



west virginia department of environmental protection

Responsiveness Summary
General West Virginia/National Pollutant
Discharge Elimination System (WV/NPDES) Permit WV0116025
For Stormwater Discharges from small Municipal Separate Storm Sewer Systems

The West Virginia Department of Environmental Protection's (WVDEP) Division of Water and Waste Management (DWWM) would like to take this opportunity to thank those individuals and organizations who submitted written comments on the General West Virginia/National Pollutant Discharge System (WV/NPDES) Permit for Stormwater discharges from small Municipal Separate Storm Sewer Systems Permit No. WV0116025.

DWWM published a Class II legal advertisement in newspapers across the State where MS4s are located; announcing the WVDEP's desire to reissue the general permit for stormwater associated with small Municipal Separate Storm Sewer Systems. There were two public notice periods for the drafts of the proposed small MS4 general permit. August 1 through September 2, 2008 and December 13, 2008 through January 12, 2009. Both public notices announced a 30 day comment period. The first public notice also announced the date for the public hearing. The first small MS4 general permit was originally established March 07, 2003.

DWWM received comments on the first draft and many changes were made to the proposed permit that a second public notice period was deemed necessary. During the first public notice period one public hearing was held. The public hearing was held at the WVDEP's Charleston headquarters on September 2, 2008.

In addition to the public hearing a technical meeting and a public meeting were held on October 7, 2008 at WVDEP Charleston headquarters. The technical meeting was specifically to address technical issues raised about the proposed permit. The public meeting was specifically to answer any questions or comments regarding the proposed permit. In addition to DWWM staff, representatives from USEPA Headquarters and USEPA Region III were present to answer questions about the draft MS4 permit. Both USEPA and DWWM addressed comments and concerns about the proposed small MS4 general permit at both meetings.

In addition, two more meetings were requested by several municipalities to discuss their specific concerns regarding the proposed MS4 permit. The first of these meetings was held on January 27, 2009 address general concerns and the second meeting on February 17, 2009 specifically to address MS4 discharges into impaired waterbodies and TMDL wasteload allocations.

This responsiveness summary contains the issues and concerns that were identified in the written comments received during the comment period. WVDEP received numerous comments and they will appear unedited and numbered.

Comments will appear first, with the WVDEP's response following. Comments reference both versions of the draft general permit.

1. "1. Public Education and Outreach ...The outreach program shall be designed to achieve measurable improvements in the target audience's understanding of stormwater pollution and how they can help to prevent it...

...Each permittee shall measure the understanding and adoption of the targeted behaviors among the targeted audiences..."

The DOH believes that this requirement would inhibit the public from participation in the Public Education and outreach opportunities. When people take the time out of their busy lives to participate in an educational opportunity it is very unlikely that they would be willing to take a test or fill out a questionnaire. The DOH feels that surveys are equally unreliable when assessing the understanding of a program of this type. Realistically, an overall dissemination of basic information may be better suited to a combined campaign by the DEP and the MS4s using television and radio.

RESPONSE: The federal regulations at 40 CFR § 122.34(g) states that small regulated MS4's "must evaluate program compliance, the appropriateness of your identified best management practices, and progress towards achieving your identified measurable goals." DWWM believes that the stormwater management program components must be assessed and evaluated to know if measurable goals are being met and if changes need to be made to the permittees stormwater management program. Surveys are one way to do this.

2. Public Involvement and Participation "The permittee shall facilitate opportunities for direct action, educational, and volunteer programs such as riparian planting, volunteer monitoring programs, storm drain marking or stream clean up programs...

...all permittees shall establish a method of routine communication to groups such as watershed associations and environmental organizations that are located in the same watershed/s as the permittee, or organizations that conduct environmental stewardship projects located in the same watershed/s or in close proximity to the permittee..."

The DOH believes this requirement is excessive and burdensome. Watershed groups and environmental organizations often have high turn-over rates making it extremely difficult to make direct contact. The DOH uses public notice to encourage participation from the public and interested groups. Legally, the public notice criteria in state code should be sufficient to solicit public involvement and participation.

RESPONSE: The requirement is to establish a method of routine communication. DWWM disagrees that it is extremely difficult to make direct contact with such groups. DWWM has basin coordinators that can provide contact information on nearly all watershed organizations in the State.

3. Illicit Discharge Detection and Elimination iv. “Each permittee shall submit this map to DWWM in the third year annual report. The map shall be a scale of 1” = 500 ft. and on pages sized 24”x36” or 22”x36” and folded to 8 x 11 inches...”

DOH plan sheets are a standard 1”=50LF or 1”=100LF. This requirement would be extremely costly. The DOH system consists of thousands of plan sheets, which would require enormous storage area. The DOH requests that the DEP eliminate the specific requirements for map scale and size. The DOH also requests that the maps/plans remain at our facilities and be made available for review upon request.

