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:

West Virginia State University

1.b. Mailing Address:

P. O. Box 1000, Institute, WV 25112-1000

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. **Marvin Smith**
1.d. **Director, Department of Physical Facilities**
1.e. **304-550-2839**
1.f. **smithm@wvstateu.edu**

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 Melvin Jones

2.c. Title **Vice President Business and Finance**

2.d. Date 4-6-16

Co-permittees (Complete this section if co-permitting with another MS4 entity)
Part III. A.

3.a. Name of MS4 Operator
3.b. Contact person
3.c. Telephone

3.d. Address
3.e. Email address
3.f. Have legal agreements been finalized between co-permittees?
3.g. If yes, provide agreement with this application. (With signatures)

Section II. Storm Sewer System

Part IV.A.
Description of storm sewer system

4.a. Area (in acres) that drains into the MS4 from outside the corporate or jurisdictional boundaries:
120+ acres A Detailed Description of WVSU Storm Sewer System Follows:

Storm Drains
There are five major storm drain trunk systems located on the WVSU campus. Three of these systems collect storm runoff from areas outside the campus and convey it through the university to discharge points to the Kanawha River. The other two trunk systems collect internal runoff and discharge into the three main systems. In addition there are several minor systems and few areas where storm runoff enters the sanitary sewer system. These combined sewers have been identified and are in the process of being separated. All the storm drainage systems for entire campus discharge into the Kanawha River.

The major trunk systems:

System A - Originates North of Campus and passes through the campus from Interstate 64 along the East side of the Campus to the Kanawha River. This system is located along the east property line of the campus. Its main function is to convey runoff from the two areas north of the campus and interstate I-64 into an unnamed creek running from behind the James Wilson Student Union to Shawnee Park east of the campus. This system is in fair condition. The contributing drainage area off campus is 55 acres and it drains a surface area of approximately 5 acres on campus. Hydraulic calculations for this system indicate that it is currently operating at capacity. Future development in the drainage area north of campus may increase the runoff and cause a problem in this area.

System B - Originates North of Campus and picks up drainage from the North end of the Campus. This system drains the campus area around Wallace Hall, Campus Drive from SR 25 to Library Drive, Library Drive, and the area between Hamblin Science Building and James Wilson Student Union. Also included are two areas north of SR 25 and interstate I-64. It discharges into the same creek behind the student union as System A. Parts of this system date back to the 1920's. Extensions apparently have been added on since then. Several inlets have been included in this system even though their connection to the trunk line has not been determined. These inlets are located in the parking area east of the Administration Building. Most of the inlets are located in the open pavement area instead of against the curbs where flow can be directed better. The Drain-Jordan Library is constructed over a portion of the trunk line. The contributing drainage area off campus is 117 acres and it drains a campus area of approximately 15 acres.

System A-B - System A & B both discharge into a stream behind the James Wilson Student Union. This unnamed stream flows eastward along the north edge of an undeveloped parcel owned by the college, through a culvert under Washington Avenue and continues eastwardly into a 54" diameter storm drain starting at the edge of Shawnee Park. This storm drain runs through the park (assumed to follow the former

stream bed) and enters the college property adjacent to the railroad and east of the stadium. At its discharge point it is a 72" diameter pipe into a backwater pond of the Kanawha River. This trunk line was installed by Union Carbide when the area was being filled with flyash. The condition of this system is good and it has sufficient capacity for today's conditions. Future development in contributing drainage areas could create a capacity problem for this system.

System C - Drains State of West Virginia owned Barron Drive along with the west side of the Campus. This is a system of relatively small diameter sewers, (18" max) draining Barron Drive and the campus mall from the Administration Building to the Cole Complex. It discharges into an open stream (Goose Creek or U.N.T. @ river mile 50.15) west of Barron Drive. The drainage area for this system is approximately 25 acres. It drains almost entirely campus area. The capacity of this system is sufficient to carry the current drainage discharge.

System D - Drains the center of the main campus. This system drains the area along the east side of the campus mall from the Administration Building to the Campbell Conference Center building and along College Drive from Student Dormitory to the water tower. It discharges into the 72" storm sewer (System E) located west of first base of the Cal Bailey Baseball Field. Approximate area for this system is 15 acres. Most of this system is 12" diameter pipe then to a 24" CRP through the baseball field. It appears to be part of the system constructed during the 1920's.

System E - Originates West of Campus and picks up drainage from Interstate 64, Bayer chemical Plant and West Virginia Rehabilitation Center as well as a few small campus drains on campus. This large diameter (72") sewer originates on the west side of the WVSU West Campus property. It picks up an open ditch "Goose Creek" (U.N.T. @ river mile 50.15) which originates north of the interstate and also picks up drainage coming from the Bayer plant. The main storm drainage system for the West Campus as well as System D drainage, discharge into this 72" RCP storm sewer. The other smaller campus storm system flows into the 72" RCP as it crosses the campus. A portion of the pipe system crosses under Building E and Building A on the West Campus. This pipe was installed prior to 1960 and appears to be in good condition. From its location between the brick garage and tennis courts to its outfall east of the stadium the location of this line is only approximate, however systems manholes and drop inlets have been located. Because the sewer is deep (20-25' below ground) it was not considered feasible to locate this line more accurately. This system discharges into an open ditch approximately 60 feet north of the railroad. It combines with the discharge from Systems A-B and G and flows through a 12'x10' concrete box culvert under the railroad into the Kanawha River. Backwater from the Kanawha River during high water affects the hydraulics of this system. The discharge for this system was not determined since its contributing area from the Bayer plant is not known.
The estimated hydraulic profile is such that any problems that may result from increased runoff would occur off campus and would be a result of development of areas off campus. This drainage area on campus for this system is approximately 20 acres.

Other Minor Trunk Systems:

System F - This storm drainage system is located at the north-west corner of the campus and is likely the oldest. Roof drains from Building R and Building K on the West Campus flow into this system as well as drop inlets in the surrounding area. The piping runs behind Building K and exits (day lights) on the riverbank behind the railroad tracks from a wooden box culvert and outfalls into the Kanawha River. The exact condition of the wooden box culvert pipe is unknown. The drainage area for this system is approximately 5 acres.

System G – This 72" pipe discharging into the backwater was likely a remnant System of A-B from when the greenhouse complex was built. System A-B was diverted through an open ditch on the north side of the railroad tracks then back into a pipe to the backwater. System G drains the practice field and the greenhouse complex. The drainage area for this system is approximately 2 acres.

System H - This system drains the area south and west of the football field. Some sewer pipe locations could not be determined or confirmed. Further investigation is needed for the storm sewer out fall to river from the manhole behind interceptor manhole. Flow out of this pipe was not conclusively determined. A more detailed survey of all known surface components may be desired. This will allow for more accurate mapping for future planning and development. The drainage area for this system is approximately 5 acres.

