

Watershed Protection Elements

Part II.C.b.5.ai.

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

Currently the Subdivision Ordinances does not contain the six watershed protection elements. Will gather needed information from other MS4s. Enlist outside attorney to assist us in developing regulations to cover the six watershed protection elements. Will present to council for approval to be added to current ordinance. By end of 4th quarter of 2018.

Watershed Protection Elements	Name of document that contains the element	*Review Date
1. Minimizing impervious surfaces	None	By 12/18
2. Preserving ecologically sensitive areas	None	By 12/18
3. Reducing thermal impacts	None	By 12/18
4. Reducing or avoiding hydromodification	None	By 12/18
5. Tree protection	None	By 12/18
6. Protection of native soils, prevention of compaction of soils	None	By 12/18

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. Will develop with ordinance.

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

- 1). Develop requirements and ordinances to address watershed protection elements. Use State Code if available or other MS4 ordinances. Complete and pass ordinances by 4th quarter of 2018. Document development, passing of ordinance.
- 2). Develop packet including requirements of watershed protection elements, project review of elements, record keeping, inspections and enforcement of requirements. Include in packet given out to developers and contractors for E&S control. By 3rd quarter of 2018. Document the development of packet. Document number of packets handed out for development, number of reviews and approvals or rejections. Enforcement actions.
- 3). Develop site design standards that includes managing the first 1-inch of rainfall in a 24 hr. storm. Include in ordinance pre-construction review of BMP designs, inspections during construction, requirement of sending us as built plans once construction is completed, post construction and maintenance of BMPs, maintenance agreements and enforcement action (monetary and non- monetary penalties, fines, bonding requirements) if needed. Develop review process, record keeping, inspections, verification of meeting standards before construction and post construction. Complete by 3rd quarter of 2018. Document number of packets handed out, design reviews, number of approvals, inspections and verification of design.
- 4). Develop ordinance for addressing Hot Spots in the coverage area. Ordinance and program will contain definition, optional treatment options, plan review and approval, inspections during and after construction, maintenance agreements, enforcement/penalties and other items found to be needed in ordinance. Complete by 2nd quarter of 2019. Document ordinance development, ordinance approval, program development and enforcement, number of site(s) development which was affected. Include information in annual report.
- 5). Investigate in developing square footage charge for commercial/industrial customer. Currently we are charging a flat fee. By charging by the square foot we can offer discounts to customers in exchange for them reducing the amount of discharge from their property. Develop discount amounts; educate commercial customers, application, record keeping, requirements, verification and inspection. Obtain square footage for all potential areas, develop program by 4th quarter of 2019. Document process, program, discounts allowed and reason why, include in annual report.

Site Design Standards

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

- 19.1. 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. No. Gather and develop ordinance by 3rd quarter of 2018 and full implementation by 4th quarter of 2019.
-

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? No, will seek professional assistance in developing this part.

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. Verification will be made into any inquiries before information is release.

19.0. Describe your program for reducing impervious surfaces.

The above mention ordinances will provide a guidance tool to meet impervious surfaces. Enforcement of ordinances should lead to less impervious surfaces. The square foot payment plan for commercial/industrial customer will give us a chance to offer development(s) owners an incentive to decrease impervious surfaces to lower their stormwater fee. Also the training portion of our MCM should help with obtaining the desired results for future designs of projects.

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.

Currently the Moundsville Stormwater Utility does not have a mitigation or payment in lieu program. We will wait until the WVDEP develop standard criteria and guidance material to develop our program. We may also seek other MS4 programs and blend the two together to develop a program for our Utility.

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

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

Will include with the E&S packet, a packet that a potential developer would receive at the City of Moundsville Planning Commission meeting, the developer will be given a packet from the Building Inspection Department if the developer contacts them first or if they did not receive one from the P.C. The packet would contain all pertinent ordinances, requirements, review process, inspections, approvals, verification measures, maintenance agreements, contact numbers and other needed information. Once we receive the plans we will conduct a thorough review of plans, ensuring that they will meet all requirements. If needed we will use an outside source (engineering firm) to confirm compliance. Once compliance has been verified a letter stating so will be sent to the applicant and the Building Inspection Department so a building permit may be issued.