RESPONSE: DWWM must receive uniform and consistent maps from regulated MS4’s. Uniform maps are necessary when the Agency writes and/or implements TMDLs. The language has been changed so that maps are maintained at the MS4. Only when paper maps are submitted to DWWM shall they meet the scale and size requirement.

4.
 - b. Each permittee shall develop and implement an ordinance or other regulatory mechanism to effectively prohibit and eliminate non-stormwater, illegal discharges, and/or dumping into the permittees municipal separate storm sewer system to the regulatory extent allowable under State and Local law. The ordinance or other regulatory mechanism shall be adopted no later than two years from the effective date of this permit...”

Currently, State Law does not provide the DOH with enforcement authority. Also, State Agencies are not subject to regulation by County, Municipal, or other local government agencies.

RESPONSE: It is the understanding of DWWM that WVDOH does have a similar policy in place to effectively prohibit connections to their storm drain system. This appears to be an effective mechanism to prohibit non-stormwater, illegal discharges, and/or dumping into DOH’s storm sewer system. DOH is strongly encouraged to cooperate and work with municipal permittees that are adjacent to DOH. Where DOH lacks enforcement capabilities, municipal permittees *may* be able to assist in the removal of illicit discharges. However, DOH would need to make an effort to cooperate with adjacent municipalities. WVDEP can also provide assistance in some instances.

5.
 - “...The regulatory mechanism shall prohibit the following categories of non- stormwater discharges unless the stated conditions are met:
Discharges from potable water sources, including water line flushing, hyper-chlorinated water line flushing, fire hydrant system flushing, and pipeline hydrostatic test water. For planned discharges to the MS4, the discharge shall be de-chlorinated to a concentration of 0.1ppm or less, pH adjusted, if necessary, and volumetrically and velocity controlled to prevent resuspension of sediments in the MS4...’

The DOH believes that this requirement is unrealistic. It is not practical or feasible for a utility to capture the discharge from flushing or testing potable water lines. Not to mention the fact that potable water should not have a detrimental impact on the waters of the state.

RESPONSE: Hyper-chlorinated water flushed from a water line is toxic to aquatic organisms and aquatic habitat. Water is that hyper-chlorinated must be de-chlorinated before discharge into the MS4 or receiving waters. This language has been modified for clarity.

6.

“...v. The ordinance or other regulatory mechanism shall include escalating enforcement procedures and actions.

vi. The permittee shall develop an enforcement strategy and implement the enforcement provisions of the ordinance or other regulatory mechanism...”

Currently, State Law does not provide the DOH with enforcement authority. Also, State Agencies are not subject to regulation by County, Municipal, or other local government agencies.

RESPONSE: In this instance, WVDOT-DOH should seek to implement “other regulatory mechanism” within their means. State agencies are required to abide by State and Federal laws. In order for WVDOH’s stormwater management program to be effective, the DOH should make a concerted effort to work with and cooperate with adjoining MS4’s. Many MS4 municipalities are on the receiving end of WVDOH stormwater discharges and are required to manage those discharges once it enters into their storm sewer systems.

7.

“Controlling Runoff from Construction Sites... BMPs shall be consistent with the BMPs contained in West Virginia’s Erosion and Sediment Control Best Management Practices Manual and other State manuals listed in Appendix F...”

The DOH requests that the West Virginia Department of Transportation, Division of Highways, Erosion and Sediment Control Manual be added to Appendix F. This manual was developed and updated with review and comment from the DEP, EPA, and others. The DOH further requests that the DEP consider removing Appendix F and allowing all sources that have been reviewed by government agencies, peers, and/or scientifically tested or proven.

RESPONSE: DWWM agrees, this manual has been added to Appendix E. Appendix E is a *suggested* listing of stormwater manuals that are available to permittees.

8.

‘Qualifying Local Program’

The DOH needs consistency in regulatory requirements in order to achieve successful compliance. Currently, State Law does not provide the DOH with enforcement authority. Also, State Agencies are not subject to regulation by County, Municipal, or other local government agencies.

RESPONSE: The Federal regulations at 40 CFR 122.44(s) establishes the concept of a “qualifying local program” for construction activity. Qualified municipalities with a robust construction stormwater program may be recognized as qualifying local programs and the concept may be used to address both small and large construction. The preamble to the Phase II regulations also contains some useful discussion and examples (e.g. 64 FR 68722-68777,

December 8, 1999). To date, there are no QLP's in West Virginia. Qualifying local programs must be recognized and approved by the WVDEP.

9.

Controlling Runoff from New Development and Redevelopment

The program must ensure that controls are in place that will increase groundwater recharge of stormwater runoff where and when possible, and would protect water quality and reduce the discharge of pollutants. The permittee shall also develop and implement strategies that include structural best management practices designed for maximizing groundwater recharge..."

The DOH believes this requirement exceeds the authority of the DEP and the NPDES program. If the DEP retains this requirement, the DOH requests that the word "must" be changed to should. This requirement would result in hundreds, if not thousands, of UIC Permits, as well as the accompanying water quality testing. This expense for the permits and testing would be overwhelming. While the need to recharge the ground water may be a greater concern in the eastern panhandle, this concern does not persist in most of the state.