System J – This system is partially mapped and is believed to discharge into the ditch (Goose Creek or U.N.T. @ river mile 50.15) along the western edge of the campus. It covers the north western corner of the campus. The drainage area for this system is approximately 5 acres.

Minor Systems not named:
There are several minor systems on campus which carry storm runoff. The largest is the system draining the football field area. There are two outlets for this system and the system should function adequately as long as it is maintained properly. Other minor systems are located along Washington Avenue in the vicinity of Jones Hall and near the maintenance garage. The system along Washington Avenue serves the local street system and is not controlled by the college. The system in front of the maintenance garage is fairly new and serves mainly as a building drain.
Also, the office and grounds east of the main campus along SR25 drains into the unnamed stream described in System A-B. The drainage area for this system is approximately 3 acres.

4.b. Area (in acres) within current corporate or jurisdictional boundaries: **See Above (about 100 acres)**
4.c. For all MS4s, population
(Universities: give current enrollment plus staff and faculty.

Current Campus Population 5,400 (students plus staff and faculty)

Part IV.B.
4.d. Latitude and Longitude of representative outfall:
Longitude- **-81 Degrees: 46 Minutes: 3.86 Seconds:**
Latitude- **38 Degrees: 22 Minutes: 40.74 Seconds:**

Part IV.B.
4.e. Describe the physical location of your representative outfall. If a street address is not possible use cross street descriptions.
Although there are multiple stormwater drainage systems on campus, all drainage comes from the same type of ground or development. Therefore, representative Samples will be taken at one location. This location is the last manhole on System D before entering the 72" RCP that carries "Goose Creek" (UNT @ river mile 50.15). The manhole is located west of the Maintenance and Storage Building on College Drive and drains most of the main Campus see attached map SD-3.

Part IV.B.

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

WVSU will sample one representative outfall located in a densely populated area twice per year. Semi-annual grab samples will be collected during the first thirty minutes of a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previous measurable storm event (greater than 0.1inch rainfall). Parameters to be checked: TKN, nitrate nitrogen, nitrite nitrogen, and total phosphorus.

Storm Sewer Infrastructure

Provide the most accurate number possible.

Below are approximate values. See attached map for general arrangement of systems.

5.a. Storm sewers, in feet	**37,850 LF**
5.b. Open ditches, in feet	**2,000 LF**
5.c. Outfalls	**4**
5.d. Catch basins	**180**
5.e. Detention* facilities	None
5.f. Retention** facilities	None
5.g. Treatment facilities	None
5.h. Regional stormwater facilities	None

6.a. Does your MS4 receive stormwater discharges from WVDOT storm sewer system, roads or right-of-ways? **Yes**
6.b. Does your MS4 discharge into WVDOT storm sewer systems or right-of-ways? **No**

7. Is your MS4 interconnected with another MS4? (Does stormwater flow into or out of your storm sewer system to or from another MS4?) **No**
If yes, describe.
8. Does your municipality contain combined sewer systems? **Yes**
9.a. What percentage is drained by Combined Sewer System? **0%**
9.b. What percentage is drained by separate storm sewer system? **100%**

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? **Four**

(Item 11 is intentionally empty)

Map Requirements

Please provide a legible map that identifies the following information:

12.a. City, County or jurisdiction boundaries **(See Sheet 1 of 5)**

12.b. State or Federal operated vocational/college/university campuses and military institutions. **Included**
12.c. Urban area as defined by the 2000 Census, use 2010 Census data if available **(See Sheet 5 of 5)**
12.d. Municipal, County, or State wastewater treatment plants and their associated outfalls **N/A**
12.e. Landfills **N/A**
12.f. Municipal, County or State operated vehicle or fleet maintenance garages **N/A**
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. **Included**
12.h. Arterial, Municipal, or State roads **Included**
12.i. Stormwater discharge points and receiving streams **Included**
12.j. Streams and waterways within the MS4 **Included**
12.k. Delineation of watershed area that drains into your MS4 **(See Sheet 1 of 5)**

Part.II.C.b.3.a.iv.
12.l. Submit paper maps folded to 8.5" x 11". **Submitted electronically**

Part.II.C.b.3.a.iv.
12.m. Multiple maps must be of the same scale, 1:1000 or 1:2000. **Submitted electronically**

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:

Part III.D.1.a.
13. Locations & Pollutants of Concern; **Kanawha River**

Name of receiving stream	**Impaired?** Yes or No	**Parameters of impairment**	**Has a TMDL been established?** Yes or No
U.N.T. @ river mile 50.15 (Locally known as "Goose Creek")	**N**	**N/A**	**No**
Kanawha River (Lower)	**Y**	**Fecal Coliform**	**No**

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.

<u>Fecal Coliform Prevention BMPs</u>: BMPs #1.1 through #1.5 included in the Public Education and Outreach MCM and BMPs #3.2 and #3.3 in the Illicit Discharge Detection and Elimination MCM will address fecal coliform pollution prevention. BMP 1.1 (Website) This BMP is expected to help address fecal coliform polluted discharges by educating the public on the effects that polluted runoff can have on surface runoff. Similarly, BMP 1.2 (Pamphlets), BMP 1.3 (News Articles), BMP 1.4 (Stormwater Poster) and BMP 1.5 (Stormwater Coursework), the resources in these BMP's will soon serve as resources for educational materials for homeowners and students. BMP 3.3 (Illicit Discharge Hotline) will provide a means of and encourage an anonymous forum for the public to report any discharges in the MS4 that may look suspicious.

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

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

WVSU will begin testing and monitoring when TMDL's are developed. Until that time the University will visually monitor its outfalls, document results and educate staff, faculty and students.

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?

N/A

<u>Evaluating the effectiveness of your SWMP for impaired waterbodies/TMDLs</u>

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.

WVSU will begin testing and monitoring when TMDL's are developed. Until that time we will educate college residents / students and perform inspections to prevent or mitigate any leaks that might contribute to fecal coliform.

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

WVSU will review our data, primary education efforts and inspection data to decide if modifications are necessary.

Section III. Minimum Control Measures

Instructions:

For each Minimum Control Measure (MCM), state your control objective and describe BMPs selected for implementation in your jurisdiction. For each BMP, include a brief description, measurable goals, and milestones as appropriate towards achieving each goal. Indicate if the BMP is part of an existing program and if another entity will share responsibility for implementing that BMP.

In cases where another entity will perform one or more BMPs or components thereof on behalf of the permittee, specifically describe the activities each entity will conduct and include reference to legal agreement where appropriate.

Describe as many BMPs as necessary to fulfill the requirements of the small MS4 General Permit. If you need more space attach additional pages.