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

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

Once we receive a notification from the Planning Commission or Building Inspection Department a letter will be sent to the applicant requesting the packet be completed and forward to us with the plans for review. We will use the WV MS4 Stormwater Compliance Spreadsheet for site verification and outside professionals (engineers, architects, consultants) if needed for verification of plans. Once compliance is confirmed a letter to the developer, building inspection dept. and the planning commission will be sent approving this part of the plans. Training will be held for all employees that are involved in this process. All records will be kept to assist in the inspection process during and after construction.

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.

Included in the ordinance pertaining to development will be a section addressing maintenance of structural control practices that will include maintenance during and after development at the site. All maintenance techniques will be a proven, reliable, verifiable maintenance practice for that BMP. Will investigate the use of Bonding or some type of monetary insurance that would guarantee up keep and maintenance at the site for future failures of any of the installed system. As part of the ordinance maintenance agreements will be required as a condition of approval. It will include a clause that all maintenance reports will be sent to the Board on an annual basis, verification of maintenance, who conducted the work, what work was completed and other pertinent facts will be required. The agreement will allow for inspection/sampling by the Board or an outside agency working for the Board, it will speak to frequency of inspections, cooperation during inspections, possible remedies and time for corrections if deficiencies are found. Our current stormwater ordinance allows us to complete the repairs/work and then charge the owner for work completed to correct a breakdown of any BMP. The ordinance will give the developer a choice of signing a statement accepting responsibility for maintenance and if property is sold, transferred to another person/company the responsibility for maintenance of the stormwater structures and BMP will transfer also. Will review maintenance warranty with Board's attorney and the City's attorney to verify legality of requirements. Also inquire other MS4s of their maintenance agreements and develop a maint. agreement for our stormwater utility.

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

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

All details and information will be kept from the beginning of the process after a developer requesting information from the Planning Commission or the Building Inspection Department. All background information will be collected at that time. Proposed plans will be requested and verified that they meet all requirements. Will require as built plans be received before the final approval letter is issued for the site. Plans will include location (gps coordinates, physical location) of all structures, technical information of BMP, description, name/address of installer or contractor and any regular maintenance requirements (if any) to maintain the BMPs at the site. All verification spread sheets, calculation, observations, pictures or test use to verify compliance will be kept with the file and be available for inspection and future inspections of the site. Digital pictures will be used for all BMPs during construction, after construction and of BMPs during future inspections. All pictures will be kept with the file. All inspection dates and findings, enforcement actions and results will be kept. All maintenance agreements will be kept in the file. Files for all developments which this MCM is required will be maintained until the site is redeveloped or razed.

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?

Inspections will be conducted during construction of BMP at a number that insures proper building techniques, will include in the ordinance that if outside assistance is needed for any inspection that the developer will bear the cost. Final inspection and verification of the effectiveness of the BMP will be conducted by Board's employees and an outside source that is familiar with stormwater BMPs. Once the BMPs are on line and working will attempt to inspect each site once per year, if number of sites increase to a level where yearly inspections are not feasible then each site inspection will be conducted at a minimum of once per each permit cycle. Inspections will be conducted in house, if needed an outside qualified source will be brought in. Inspection reports will include all pertinent site information, observations, findings, digital pictures (video), sampling results if needed, conditions of BMPs, past maintenance if any, inspector name. Once inspection is completed a letter of any findings, length of time for corrections, and possible penalties will be sent to the owner by certified mail. Follow up inspections and contacts will be made to insure compliance with inspection and findings.

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, Article 1319, Article 1323, Article 1343, Article 1345, Article 1381, Article 1383. Building Inspection Department, Zoning and Planning Commission.

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.

Gather and develop ordinance by 3rd quarter of 2018 and full implementation by 4th quarter of 2019.