RESPONSE: The Clean Water Act (CWA) is the cornerstone of surface water quality protection in the United States. The statute employs a variety of regulatory tools to sharply reduce direct pollutant discharges into waterways and manage polluted runoff. These tools are employed to achieve the broader goal of restoring and maintaining the chemical, physical, and biological integrity of the nation's waters so that they can support the 'protection and propagation of fish, shellfish, and wildlife' and recreation in and on the water. DWWM believes that the Federal as well as State NPDES Rules do allow permits the authority to specify such measures.

Furthermore, the previous small MS4 general permit has the exact language that the commenter is protesting; "The program must ensure that controls are in place that will increase groundwater recharge of storm water runoff where and when possible, and would protect water quality and reduce the discharge of pollutants." MS4's are to already be implementing this measure. This permit proposes more options in reducing runoff from developed lands. This is achieved by any one or combination of the principles of runoff reduction described in Part II.B.5

MS4s in West Virginia have had almost six years to implement their programs. DWWM believes that the MS4 permit requirements do not require anything more, they do require that the things that are already required to be underway, be improved.

The statement about UIC permits is erroneous. There are numerous ways to infiltrate stormwater back into the ground and few may require a UIC permit. To provide clarification on which stormwater infiltration techniques meet UIC Class V well definitions, USEPA's Office of Water has developed a "Class V Well Identification Guide." MS4 permittees are requested to refer to this guide when considering stormwater infiltration practices. The guide can be found at this website: http://www.wvdep.org/dwwm/stormwater/MS4_docs.htm

Getting stormwater back into the ground where it belongs will help to recharge groundwater and restore natural stream hydrology.

10.

"...i. Watershed Protection

(1) Minimize the amount of impervious surfaces (roads, parking lots, roofs, etc.) within each watershed, by minimizing the creation, extension and widening of parking lots, roads and associated development...”

The DOH road system is expanded based on demand and desired development. The DOH addresses environmental concerns through an environmental assessment of the proposed project. The DOH also expands the roadway system to address air quality concerns. While the DOH understands the desire to decrease runoff, pervious pavements have not had sufficiently strength or durability to withstand the traffic loads and weathering. There have also been significant problems associated with long term functionality. The DOH believes that, where possible, natural features are desirable to achieve this goal.

RESPONSE: Pervious pavements may not be appropriate for interstate highways and other types of roads that receive much vehicular traffic, but they are very appropriate for lesser traveled roads, parking lots and certain types of developments within an MS4. Pervious pavements and concrete technology has greatly improved over the last few years.

Further, this particular section is requiring the MS4 to include this protection element in policy and planning documents. In most instances there are places where it is possible to reduce the *creation* of impervious surfaces; it does not mean reducing the capacity or safety of the roads or highways.

11.

“(4) Prevent disturbances of natural water bodies and natural drainage systems caused by development, including roads, highways, and bridges...”

The DOH attempts to reduce or minimize impacts to the waters of the United States and the State during plan development. The DOH believes that this aspect is addressed by Section 401 and 404 of the Clean Water Act (United States Army Corps of Engineers permitting process) and should be eliminated from the MS4 permit.

RESPONSE: This requirement applies to the private sector as well as the public sector road and bridge construction. The language has been modified for clarity.

12.

ii. Site and Neighborhood Design

“...a program to protect water resources by requiring all new and redevelopment projects to control stormwater discharge rates, volumes, velocities, durations and temperatures...”

The DOH believes this should be achieved via BMPs and should not require extensive and expensive data collection.

RESPONSE: Yes, controlling discharge rates, volumes, velocities, durations and temperatures are accomplished by the mix of BMP's that are implemented on site. This requirement does not *require* any type of data collection for the BMP's that are chosen. However, a permittee may certainly collect data about the BMP if they so choose. The key for this requirement is appropriate design, proper installation and maintenance.

13.

A. Performance Standards

“...1. Site design standards for all new and redevelopment that require, in combination or alone, management measures that infiltrate, evapotranspire and reuse of, at a minimum, the first one inch of rainfall from a 24-hour storm preceded by 48 hours of no measurable precipitation. This first one inch of rainfall must be 100% managed with no discharge to surface waters. An Underground Injection Control permit may be required when certain conditions are met...”

Soils, materials, and vegetation absorb water at specific rates; therefore, it is impossible to achieve this requirement for all rainfall events. When there is a down pore, the rainfall inundates the area and absorption is inhibited because the transfer of air and water can not occur until the balance is restored. Any given rainfall event may differ in the amount of rain in any given time period. The DOH suggests that the DEP use a 1 year or 2 year 24-hour storm which is a normal rainfall event.

RESPONSE: As documented in the fact sheet that accompanied the proposed permit, there are volumes of scientific justification for the proposed provisions. The MS4 permit provisions can be linked directly to what we know about the causes and solutions of water quality degradation.