Measurable Goals

Measurable goals are numeric or narrative standards used to gauge program effectiveness. These are design objectives or goals that quantify the progress of program implementation. For each BMP a measurable goal must be established. Describe what you expect to accomplish or achieve by certain dates or milestones, when you implement that particular BMP. Your expected outcome or accomplishment should be expressed as a measurable goal. You should have a variety of short and long term goals.

Milestones are a quantifiable target to measure progress toward achieving the activity or implementation of that BMP.

Additional guidance on selecting BMPs and developing measurable goals can be found at the following EPA website: www.epa.gov/npdes/stormwater/measurablegoals/index.htm

USEPA's measureable goal guidance can be found here:
http://cfpub.epa.gov/npdes/stormwater/measurablegoals/index.cfm

Your stormwater management program should specify:

- *What* needs to happen (Specific stormwater control measure)
- *Who* needs to do it (Which department of the MS4 will be implementing this stormwater control measure?)
- *How much* they need to do (milestones and measurable goals)
- *When* they need to get it done

- *Where* it is to be done

There must be specific performance measures. Without a goal, you will have a difficult time measuring progress.

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. **Marvin Smith**
15.b. **Director**
15.c. **Department of Physical Facilities**
15.d. **P. O. Box 1000, Institute, WV 25112-1000**
15.e. **304-550-2839**
15.f. **smithm@wvstateu.edu**

Part II.C.b.1.

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

WVSU will implement a public education program to educate the public on the impacts of stormwater discharges to water bodies. Students, employees, contractors, and the general public will be the groups targeted for education and outreach to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts.

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

All of the following are new Best Management Practices

BMP 1.1	**STORMWATER WEBSITE**
Description	**Establish a stormwater website that will include links to download outreach materials and the various MS4 reports (SWMP, Annual Report, etc.). The website will also be used to report illicit discharges. Include a stormwater survey to evaluate the public's knowledge of stormwater issues. The website URL will be included in the stormwater newsletters, pamphlets, and newspaper articles. The number of hits to the website will be documented and reported on an annual basis.**

BMP 1.2	STORMWATER EDUCATIONAL MATERIALS
Description	**Display a stand with stormwater management brochures, posters, and/or flyers, during the annual on campus Earth Day event. Participate with similar displays at different on and off-campus community events.**

BMP 1.3	STORMWATER NEWSPAPER ARTICLES
Description	**The University will encourage and support efforts in publishing articles in the Yellow Jackets newsletter regarding stormwater pollution prevention, recycling and sustainability. The University will provide information for publishing the article. The telephone number(s) to be used by students, faculty and other staff to report suspected illicit discharges or other pollution concerns will also be publicized in the article. At least one article will be published in the University's newsletter on an annual basis.**

BMP 1.4	STORMWATER AWARNESS POSTER
Description	**The University will display a stormwater awareness poster at several strategic common areas where students, faculty, staff congregate (i.e., student plaza, cafeteria, convocation center, gym, dorms, orientation venue, etc). The poster will contain the URL for WVSU's stormwater webpage and the phone number(s) to be used by students, faculty and other staff to report suspected illicit discharges or other pollution concerns. The poster will also be posted on University's webpage, and students, faculty and staff will be allowed to comment.**

BMP 1.5	STORMWATER CURRICULUM
Description	**The University will work with the appropriate faculty members to integrate stormwater management educational material into the syllabus of some specific relevant courses provided by the College of Natural Sciences and Mathematics. Student surveys will be conducted at the beginning, during, and at the end of the curriculum to assess the level of understanding of targeted stormwater management concepts.**

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

MCM Components

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

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

WVSU will provide information to the general public on the impact of stormwater runoff in the local area through the Universities existing media sources such as the Yellow Jacket Newspaper.

Part II.C.a.ii

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

WVSU will institute a written policy within twelve months of approval that requires all mobile businesses that do work on campus furnish a list of any chemicals they will use onsite along with an outline of any established policies for disposal of waste products produced by their services. A representative of WVSU will evaluate this information and inform the vendor if there are any unsafe chemicals or processes that require modification prior to obtaining approval to operate on campus.

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

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

All University groundskeepers and those contracted by WVSU to perform grounds maintenance must obtain and keep current all required certifications to handle and distribute pesticides, herbicides, and fertilizers. Language to this effect will be added to all appropriate contract documents. In addition, brochures discussing the benefits of controlling the use of pesticides and herbicides will be distributed to campus facility, residents and adjacent homeowners. Finally the groups listed above will receive information on dangers of fecal coliform contamination to the watershed.

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.

WVSU will educate all contractors coming onto campus to do work by placing an 'educational stormwater page' in contract documents. This educational page will contain specific information about technical standards for construction site sediment and erosion control, runoff reduction techniques, including site design, pervious pavement, alternative parking lot design, retention of forests and mature trees, stormwater treatment and flow control BMPs, impacts of increased stormwater flows into receiving water bodies. WVSU intends to have this educational pageready within six months of final approval of the permit so that all contractors coming onto the

campus after this date and beyond will receive this information. WVSU will disseminate this page to all our procurement personnel who deal with contracts and contractors so they will know that this page is mandatory for placement in all contracts. Staff that oversee procurement and/or contractor work will be trained on proper stormwater management and what to look for onsite to prevent stormwater pollution. On an annual basis WVSU will tally the number of contractors that received this page in their contracts.

Schedule

Part II.C.a.1

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

BMP #	BMP Name	Interim Goals	Full Implementation
1.1	Stormwater Website		Within 12 Months*
1.2	Stormwater Pamphlets		Within 24 Months*
1.3	Newspaper Articles		Within 12 Months*
1.4	Stormwater Poster		Within 36 Months*
1.5	Stormwater Curriculum	Establish curriculum Within 12 months	Within 24 Months*

***from date of approval of the permit**

Measurable Goals

Part II.B.4

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

BMP #	BMP Name	Measurable Goals
1.1	Stormwater Website	Update the University's website to provide stormwater pollution prevention, recycling, sustainability, and waste management related educational information and/or create a stormwater Facebook page linked to the WVSU website.
1.2	Stormwater Pamphlets	Develop stormwater pamphlets and display them on a stand during the annual on campus Earth Day event. Participate with similar displays at different on and off-campus community events.
1.3	Newspaper Articles	Publishing articles in the Yellow Jackets newsletter regarding stormwater pollution prevention, recycling and sustainability. At least one article will be published in the University's newsletter on an annual basis.
1.4	Stormwater Poster	The University will develop and display a stormwater awareness poster at several strategic common areas where students, faculty, staff congregate. The poster will also be posted on University's webpage.