Measurable Goals

Part IV.A

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

To develop a system to reduce or eliminate stormwater runoff from developed site and to educate developers, contractors and public on controlling runoff.

Evaluation

Part II.B.7

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

Track responses by developers and designed professionals, inspections, documentation of inspections of sites after the BMPs are in place.

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: Larry Bonar, Tim Minor, Earl Shaw, All City Departments.

20.b. Title: Superintendent, Assistant Superintendent, Safety Director.

20.c. Department: Moundsville Sanitary/Stormwater Board, City Hall

20.d. Address: 800 6th Street, Moundsville WV 26041

20.e. Phone number: 304-845-4360

20.f. Email address: www.moundsvillewwtp.com, lrbonar@moundsvillewwtp.com

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

Control Objectives & BMPs

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

Preventing or reducing pollutant runoff from municipal operations through personnel training and use of BMPs.

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

- 1). Continue to inspect City vehicles for oil, grease, fuel and fluid leaks.
- 2). Continue to conduct annual reviews of vehicle inspection program and make adjustments as needed.
- 3). Continue the Street Sweeping Program. Evaluate program and make adjustments as needed.
- 4). Continue catch basin cleaning and pipe cleaning.
- 5). Continue to evaluate and do maintenance on stormwater structures in system.

- 6). Continue to smoke test, use tractor camera, call log to investigate and remove sanitary cross connections in our stormwater collection system. This will aid in reduction of bacteria in the impaired streams.
- 7).Continue to conduct Department reviews (Departments that does not have a NPDES Permit) and work with each Department to correct deficiencies.
- 8). Continue to furnish trash containers, empty containers as needed at all City owned parks, recreational areas and heavy traffic areas for citizens.
- 9). Continue to conduct training for employees. Develop training to cover topics that may include but not limited to the importance of the program and water quality standards, BMP, illicit discharge recognition, pesticide/fertilizer use, proper vehicle maintenance, operation and maintenance techniques and safety.
- 10). Continue annual leaf pick up in the fall.
- 11). Assist municipal operations if needed to maintain pollution prevention plan and a spill response plan and then conduct training for their employees if needed.
- 12). Continue to maintain dog waste stations in City Parks and do public education..

MCM Components

Part II.C.b.6

20.j. List the municipal facilities and their locations owned by your MS4. 1). City Building/Paid Fire Department 800 6th Street, Moundsville WV. 2) Four Season Pool and Recreational Area, 4th Street, Moundsville WV. 3). City of Moundsville Water Plant, Hitt Drive, Moundsville, WV. (4). Moundsville Wastewater Treatment Plant, Rt.2 South Lafayette Ave. (5) Street Department/Maintenance Garage 1st Street and Tomlinson Ave. , and Brown Street (6) Evan G. Roberts Recreational Complex, 12th Street Moundsville WV. (7). Moundsville Riverfront Park, 13th and Thompson Ave. Moundsville WV. (8). Moundsville Police Department, 604 Tomlinson Ave., Moundsville WV.

Part II.C.b.6.a

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

Each Department is responsible for their own operation and maintenance program. The City Safety Director would assist each department if needed. The Street Department, Water and Wastewater Departments have NPDES Permits.

Part II.C.b.6.a

20.l. Does each site have a pollution prevention plan? Recreation and Parks Department: Yes. Is there a spill response plan included in the pollution prevention plan? Yes. If not, provide a time frame for developing pollution prevention plans at all MS4 owned municipal facilities, including mid-point and full completion dates. All other Departments have a NPDES Permit. Have copy of Street/Public Works Department Plan. City Building and Police Departments are offices only and does not have a plan.

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.