This permit proposes a simple performance standard to approximate 10% discharge, with most of the remainder handled on-site. Analysis of precipitation data for West Virginia indicates that 90% of the 24 hour (or less) rainfall events are one inch or less. Therefore stormwater systems designed to manage one inch of rain will reasonably mimic the natural hydrologic process. Stormwater management practices can be engineered and designed to use one or a combination of the practices described in Part II.B.5. Soils and vegetation can be engineered and selected to meet this requirement.

The language in the permit has been modified to include more runoff reduction techniques.

14.

“...2. The following additional water quality requirements, as applicable:

A project with reasonable potential for pollutant loading(s) must provide water quality treatment for pollutants of concern...”

The DOH is very concerned about the logistics and feasibility of treatment systems along the roadways. The DOH is also concerned about the safety and economic impacts associated with this requirement.

RESPONSE: Generally, this requirement will apply to ‘stormwater hot spots’, which includes automotive service stations, certain industrial applications, hazardous waste generators and transport, and other types of sites that store or transport hazardous chemicals, pesticides, solvents, etc.. Roadway stormwater runoff should not necessitate ‘treatment’ of that stormwater at a NPDES permitted facility. A definition for stormwater hot spots has been added to Appendix B.

15.

4. “For projects that cannot meet 100% of the infiltration/evapotranspiration/reuse requirement on-site, two alternatives are available: off-site mitigation and payment in lieu...

...These alternatives are only available, in combination or alone, for up to 0.4 inches of the original obligation at a 1:1.5 ratio, i.e., mitigation or payment in lieu must be for 1.5 times the amount of stormwater not managed on site...”

The DOH appreciates the possibility of an in-lieu fee mitigation program; however, it seems as though the developer is being punished for improving an existing flaw. The DOH believes that the decrease runoff from an existing site should be adequate in the fact that there is an improvement; otherwise, there is no incentive to revamp an existing imperious area.

RESPONSE: The in-lieu fee and mitigation program is an option for those MS4s who choose to implement it.

16.

D. “Inventory and Tracking of Management Practices. The permittee shall develop a system, within 180 days of issuance of this permit, designed to track management practices deployed at new development and redevelopment projects. Tracking of management practices shall begin during the plan review and approval process with a database or geographic information system (GIS).

1. Source control management practices (type, number, design or performance specifications)
2. Treatment control management practices (type, number, design or performance specifications)
3. Latitude and longitude coordinates of controls using a global positioning system
4. Digital photographs of controls
5. Maintenance requirements (frequency of required maintenance and inspections)
6. Inspection information (date, findings, follow up activities, compliance status)...”

The DOH is in the development stages of our GIS system. 180 days is not sufficient to build a data base of this type. The DOH requests that the time frame be extended to 2 years.

RESPONSE: The time frame has been removed as the requirements of this section are required to be fully implemented within four years, except where otherwise stated.

17.

“...D. Discharge to Impaired Waters

1. 303(d) Listed Waters:

This permit does not authorize new sources or new discharges of pollutants of concern to impaired waters unless consistent an approved Total Maximum Daily Load (TMDL) and applicable state law...

...Pollutants of concern are those pollutants for which the water body is listed as impaired. 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, and must ensure that there will be no increase of the pollutants of concern..."

2. Discharging into Waters with Approved TMDLs

"...monitoring component to assess the effectiveness of the BMPs in achieving the wasteload allocations must also be included in the SWMP."

The DOH is very concerned that these requirements would result in extensive water quality testing which would substantially increase the cost associated with state roads.

RESPONSE: MS4s are regulated as a point source discharge under the NPDES program. The Federal regulations at 40 CFR 122.44(d) prohibit the issuance of a permit unless it contains 'effluent limits and conditions' that are consistent with the requirements and assumptions of the wasteload allocations in the TMDL, and that discharges to such waterbodies attain or maintain water quality. 40 CFR § 122.44 (d)(1)(vii)(B); 122.44(d)(2).

Without a monitoring component in the permittees SWMP, it would be impossible to know if the wasteload allocations of the TMDL are being met.

18.

We applaud the steps taken by DEP to require on-site stormwater management that focuses on minimizing the adverse impact of development on water resources. We fully support the broad scope taken by DEP in looking at watershed protection and neighborhood design. Below are our specific comments:

RESPONSE: DWWM agrees.

19.