1.5	**Stormwater Curriculum**	**Integrate stormwater management educational material into the syllabus of some specific relevant courses provided by the College of Natural Sciences and Mathematics.**

Tracking

Part II.C.b.1.c.

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

BMP #	BMP Name	Tracking
1.1	**Stormwater Website**	**Document the number of hits that the website has per year**
1.2	**Stormwater Pamphlets**	**Track the number of pamphlets sent out each year. Retain a copy of each pamphlet.**
1.3	**Newspaper Articles**	**Track the number of newspaper articles sent out each year. Retain a copy of each article.**
1.4	**Stormwater Poster**	**Document the number of hits to the phone number on the poster per year.**
1.5	**Stormwater Curriculum**	**Track the number of classes and the number of students enrolled, will evaluate the student surveys at the beginning, during, and at the end of the curriculum and will adjust curriculum if progress in survey evaluations are not satisfactory.**

Evaluation

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

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

The effectiveness of the program will be tracked via responses to surveys administered during public events, responses to the online survey, number of visits to the website and number of students in the stormwater related classes. All of this will be reported ~~twelve~~ within twelve months of approval of the permit thereafter annually.

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. **Marvin Smith**
16.b. **Director**
16.c. **Department of Physical Facilities**
16.d. **P. O. Box 1000, Institute, WV 25112-1000**

16.e. **304-550-2839**
16.f. **smithm@wvstateu.edu**

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

West Virginia State University will provide opportunity for public involvement and participation in the implementation of the stormwater management program

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

BMP 2.1	**LITTER CLEANUP EVENT**
Description	**WVSU will initiate a campus litter cleanup event on an annual basis. These events could also be oriented towards cleaning stormwater outfalls, manholes, catch basins, storm drains inlets from debris like leaves, sediments, litter. The event will be announced using all media sources available: emails, website, Facebook page, newsletter, flyers, and posters.**

BMP 2.2	**STORM DRAIN INLET MARKING**
Description	**The University will make use of the fact that campus organizations need volunteer hours and involve them in activities such as marking the storm drain inlets within the campus grounds. University will ensure that the storm drain inlet markings are continued to be maintained, and markings damaged as a result of inclement weather, snow plowing activities, prolonged sun exposure will be rehabilitated or replaced.**

BMP 2.3	**TREE PLANTING PROGRAM**
Description	**The university will continue to encourage and support the Student Environmental Action Coalition (SEAC) efforts initiated in April of 2010 for planting trees on the campus in celebration of Earth Day.**

BMPs 2.1 and 2.2 are new BMP 2.3 is existing.

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

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. Initiate campus litter cleanup events

2. Storm drain inlet marking

Part II.C.b.2.a

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

Through public awareness in publishing stormwater documents on the website and opportunities for student participation.

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).

The University webpage will list events and opportunities to be involved. In addition, Events will be advertised in the student newspaper (Yellow Jacket)

Part II.C.b.2.c

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

Website links will be established within one year after the final approval of the permit.

Schedule

Part II.C.a.1

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

BMP #	BMP Name	Full Implementation
2.1	Litter Cleanup	Within 12 Months*
2.2	Stormdrain Inlet Marking	Within 12 Months*
2.3	Tree Planting	Annually*

***from date of approval of the permit**

Measurable Goals

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

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

BMP #	BMP Name	Measurable Goals
2.1	Litter Cleanup	The number of participants enrolled will be reported in the annual submission. Also the quantities of litter collected during each event will be recorded in the annual report.
2.2	Stormdrain Inlet Marking	The number of storm drains marked will be recorded in the annual report. Also the number of storm drain markings that were rehabilitated or replaced each year will be reported in the annual submission.

2.3	**Tree Planting**	**The number of trees planted and the number of participants will be recorded into the annual report.**

Tracking

Part II.B.7.

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

BMP #	BMP Name	Tracking
2.1	**Litter Cleanup**	**WVSU will evaluate the number of enrolled participants to these events and will assess the quantity of materials collected each year as part of the clean-up event.**
2.2	**Stormdrain Marking**	**WVSU will evaluate the number of volunteer hours/volunteers involved in the actions of stormdrain inlet marking event, and will assess the number of inlets marked-up and the number of rehabilitated markings.**
2.3	**Tree Planting**	**Will evaluate the number of enrolled participants to the tree planting events and will assess the number of trees planted each year.**

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 program will be gauged be the public participation in the litter cleanup, storm drain marking and tree planting events. It will also be gauged by tracking the number of comments and the amount of public participation received during the course of the SWMP review and through email correspondence with public groups during event announcements.

Illicit Discharge Detection and Elimination – MCM #3

Part II.C.b.3.

Responsible Person

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

17.a. **Marvin Smith**
17.b. **Director**
17.c. **Department of Physical Facilities**
17.d. **P.O. Box 1000, Institute, WV 25112-1000**

17.e. **304-550-2839**
17.f. **smithm@wvstateu.edu**
17.g. Is another entity sharing responsibility for the MCM? **No** If so, who?

Control Objective & BMPs

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

The overall goal of this MCM is to minimize non-stormwater discharges to the MS4. This will be accomplished by developing a program to locate non-stormwater discharges, illicit connections to the storm system, and eliminate illegal dumping of pollution into the storm system.

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

BMP 3.1	MAINTAIN STORM SEWER MAP
Description	**WVSU will work with students, faculty and staff to collect information with regards to the location of the storm drain inlets, pipes, outfalls and receiving streams which will be used to update and maintain a map to accurately show the stormwater infrastructure within the campus grounds. The map will then be updated periodically as changes to the stormwater system occur in time.**

BMP 3.2	ILLICIT DISCHARGE PLAN
Description	**An Illicit Discharge Detection and Elimination Plan of Action will be developed that will effectively prohibit non-stormwater, illegal discharges and/or dumping into the storm system.**

BMP 3.3	ILLICIT DISCHARGE MONITORING
Description	**University students (as part of a course) will be trained and will conduct dry weather observation in the stormwater infrastructure using visual observation, odor, and other indicators to identify possible illicit discharges.**

BMPs 3.2 and 3.3 are new BMP 3.1 is existing.

MCM Components

Part II.C.b.3.a.
17.j. Do you have a current map of your municipal storm sewer system? **Yes**

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

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.

N/A

Does your IDDE Ordinance prohibit the following:

Part II.C.b.3.ii

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

No. WVSU is educating local fire departments employees to limit the amount of waterline flushing where possible and to encourage discharging the flushed water onto grass.

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

No. WVSU will include this topic on the webpage, will include it in contract documents distributed to contractors, and will train staff on lawn care.

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

No. WVSU will include this topic on the webpage, will include it in contract documents distributed to contractors, and will train staff on appropriate wash down proceedures.