Pollution Control policy is based on limited use of fertilizers, pesticides and herbicides. Use of these substances are used on a limited basis. They are only used when all other natural maintenance practices fail. Proper storage is used along with proper application procedures and practices are followed. Landscape maintenance is conducted by City crews and they follow standard practices for maintenance and disposal of landscape residue. The City is responsible for garbage pickup and dispose of collected material at a certified landfill. We are currently working on a cleaning station for the garbage trucks; this will consist of a grit/solids collector, oil and grease separator and disposal of liquid to a sanitary sewer. Salt storage is now kept in a salt shed and runoff is controlled. Currently the City is responsible for street sweeping; they run the sweeper daily weather permitting. The Sanitary/Stormwater Utility recently purchased a new Sewer Cleaning/Vacuum Truck and will start an inlet/catch basin/stormsewer cleaning program. The program will be reviewed and changes adopted as needed.



Part II.C.b.6.c

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

In House training is developed and conducted by Earl Shaw a certified trainer and is the City of Moundsville Safety Director. Training is held in the updated NIJ Center located in Moundsville. Training is held six times a year and is open to all City employees. Topics include confined space entry, hazards recognition, PPE, fall protection, safe equipment operation, driving, trenching and shoring safety, electrical, and other topics, IDDE, spill response and stormwater.

Also the Moundsville Sanitary/Stormwater Board encourages and pays for their employees to attend outside training. Employees have attended classes at the ETC in Ripley WV, Training sessions conducted by WV Rural Water Association, Training provided by the WVDEP and other agencies. Full time collection employees have attended the collection system class at the ETC, Ripley WV. The collection crew has received collection system licenses and certification for this class. Topics include safety, system repairs, evaluation of system, housekeeping and other topics used daily in their work on the collection system.

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.

- 1). Moundsville WWTP. NPDES Permit Number WV0023264.
- 2). City of Moundsville Street /Sanitary Garage. NPDES Permit General permit # WV0111457, Registration # WVG611229.
- 3). City of Moundsville Water Plant. NPDES Permit # WV0115754.

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.

BMPs are already implemented.

Part II.C.b.6

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

After training will inspect and review plan with each department that does not have a NPDES Permit yearly or sooner if a spill occurs or sooner if a Department Head request assistance. Will have a review process in place to review plan and procedures after a spill which involved the Department. Record and keep all data collected during inspections and reviews.

Measurable Goals

Part IV.A

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

- 1). Conduct vehicle maintenance, review program annually and make adjustments as needed. List number of inspections and reviews.
- 2). Continue to run street sweeper daily, weather permitting. Review program annually and make adjustments as needed. Continue to measure debris picked up in cubic yards and days of operation.
- 3). Conduct catch basin and pipe cleaning on a monthly basis if able. Continue to make repairs as needed and conduct regular system evaluations using tractor camera and calls from public. Record number of CB cleaned and repaired, feet of pipe cleaned and repaired, record maintenance of other structures in the stormwater system. Record number and data collected of camera use, smoke and dye testing events and findings.
- 4). Continue trash collection program at city owned parks and recreational complexes.
- 5). Document number of training sessions, number of attendees, subject of training.
- 6). Continue to assist other Departments with pollution prevention and spill plans if needed. Document training session and attendees if needed..

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.

Will document all pertinent facts, comments of inspections and results and any follow up needed. Currently during training session the Safety Director has each attendee sign an attendance form, will

keep copies of forms. Will keep copy of pollution prevention plan developed for each department and record any inspections and changes to the plans.

Evaluation

Part II.B.7

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

- 1). By tracking and reviewing data collected from inspection reports.
- 2). By reviewing inspection reports of City owned facilities.
- 3). By employees input, comments, attitudes and attendance at training sessions.
- 4). By continued evaluation of collection system and maintenance records.
- 5). By visual observations of streets, CB and other stormwater structures.
- 6). By tracking public comments of program.

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. NA.

20. v. For each facility, provide the name and contact information of the operator if applicable. Not applicable, all industrial facilities have a current NPDES permit. See section 20.p

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

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.
- 20.y. List the nature of activity at the industrial facility.
- 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?
- 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?
- 20.bb. Do any of your storm water outlets discharge through an oil water separator? If yes, provide the outlet numbers.

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