Watershed Protection and Water Conservation The suite of elements required as part of watershed protection to be incorporated into all relevant local planning documents and ordinances are an excellent way for communities to begin protecting clean water as part of the development and redevelopment process.¹ Establishing measureable and quantifiable goals will be essential to ensuring that these elements are actually incorporated into local documents, which can range from master and transportation plans to zoning codes. We are especially supportive of element eight, requiring communities to implement water conservation policies to reduce stormwater discharges. Outdoor water use accounts for approximately 30% of a household water budget, and highly treated water is wasted when

¹ Draft permit (C)(5)(a)(ii)(A)(1).

it runs off lawns and streets and pollutes local streams with pesticides and fertilizers. Because this nexus between stormwater and water conservation is important and often overlooked, we would also recommend adding water supply plans to the list of “relevant policy documents” that should be reviewed for compliance with the watershed elements.²

DWWM agrees that this is a great element to have in MS4 permits; however, we have decided to remove the water conservation requirement and focus more on stormwater reuse during this permit cycle. DWWM believes that when rainwater harvesting is implemented in order to capture one inch, stormwater that is reused will have the effect of water conservation. This item may be added to the next reissuance of the MS4 general permit in 2014.

20.

Performance Standard Creating a performance-based standard to reduce runoff is critical to effective management of stormwater. The explicit runoff requirement requiring full management of the first inch or rainfall during a 24-hour rain event for new development and redevelopment is particularly commendable.³ The goal to eliminate any discharge to surface water to mimic the predevelopment hydrology will benefit clean water, enhance community resilience to floods and sewer overflows, recharge groundwater supplies, and protect streams from scouring and erosion. It will be critical that local governments ensure compliance with this standard in a consistent and enforceable manner through local codes and ordinances or through DEP enforcement.

In the spirit of making this performance-based standard clearer, we would also suggest the following changes to the text on page 14. At the top of p. 14, the language of section 1 would be changed to:

“1. Site design standards for all new and redevelopment that require, in combination or alone, keeping and managing on site the first one inch of rainfall from a 24-hour storm preceded by 48 hours of no measurable precipitation through canopy interception, soil amendments, evaporation, rainfall harvesting, engineered infiltration, extended filtration or evapotranspiration. This first one inch of rain must be 100% managed with no discharge to surface waters. This management can be achieved through on-site utilization of practices to include dry swales, bioretention, rain tanks, soils amendments, rooftop disconnections, permeable pavers, reforestation, specially designed extended detention ponds, grass channels, green roofs and others.”

RESPONSE: The language has been modified to include most of these components of this standard.

21. *Incentives for Redevelopment and High Density Development.* We also support providing an incentive for smart growth development as listed in the draft permit including redevelopment, high density development and transit oriented development.⁴ We are inclined to structure the incentive a little differently, however. We support the .1” credit for brownfield redevelopment, but would treat the other 4 factors, all of which are elements of a smart growth development, as a package. We would treat them as such and

² Draft permit (C)(5)(a)(i).

³ Draft permit (C)(5)(a)(i)(A)(1-8).

⁴ Draft permit (C)(5)(a)(ii)(A)(3).

would provide smart growth incentives, which we would suggest as twice the rate of the brownfield credit or .2,” only if all the criteria are met. We would also suggest considering a greenfield disincentive that would mandate capture not only of stormwater falling on site, but also any new roads or other hardscape built to accommodate the development (e.g., new lane on a road feeding into the development) and a portion of the stormwater associated with the overall road system supporting the development. We found the materials in the fact sheet explaining the water quality benefits of smart growth very helpful and commend you on their development.

RESPONSE: DWWM agrees and this suggestion will be appropriate for the next permit cycle. DWWM desires to allow time for MS4’s to implement the proposed standards and then proceed.

22.

BMPs for Stormwater Management We support DEP’s emphasis on minimizing erosion, sediment, and soil disturbance during and after construction through the use of BMPs. NPDES permits are required to incorporate the use of BMPs, but some states have gone further by including a preference for LID and GI techniques, and others have included narrative or numeric limits to ensure that sediment and the pollutants that adhere to sediment are retained on site.⁵ DEP can aid permittees in adopting these cost-effective and environmentally sensitive measures by providing technical guidance and training on their implementation. Furthermore, the municipality can serve as a model for LID and GI use by requiring that these measures be fully applied in new and redevelopment of public buildings and roads. By focusing on LID and GI in the SWMP, DEP can move permittees more quickly towards adoption of these measures.

RESPONSE: DWWM agrees, and is currently negotiating for two runoff reduction design charettes in 2009 to train designers and engineers to capture the first one inch. DWWM hopes to conduct more training and workshops every year for this permit cycle.

23.

Off-site Mitigation and Payment in Lieu For projects that cannot meet the performance standards the draft permit provides alternative means by allowing off-site mitigation and payment in lieu.⁶ We are concerned that the off-site mitigation and payment in lieu components may undermine the performance standard by allowing developers to pay for municipal projects instead of reducing stormwater at their own sites. While we support the safeguards that either of the methods is available only for up to 0.4 inches of the original requirement and at a ratio of 1:1.5 we believe that all new development can effectively meet the run-off requirements through a combination of BMPs and that this provision provides too great an opportunity for abuse. We recommend that the provision for off-site mitigation be strengthened by clarifying that the party applying for off-site mitigation remains responsible for the maintenance agreement for the mitigation site. We believe that

⁵ State of California, California Regional Water Quality Control Board Los Angeles Region, *draft, Water Discharge Requirements from Stormwater and non-Stormwater Discharges from the MS4s within Ventura County*; Government of the District of Columbia, *MS4 Letter Agreement*, November 2007; OR construction general permit, WA construction general permit [and MS4 permit, as per recent administrative ruling]; GA construction general permit; VT construction general permit.