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

17.v. Does your IDDE Ordinance include escalating enforcement procedures and actions? **No**

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

17.w. Briefly describe your enforcement strategy. **No enforcement since this is a university**

Part II.C.b.3.c .

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

a. WVSU will develop a prioritized list of locations across the campus where a greater potential may exist for illicit discharges to the stormwater system. These locations will be monitored on a quarterly basis. Starting June 30, 2016 WVSU will research the storm infrastructure shown on the mapping system.
b. Checklists, inspection forms and written protocol used for the IDDE program will be developed within this first year, so that it is ready for the first reconnaissance mission by March 31, 2017. The source for our checklists and forms will be the IDDE Manual published by the Center for Watershed Protection.
c. WVSU will conduct outfall/manhole reconnaissance annually. We will have a two member team walk all drainage areas on the campus. Our priority area(s) will be inspected once per quarter.
d. Outfalls, pipes, and catch basins will be screened for any dry weather flow. The flow will be checked for discoloration, odors, including sewage and chlorine in accordance to our inspection protocol and recorded on the inspection form. When non-flowing outfalls and pipes are observed, WVSU will utilize the protocol outlined in the IDDE Guidance Manual recommended by WVDEP, including off hours monitoring, caulk dams, and optical brighteners.
e. When intermittent or non-intermittent flows are discovered. WVSU will initiate procedures to determine whether or not the flow is ground or spring water or if it is indeed an illicit discharge.

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

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

WVSU will document and create an inventory of the locations of priority areas likely to have illicit discharges along with previous complaint locations and provide an evaluation of those areas on campus where the storage of large quantities of materials that could result in spills exist. This information will be included in WVSU’s first annual report.

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

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

WVSU will conduct visual observations and screenings. Follow-up monitoring will occur on suspicious discharges (i.e., dye-tests, smoke tests), and removal of illicit discharges that are found due to screening and monitoring of priority areas once per quarter. Non-priority areas will be monitored once a year.

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

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

WVSU will promptly investigate suspected illicit discharges using the storm sewer map to help identify the location and source of the discharge. WVSU will trace the source of each illicit discharge by one or more of the following methods: conducting visual inspections, opening manholes, using mobile cameras, and/or analyzing water samples.

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

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

In the event that the discharge is caused by something that cannot be stopped immediately, WVSU will immediately start the process (work orders, etc.), to remove the cause of the discharge. For instance, if a sewer line is broken and raw sewage is flowing into the storm system, an emergency work order will be initiated. In the event that the discharge is coming from a site off campus, the appropriate County officials will be notified immediately. The notification will be properly documented and maintained on campus at the physical plant. All of WVSU's activities to inspect and remove illicit discharges will be documented on a spreadsheet and updated on a quarterly basis. WVSU will rely heavily on the procedures defined in the Center for Watershed Protection Publication, Illicit Discharge Detection and Elimination (2004), to develop its procedures for characterization, tracing and removing the sources of illicit discharges.

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.

WVSU has a crisis communications plan. The plan includes procedures for communicating with both internal and external audiences in the event of an emergency. Vehicles of communication may include traditional print and broadcast media, internet based media, social media, emergency broadcast systems, emergency cell phone notification systems, email notification to specific audiences, and/or telephone notification of specific audiences.

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.

WVSU will conduct annual staff training on the proper procedure for identifying, reporting and removing illicit discharges. The training will focus on pollutants of concern and will include review of the WVSU Illicit Connection Detection Program Procedures (once established). The goals of the training are to train maintenance employees on the importance of reducing the amount of sediment allowed to enter the storm system or stream, train targeted students and faculty on Program procedures, and to train both groups on the proper method of reporting suspected illicit discharges

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.

BMP #	BMP Name	Full Implementation
3.1	**Maintain Storm Sewer Map**	**Annually**
3.2	**Illicit Discharge Plan**	**Within 12 Months***
3.3	**Illicit Discharge Monitoring**	**Within 12 Months***

***from date of approval of the permit**

Measurable Goals

Part II.B.4

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

BMP #	BMP Name	Measurable Goals
3.1	**Maintain Storm Sewer Map**	**Mapping will be updated on an ongoing basis to document revisions or upgrades to the system.**
3.2	**Illicit Discharge Plan**	**An IDDE Plan will be developed that will effectively prohibit non-stormwater, illegal discharges and/or dumping into the storm system.**
3.3	**Illicit Discharge Monitoring**	**University students (as part of a course) will be trained and will conduct dry weather observations on an annual basis.**

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.

BMP #	BMP Name	Tracking
3.1	**Maintain Storm Sewer Map**	**WVSU will evaluate the accuracy of the stormwater infrastructure map by performing field reconnaissance observations**
3.2	**Illicit Discharge Plan**	**A database will be created to track and maintain records of the number and type of spills, illicit discharges identified, inspections, illicit connections removed, and any feedback received from public education efforts. Over the period of the permit the information will be used to determine if the IDDE program is effective.**
3.3	**Illicit Discharge Monitoring**	**WVSU will maintain records of when and where observations were made and the number of illicit discharges detected or suspected in the database. Observations will be made at least quarterly. The numbers of those trained will be included in the Annual report.**

Evaluation

Part II.B.7

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

The program's effectiveness will be evaluated through tracking the number of WVSU staff, students and faculty trained on IDDE, the number of field assessment activities completed, and the number of illicit connections confirmed and corrections achieved.

Construction Site Run-off Control – MCM #4

Part II.C.b.4.

Responsible Person:

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

18.a. **Marvin Smith**
18.b. **Director**
18.c. **Department of Physical Facilities**
18.d. **P. O. Box 1000, Institute, WV 25112-1000**
18.e. **304-550-2839**
18.f. **smithm@wvstateu.edu**
18.g. Is another entity sharing responsibility for this MCM? **No** If so, who?

Control Objective & BMPs

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

To minimize the discharge of sediment from construction sites by educating contractors, engineers, and architects on the proper design and implementation of erosion and sediment control BMP's, and requiring/regulating the same with an active construction site inspection program.

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

BMP 4.1	VERIFY NPDES PERMITS
Description	**WVSU will ensure that all construction projects disturbing over 1 acre of land have an approved registration under the WVDEP's General National Pollutant Discharge Elimination System (NPDES) Permit for stormwater associated with construction activities**

BMP 4.2	STAFF TRAINING

Description	**WVSU will train staff on construction site review, inspection, and enforcement procedures.**

BMP 4.3	**CONTRACTOR EDUCATION**
Description	**WVSU will prepare language for the contract documents describing the stormwater management responsibilities that the contractor must abide by including a checklist with necessary steps to take a project from initial concept through to site stabilization. Contractors will be required to provide education on Construction Site Run-off Control to on-site employees..**

BMP 4.4	**PRE CONSTRUCTION MEETING**
Description	**WVSU will document that stormwater compliance will be addressed during a pre-construction conference with the contractor(s).**

BMP 4.5	**EMERGENCY POINT OF CONTACT**
Description	**For each construction project, WVSU will establish a contact person for quick reference by project team members for reporting and emergency response following spills or releases. Any spills or releases will be addressed per the University's emergency management plan. WVSU will aid the contractor with resources needed to contain the spills or releases.**

BMP 4.6	**CONSTRUCTION SITE INSPECTIONS**
Description	**A WVSU Inspector will perform monthly site inspections. The inspector will also perform inspections within 24 hours after a storm event greater than 0.5 inches of rain per 24-hour period to ascertain the BMP's effectiveness.**

MCM Components

Part II.C.b.4.a.

18.j. Do you have an Ordinance to control construction site run-off? **No**

Part II.C.b.4

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

N/A

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

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

N/A

Part II.C.b.4.b.
18.m. Describe the plan review process for your construction site run off program.

WVSU will employ a qualified professional to review and approve construction plans.

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

WVSU will employ a qualified professional to verify erosion and sediment controls are in place, during storm event to verify function and after construction completion to ascertain site stabilization.

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

Inspectors will document insufficient items/procedures and inform the contractor that items need addressed along with timelines for doing so. If the contractor does not address all issues to the satisfaction of WVSU work will be stopped.

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.

WVSU is a public institution and all construction work will be regulated and guided by the MS4 Permit as necessary.

Schedule

Part II.C.b.4.a.
18.q.

BMP #	BMP Name	Full Implementation
4.1	Verify NPDES Permits	Within 24 Months*
4.2	Staff Training	Within 24 Months*
4.3	Contractor Education	Within 24 Months*
4.4	Pre-Construction Meeting	Within 24 Months*
4.5	Emergency Point of Contact	Within 24 Months*
4.6	Construction Site Inspections	Within 24 Months*

***from date of approval of the permit**

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.

N/A

Measurable Goals

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

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

BMP #	BMP Name	Measurable Goals
4.1	**Verify NPDES Permits**	**University will verify all registrations associated with each construction activities on its campus**
4.2	**Staff Training**	**WVSU will train staff on construction site review, inspection, and enforcement procedures.**
4.3	**Contractor Education**	**WVSU will prepare language for the contract documents describing the stormwater management responsibilities that the contractor must abide by. Contractors will be required to provide education on Construction Site Run-off Control to on-site employees.**
4.4	**Pre-Construction Meeting**	**WVSU will document that stormwater compliance will be addressed during a pre-construction conference with the contractor(s) of each project.**
4.5	**Emergency Point of Contact**	**WVS University will establish contact for quick reference for each construction project for reporting and emergency response following spills or releases**
4.6	**Construction Site Inspections**	**Inspectors will perform monthly and event related site inspections.**

1

Tracking

Part II.B.7.

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

BMP #	BMP Name	Tracking Activities
4.1	**Verify NPDES Permits**	**University will verify all registrations associated with each construction activities on its campus**
4.2	**Staff Training**	**WVSU will track the number of trained staff, will evaluate the skills achieved as a result of the training (by assessing the level of detail provided in the inspection documents), and if necessary will provide additional training.**
4.3	**Contractor Education**	**WVSU will track the number of trained contractors.**
4.4	**Pre-Construction Meeting**	**WVSU will document the number of meetings held.**
4.5	**Emergency Point of Contact**	**University will track the details of each emergency situation reported and the details of the initial steps taken to address it.**

4.6	**Construction Site Inspections**	**Copies of the inspection forms will be included in the annual report along with remediation measures.**

Evaluation

Part II.B.7

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

The effectiveness of the Construction Site Run-off Control program will be gauged by the results of different activities. The number and type of run-off control problems compared to the number of contractors, and developers educated on stormwater management regulations, and requirements will provide statistics to gauge the effectiveness of the program. Site inspections by the Stormwater Inspector will also show the effectiveness of the program. The number of stormwater related complaints from active construction sites will also indicate how well the program has been accepted by contractors and construction site operators.

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. **Marvin Smith**
19.b. **Director**
19.c. **Department of Physical Facilities**
19.d. **P. O. Box 1000, Institute, WV 25112-1000**
19.e. **304-550-2839**
19.f. **smithm@wvstateu.edu**

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

Control Objectives & BMPs

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

The overall objective for this MCM is to implement, assess, and enforce a program to reduce pollutants in stormwater runoff from new development and redevelopment activities while simultaneously ensuring that long-term stormwater controls are being implemented to increase groundwater recharge when possible and protect the physical, chemical and biological integrity of their receiving waters and their designated uses from the impacts of stormwater discharges.

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? **This is a university and doesn't have an ordinance. All land development activities are controlled by WVSU. The University will develop a set of policies to address watershed protection.**

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).

As a newly permitted MS4, WVSU must begin implementation of this MCM within twelve months of approval of this permit. Implementation includes the process of incorporating the six watershed protection elements into WVSU's planning documents along with inclusion in all appropriate contract documents.

Watershed Protection Elements	Name of document that contains the element	*Review Date
1. Minimizing impervious surfaces	**University Policy**	**Annually**
2. Preserving ecologically sensitive areas	**University Policy**	**Annually**
3. Reducing thermal impacts	**University Policy**	**Annually**
4. Reducing or avoiding hydromodification	**University Policy**	**Annually**
5. Tree protection	**University Policy**	**Annually**
6. Protection of native soils, prevention of compaction of soils	**University Policy**	**Annually**

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.

All objectives will be initiated within twelve months of approval of the permit and will be fully implemented within twenty four months.

1. The quantifiable objective for the Watershed Protection Element 1, Minimizing Impervious Surfaces, is to encourage the University to decrease the impervious cover of the development by creating policies to discourage horizontal growth and encourage the use of pervious pavement.

2. The quantifiable objective for the Watershed Protection Element 2, Preserve Ecologically Sensitive Areas, is to inventory, restore and protect any areas found on campus.

3. The quantifiable objective for the Watershed Protection Element 3, Reduce Thermal Impacts, is to reduce the effects of stormwater runoff from new developments and redevelopment projects by requiring all new and redevelopment projects to provide permanent BMPs to accomplish stormwater management for the site.

4. The quantifiable objective for the Watershed Protection Element 4, Reducing or Avoiding Hydromodification, is to reduce the effects of stormwater runoff from new developments and redevelopment projects by requiring all new and redevelopment projects to provide permanent BMPs to accomplish stormwater management for the site.

5. The quantifiable objective for the Watershed Protection Element 5, Tree Protection, is to control the amount of trees removed from site.