⁶ Draft permit (C)(5)(a)(ii)(A)(4).

the payment in lieu option should be limited to redevelopment sites and that the projects it is used to finance must take place in the same sewershed or subwatershed.

RESPONSE: DWWM does acknowledge that abuse is possible, however, during this permit cycle off-site mitigation and payment in lieu will remain. If abuse of this becomes evident, the agency can take a more stringent approach during the next permit cycle. DWWM will allow the permittee to determine who will be responsible for long term maintenance projects.

24.

We also suggest that DEP require MS4s to maintain a publicly accessible database of approved in lieu projects so that MS4s, DEP, and the public can easily track the use of this provision.

RESPONSE: MS4's are required to create an inventory of appropriate mitigation projects, and develop appropriate institutional standards and management systems to value, evaluate and *track* transactions. The language has been modified to include a database requirement.

25.

In addition, we would also propose that section 4 on page 14 be strengthened to require that all the requirements of paragraph 1 must be met before off-site mitigation or fee-in-lieu are permitted. Our recommended changes for section 4 on page 14 are as follows:

Strike the first sentence "For projects that cannot meet 100% of the infiltration/evapotranspiration/reuse requirement on-site, two alternatives are available: off-site mitigation and payment in lieu."

In place of this sentence, substitute the following: "Only upon an affirmative showing that the requirement of paragraph 1, above, cannot be met can the project be considered eligible for off-site mitigation and payment in lieu."

RESPONSE: DWWM declines this request, however, the language has been modified in this paragraph.

26.

In the third sentence of section 4, strike "of infiltration, evapotranspiration and reuse" and substitute "of the practices set forth in section 1, above,"

REPOSENSE: The language has been modified.

27.

Enforcement of the MS4 permit. WVDEP enforcement of the MS4 permit is perhaps the most crucial issue. In the previous permit cycle, once permittees were registered under the permit, WVDEP did not enforce it. The new permit includes many more requirements, and a credible enforcement program will be required.

One essential step is to send clear signals to MS4 communities that flexible programming is not synonymous with voluntary programming, and that permits can and will be

enforced. In other words, while MS4s can choose their BMPs, WVDEP will still hold them accountable.

REPOSE: The DWWM plans to conduct evaluations and initiate enforcement action, if necessary, during the second permit cycle.

28.

A second step would be to use non-threatening program evaluation meetings to strengthen local MS4 programs and provide targeted technical assistance. WVDEP offers significant evaluation and assistance to MS4s currently by providing workshops or ad hoc municipal-specific assistance upon request or during periodic visits. Scheduling formal program evaluation meetings with municipal MS4 staff can clarify to staff what is required of them, provide WVDEP MS4 staff with a more comprehensive idea of what is happening in different MS4 programs and where specific assistance is needed (even if not directly requested), and set transparent compliance and enforcement standards.

REPOSE: The DWWM plans to conduct evaluations of MS4's during the second permit cycle.

29.

Finally, standardized annual report forms would be helpful. Standardized forms will make it easier for WVDEP staff to measure compliance with meeting the goals for each minimum control measure. Section IV.D provides permittees with a detailed list of items to include in these annual reports. However, based on the varying quality of the annual reports submitted in the previous permit cycle, a standardized form would help ensure that permittees provide complete responses, and that WVDEP can efficiently find the responses to each of these questions. Standardized forms would help small communities better understand expectations of them, and better track their own successes and goals. These forms would also help local MS4 managers explain to partner agencies the importance of the stormwater program, ideally improving intergovernmental understanding and support. A standardized, electronic form would be a boon to time-strapped MS4 program staff at WVDEP to more quickly and objectively evaluate plans and progress of each community. This evaluation is critical for providing communities with well-targeted technical support, and is also an important foundation for taking enforcement action, should it become necessary.

RESPONSE: DWWM intends to create a standardized annual reporting form.

30.

Permit non-traditional facilities, and regulate them as co-permittees

West Virginia has numerous state and federal facilities that can likely be covered under the MS4 program. Ensuring that public facilities are held to the same standards as small communities is important for public relations, and it makes environmental and fiscal sense. Lack of coordination on common goals among spatially overlapping but distinct jurisdictions is harmful to any program. For stormwater management, this is particularly counterproductive since water problems generally do not conform to political boundaries. Non-traditional facilities can be co-permittees. For example, in Morgantown, consideration could be given to whether the Morgantown Municipal Airport, West

Virginia University, federal post office, county parks, and West Virginia Division of Highways could all be named as co-permittees with the City of Morgantown and other adjacent municipal MS4s. This may increase the regulatory burden on co-permittees, but overall it would distribute responsibilities more evenly across the community and could lead to a more effective program across all six MCMs. WVDEP should work with traditional permittees to identify potential key non-traditional MS4s within their jurisdictions.

RESPONSE: Co-permitting is an option for West Virginia MS4's; however DWWM cannot force co-permittees. All Universities that are MS4's according to the Federal definition will be covered under the MS4 permit this cycle.

31.

Water quality standards

One of the most significant flaws in the draft permit is its attempt to equate implementation of BMPs to the maximum extent practicable (MEP) with compliance with water quality standards. Under the Clean Water Act, technology based standards are the minimum that apply to all covered entities, but if a discharge has the reasonable potential to cause or contribute to water quality standards violations in the receiving water, additional controls are required. 33 USC § 301(b)(1)(C). The provision in the Special Conditions on p. 20 should be made consistent with this by indicating that compliance with water quality standards is required in addition to compliance with the performance based MEP standard.

RESPONSE: DWWM has modified this language to include compliance with water quality standards. The 1987 amendments, (§ 402(p)(3)(B)) to the CWA created a standard requiring MS4 permits to require controls to reduce the discharge of pollutants to the maximum extent practicable. It is presumed that water quality standards will be met by an iterative approach to SWMP implementation.

32.

Clarify linkages between MS4 program and reduction of pollution in impaired waters

In the previous permit cycle, most annual reports submitted by MS4s made no mention of how practices were reducing pollutant discharges to locally impaired streams. The common public understanding of stormwater programs is to associate them with the quantity and timing of storm flows, not water quality. However, the purpose of the MS4 program is to improve water quality. In fact, where WVDEP develops TMDLs for areas covered by MS4 permits, MS4s may be required to reduce specific stormwater pollution loads. Current MS4 permits do not require water quality monitoring, which makes it difficult to gage the success of reducing pollutant discharges into impaired waters. Further education efforts for the general public, MS4 staff, and local elected officials on the links between water quality and quantity would be helpful.

REPOSENSE: The DWWM believes that Part II.B.1, which describes the requirements of the SWMP, does clarify the purpose of the permit. The permit states: The permittee must develop a stormwater management program designed to reduce the discharge of pollutants from your small

municipal separate storm sewer system to the maximum extent practicable (MEP), to protect water quality, and satisfy the appropriate requirements of the Clean Water Act. The annual reporting requirements in this MS4 permit require: “A description of specific BMPs *that were implemented* in order to reduce pollutants of concern in impaired receiving waters and waters in which a TMDL has been developed.” DWWM believes that this language, if read by the permittee, will cause the permittee to consider how BMP’s are reducing pollutant discharges.

33.

Section III.D. imposes new requirements on MS4s related to discharges to impaired streams. That section indicates that discharges to impaired waters must be consistent with an approved TMDL where the TMDL contains requirements for control of pollutants from the MS4 stormwater discharges, which is helpful, but it does not clearly indicate that new discharges into impaired waters cannot be authorized even in the absence of a TMDL unless they will not cause or contribute to water quality standards violations. It should do so. Also, it should indicate that new discharges of a pollutant into a water body that has a TMDL for that pollutant cannot be allowed unless there is a wasteload allocation for that type of discharge in the TMDL and the authorized discharges under the permit do not exceed that wasteload allocation. We would suggest also that the following statement in Section III.D is incorrect: “Impaired waters are identified on the West Virginia, Section 303(d) list until a TMDL is developed and approved by USEPA.” In fact, impaired waters remain on the 303(d) list after TMDLs are developed.

RESPONSE: DWWM disagrees. A 303(d) list is a list of impaired water bodies for which TMDL’s need to be developed. Once the TMDL is developed, the water body is removed from the list. DWWM believes that the language in Part III.D.a. makes it clear that the permittee must document how their proposed BMPs will control the pollutants of concern and demonstrate that there will be no increase of the pollutants of concern into impaired waterbodies.

34.

While Section III.D has clear requirements related to TMDLs, Section II.B.8 confuses the issue. This section states: “If the permittees small MS4 discharges into waters listed on the Clean Water Act Section 303(d) list of impaired waters or waters with an approved Total Maximum Daily Load (TMDL), the SWMP must document how the proposed BMPs will control the discharge of the pollutants of concern, as described in Part III.D.” We suggest deleting Section II.B.8 and letting Section III.D stand on its own. If, however, there is a reason why Section II.B.8 must remain, then we suggest that it should specifically mention the requirement to meet wasteload allocations in TMDLs and prohibit new discharges that will cause or contribute to water quality standards violations irrespective of whether there is a TMDL.

RESPONSE: The language in part II.B.8 has been modified to include discharges meeting wasteload allocations.

35.