6. The quantifiable objective for the Watershed Protection Element 6, Protect Native Soils, is to inventory the campus for Native Soils and document those found. The University will create a plan to restore and protect any found.

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

All of the following BMPs are new

BMP 5.1 - The quantifiable objective for the Watershed Protection Element 1, Minimizing Impervious Surfaces, is to encourage the University to decrease the impervious cover of the development by creating policies to discourage horizontal growth and encourage the use of pervious pavement.

BMP 5.2 - The quantifiable objective for the Watershed Protection Element 2, Preserve Ecologically Sensitive Areas, is to inventory, restore and protect any areas found on campus. WVS University will develop guidelines that buffer ecologically sensitive areas from new construction and redevelopment.

BMP 5.3 - The quantifiable objective for the Watershed Protection Element 3, Reduce Thermal Impacts, is to reduce the effects of stormwater runoff from new developments and redevelopment projects. WVSU will develop guidelines that minimize the area of connected impervious cover flowing into MS4 and will establish minimum standard for green infrastructure components in new construction and redevelopment.

BMP 5.4 - The quantifiable objective for the Watershed Protection Element 4, Reducing or Avoiding Hydromodification, is to reduce the effects of stormwater runoff from new developments and redevelopment projects. WVSU will require all new and redevelopment projects to provide permanent BMPs to accomplish stormwater management for the site.

BMP 5.5 - The quantifiable objective for the Watershed Protection Element 5, Tree Protection, is to control the amount of trees removed from site. The University will develop guidelines that require tree protection during construction and replacement of trees removed during construction.

BMP 5.6 - The quantifiable objective for the Watershed Protection Element 6, Protect Native Soils, is to inventory the campus for Native Soils and document those found. The University will create a plan to restore and protect any found. WVSU will also develop strategies to minimize the limit of disturbance on construction sites which will include design guidelines to establish minimum standards for topsoil replacement after construction activities have been completed.

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? **Other.**

If not, what is your schedule of implementation? Include mid-term and full implementation dates for Ordinance review and enactment.

The Plan of Action will be initiated within twelve months of approval of the permit and will be fully implemented within twenty four months.
Details of the Steps toward creation of the plan include:

- **a. Present stormwater management concepts to the University Planning Committee. (Within six months of approval of the Plan)**
- **b. Identify the timeframe for the updates needed for the planning documents. (Within six months of approval of the Plan)**
- **c. Consider staff input and begin drafting the Post-Construction Stormwater Management Plan of Action. (Within nine months of approval of the Plan)**
- **d. Identify if there are current documents that pertain to the site planning and site design review process. (Within nine months of approval of the Plan)**
- **e. Begin drafting or consider amendments to existing documents to require the attempt to minimize new impervious surfaces. (Within twelve months of approval of the Plan)**
- **f. Begin drafting or consider amendments to existing documents to incorporate the six Watershed Protection Elements. (Within twelve months of approval of the Plan)**
- **g. Identify the staff and their roles participating in the Post-Construction Stormwater Management Program. (Within twelve months of approval of the Plan)**

h. Develop training programs for the different staff functions in the Post-Construction Stormwater Management Program. (Within twelve months of approval of the Plan)

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? **WVSU will map all areas with reasonable potential for potential loadings. This "hot spot" map will be used to determine which projects fall within these boundaries. Appropriate water quality treatment practices will be provided prior to infiltration or discharge into each area and will be designed for the specific pollutant and source.** 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?

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

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

There are no drinking water source protection areas within the WVSU MS4 watershed.

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

WVSU will include language in its policy document to encourage the creation of smaller building footprints and smaller parking lots with biodetention structures. Use of pervious pavements will also be addressed.

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.

As a non-municipal MS4, the creation of a payment in lieu program does not apply to WVSU. WVSU will instead conduct an inventory of areas on campus where new infiltration and retention areas could be installed. By developing this inventory, WVSU may find logical areas on campus to create stormwater infiltration BMPs that could be used to offset detention and infiltration requirements from construction projects across campus. This form of mitigation could be more cost effective for WVU than installing retention BMPs at each development or redevelopment site. Further, by taking a comprehensive view, WVU can create a campus-wide stormwater management plan that takes advantage of the best soils and topography of sites across campus to infiltrate stormwater. This inventory will be completed within 12 months of approval of the permit.

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

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

If a project is going to disturb more than one acre evidence of appropriate WVDEP NPDES permitting will be required prior to approval to start construction. If disturbance falls below this threshold then an erosion siltation plan signed and sealed by a professional engineer must be provided to WVSU for review and comment.

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

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

WVSU will contract for the services of an appropriate professional to review and approve construction documents for each project.

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.

If WVSU constructs any retention structures, WVSU will maintain the structures.

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

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

WVSU will place stormwater structures on the site map

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?

WVSU will inspect structural stormwater controls on an annual basis as to performance. Complete inspection reports will be created and included in the Annual Report

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?

WVSU Facilities Department will develop design criteria for development projects that will create incentives to reduce impervious surfaces and control stormwater runoff from impervious surfaces within 12 months of approval of the permit.

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.

BMP #	BMP Name	Interim Goals	Full Implementation
5.1	Minimizing Impervious Surfaces	Within 12 Months*	Within 24 Months*

5.2	**Preserve Ecologically Sensitive Areas**	**Within 12 Months***	**Within 24 Months***
5.3	**Reduce Thermal Impacts**	**Within 12 Months***	**Within 24 Months***
5.4	**Reducing or Avoiding Hydromodification**	**Within 12 Months***	**Within 24 Months***
5.5	**Tree Protection**	**Within 12 Months***	**Within 24 Months***
5.6	**Protect Native Soils**	**Within 12 Months***	**Within 24 Months***

***from date of approval of the permit**

All components of the MCM will be initiated within twelve months of approval of the permit and will be fully implemented within twenty four months.

Measurable Goals

Part IV.A

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

BMP 5.1 – WVSU will create policies to discourage horizontal growth and encourage the use of pervious pavement.

BMP 5.2 – WVSU will inventory, restore and protect any areas found on campus. WVS University will develop guidelines that buffer ecologically sensitive areas from new construction and redevelopment.

BMP 5.3 - WVSU will develop guidelines that minimize the area of connected impervious cover flowing into MS4 and will establish minimum standard for green infrastructure components in new construction and redevelopment.

BMP 5.4 - WVSU will require all new and redevelopment projects to provide permanent BMPs to accomplish stormwater management for the site.

BMP 5.5 - The University will develop guidelines that require tree protection during construction and replacement of trees removed during construction.

BMP 5.6 - The University will create a plan to restore and protect any found. WVSU will also develop strategies to minimize the limit of disturbance on construction sites which will include design guidelines to establish minimum standards for topsoil replacement after construction activities have been completed.

Evaluation

Part II.B.7

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

WVSU will prepare a list of the six measurable goals in this BMP and detail progress on each. Data on total disturbed areas, tree protection effectiveness (along with numbers of trees), amounts and types of new green infrastructure on campus, location and status of ecologically sensitive areas along with amounts of new pervious pavement will be included in the annual report.

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. **Marvin Smith**
20.b. **Director**
20.c. **Department of Physical Facilities**
20.d. **P. O. Box 1000, Institute, WV 25112-1000**
20.e. **304-550-2839**
20.f. **smithm@wvstateu.edu**

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

Control Objectives & BMPs

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

WVSU will develop and implement an operation and maintenance program with the ultimate goal of reduction or eliminating pollutant runoff from campus operations.

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

BMP 6.1	**MUNICIPAL FACILITIES INSPECTION PLAN**
Description	**WVSU will develop and implement an appropriate Inspection Plan for its four municipal facilities.**

BMP 6.2	**STORM STRUCTURES MAINTENANCE PLAN**
Description	**WSU will develop and implement a plan to remove debris from stormwater manholes, catch basins and storm drain inlets.**

BMP 6.3	POLLUTION PREVENTION PLAN
Description	**The University will develop and implement a Pollution Prevention Plan and specific Standard Operating Procedures (SOP) relevant to activities performed in the four municipal facilities.**

BMP 6.4	STAFF TRAINING
Description	**University will adopt and implement pollution prevention training program focused on training of faculty and staff.**

All of the above BMPs are new.

MCM Components

Part II.C.b.6

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

1. **There are four "municipal facilities" on WVSU's campus that are operated on campus:**
    a. **Butler Maintenance Building – Lawn mowers, weeders, blowers, etc. are fueled, maintained and stored on concrete floors in this building. Vehicles are washed at the Physical Plant. Cleaning materials used are biodegradable. Salt and other deicing materials are stored under roof on concrete floors at a salt storage shed. Pre-bagged calcium chloride is used for deicing.**
    b. **Vehicle Maintenance Garage– The garage does not have floor drains; therefore, the likelihood on discharging contaminated runoff or stormwater is very low.**
    c. **Salt Shed - – Road salt is stored within this structure.**
    d. **Agriculture Area – Fertilizers, pesticides/herbicides are stored within the Greenhouse Complex on concrete floors.**

Part II.C.b.6.a

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

Butler Maintenance Building: Fertilizers, pesticides/herbicides and deicers are stored within buildings with concrete floors. Vehicles are washed using biodegradable materials.
Vehicle Maintenance Garage: Vehicle maintenance is performed inside the vehicle maintenance building. The used oil is collected and recycled.

Part II.C.b.6.a

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

No. A Pollution Prevention Plan for each facility will be developed and implemented within eighteen months of approval of the Permit.

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.

Salt Shed: Road salt is stored in this structure. The stored salt is covered be a tarp when not in use during the summer months. The shed is located in a large flat area and there is not much chance of an accidental discharge. During the winter spilled salt, if any, is swept up and removed as necessary. The facility is inspected monthly during the winter and at least once during the summer months. An inspection log is maintained and information obtained in the inspections will be included in the annual report.
Agriculture Area: Fertilizers and pesticides are stored within buildings with concrete floors. All pesticides are applied per manufacturer's recommendations.

Part II.C.b.6.c

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

WVSU will train its maintenance and operations staff on the MS4 and pollution prevention standards. Additional staff who may come into contact with pollution will be trained. Training will address the importance of protecting water quality, the requirements of the MS4 Permit, operations and maintenance standards, inspection procedures, procedures for preventing or minimizing impacts to water quality, along with procedures for reporting water quality control concerns such as potential illicit discharges.

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.

WVSU has an anaerobic digester used for research and educational purposes. The stormwater discharges associated with industrial activity was Permit No. WVRNE0113 No Exposure Exemption and WV/NPDES Permit No. WV0111457. The permit expired December 31, 2014. WVSU is in the process of decommissioning this facility. This work will be completed by June 1 2016.

Schedule

Part II.C.b.6

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

BMP #	BMP Name	Interim Goals	Full Implementation
6.1	**Municipal Facilities Inspection Plan**	**Within 12 Months***	**Within 18 Months***

6.2	**Storm Structures Maintenance Plan**	**Within 12 Months***	**Within 18 Months***
6.3	**Pollution Prevention Plan**	**Within 12 Months***	**Within 18 Months***
6.4	**Staff Training**	**Within 12 Months***	**Within 18 Months***

***from date of approval of the permit**

Part II.C.b.6

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

An appropriate inspection schedule will be developed as part of the Pollution Prevention Plan for each facility.

Measurable Goals

Part IV.A

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

BMP #	BMP Name	Measurable Goals
6.1	**Municipal Facilities Inspection Plan**	**WVSU will inspect all facilities on a reasonable schedule.**
6.2	**Storm Structures Maintenance Plan**	**WVSU will maintain all campus storm structures and keep them free from debris.**
6.3	**Pollution Prevention Plan**	**WVSU will prepare and implement Pollution Prevention Plans and Standard Operating Procedures (SOP) for each of its municipal facilities.**
6.4	**Staff Training**	**University will adopt and implement an annual program focused on training of faculty and staff on its Pollution Prevention Plans and Standard Operating Procedures.**

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.

6.1	**Inspection and Maintenance Plan**	**A comprehensive inspection and maintenance log will be created as part of the inventory process. Inspection and maintenance activities will be documented in the annual report.**
6.2	**Maintain Storm Structures**	**Amounts of sediment and debris collected will be logged and included in the annual report.**
6.3	**Pollution Prevention Plan**	**Detailed information for the Plan will be compiled and included in the annual report.**
6.4	**Training**	**Copies of course materials along with numbers of attendees will be included in the annual report.**

Evaluation

Part II.B.7

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

The effectiveness of the Pollution Prevention/Good Housekeeping Program will be by the inspections done on the facilities and number of employees trained, with results gained.

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.

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

WVSU Physical Plant and WVSU Garage. Marvin Smith, Director Department of Physical Facilities P. O. Box 1000, Institute, WV 25112-1000 Phone 304-550-2839 smithm@wvstateu.edu

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	
1	**38**	**22**	**39.7662**	**-81**	**45**	**59.97**	**N/A**

20.x. List the Standard Industrial Classification (SIC) Code designated for your facility/s.
822 (Physical Plant) 7538 (Garage)

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

Butler Maintenance Building: Fertilizers, pesticides/herbicides and deicers are stored within buildings with concrete floors. Vehicles are washed using biodegradable materials.
Vehicle Maintenance Garage: Vehicle maintenance is performed inside the vehicle maintenance building. The used oil is collected and recycled.

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.