Stormwater monitoring

Part IV.B is a good first step to require monitoring to judge whether MS4 communities impact receiving streams. WVDEP proposes that permittees monitor for nitrogen and

phosphorus only. We suggest that monitoring for fecal coliform bacteria be required as well. MS4s are likely to discharge bacteria, and when TMDLs assign wasteload allocations to MS4s, these allocations are typically for fecal coliform.

RESPONSE: DWWM agrees, but will not place more monitoring into the MS4 permit at this time. Additional monitoring may be added in the next permit cycle.

Editor's remark - Comments #36 through #119 have the original edit/comment *embedded* in the permit language. The commenter's additions and struck text to the original permit language appears in blue, as do the comments. DWWM responses will appear after the comments.

36.

This permit is subject to the following terms and conditions:

The information submitted on and with the site registration application form will hereby be known as the stormwater management program (SWMP).[[This is not right; inconsistent with SWMP development and submittal for approval within six months (see page 2 and Section B.9)]]] The information submitted on and with the site registration application, also known as the SWMP will hereby be made terms and conditions of the permit with like effect as if all such information were set forth herein, and other conditions set forth in Parts I, II, III, IV, Appendices A through D and the SWMP approval letter. [[This should say that the approved SWMP will become part of the permit]

RESPONSE: The site registration application is a form used to write out and describe the MS4's stormwater management program. The information contained on the site registration application does become the program that the MS4 is required to implement once reviewed and approved by the DWWM. The language in Part II.A has been modified for clarity.

37.

B. Eligibility

1. Jurisdictions including, but not limited to; municipalities and counties along with their subdivisions, such as utility boards, transportation facilities, Federal and State owned prison systems, and universities that are located within the boundaries of a Bureau of the Census defined "Urbanized Area" (UA) based on the latest decennial census.

RESPONSE: Registration under this permit to discharge stormwater is appropriately issued to the municipality or governing body of an MS4. It is the municipality that owns the municipal separate storm sewer system. In most cases in West Virginia, the permittee is the City or the County. This permit is not, nor was ever intended to be issued to a 'sub' department of a municipality. All departments of a municipality fall under the 'governing umbrella' of its City Council. And, this permit covers the entire municipal separate storm sewer system, not just select portions. See response to comment #168.

38.

C. This permit authorizes the following non-stormwater discharges provided they have been determined not to be substantial contributors of pollutants to a particular small MS4 applying for coverage under this permit. However, the DWWM recommends that your [stormwater management program SWMP](#) include public education and outreach activities directed at reducing these discharges even if they are not substantial contributors of pollutants to your system.

RESPONSE: According to the fifteenth edition of the Chicago Manual of Style, using an acronym and then subsequently spelling out the acronym is acceptable. The acronym SWMP is spelled out in subsequent paragraphs to provide the reader ease of reading and to occasionally refresh memory.

39.

1. Uncontaminated water line flushing
2. Landscape irrigation,
3. Diverted stream flows,
4. Uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20)),
5. Uncontaminated pumped groundwater,
6. Discharges from potable water sources [[distribution systems?](#)],
7. Foundation drains,
8. Air conditioning condensate,
9. Irrigation water,
10. Springs,
11. Water from crawl space pumps,
12. Footing drains,
13. Lawn watering runoff,
14. Water from individual residential car washing,
15. Flows from riparian habitats and wetlands,
16. Residual street wash water,

RESPONSE: Discharges from potable water systems includes distribution systems.

40.

Notice of Intent (NOI) and Stormwater Management Program (SWMP) [applications](#)

RESPONSE: Stormwater management programs will generally be in written format on a form known as a site registration application. The application process will include some sort of written documentation of the permittees SWMP, whether or not municipalities choose to use DWWMs regular site registration application. The information contained on the application is what will be evaluated and approved.

41.

Within six months of the issuance date of this permit, all operators of regulated small MS4s shall submit a [stormwater management program \(SWMP\)](#) to the DWWM. A SWMP can be submitted on the form provided by DWWM, or in a prescribed manner acceptable to the DWWM that contains all necessary components. [[Note, this is okay but inconsistent with the language about the site registration application equaling the SWMP on page 1](#)]

RESPONSE: This language has been modified for clarity. The site registration application is a form used to write out and describe the MS4's stormwater management program. The information contained on the site registration application does become the program that the MS4 is required to implement once reviewed and approved by the DWWM. This should not be confused with the Notice of Intent.

42.

Part II.B.1.

The permittee must develop a ~~stormwater management program~~ SWMP designed to reduce the discharge of pollutants from ~~yours~~ its small municipal separate storm sewer system to the maximum extent practicable (MEP), ~~to protect water quality, and satisfy the appropriate requirements of the Clean Water Act.~~

RESPONSE: CFR § 122.34(a) states: "Your NPDES MS4 permit will require at a minimum that you develop, implement and enforce a stormwater management program designed to reduce the discharge of pollutants from your MS4 to the maximum extent practicable, to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act." The DWWM believes this statement is accurate, meets the intent of the MS4 program under the Federal Rule and is appropriate for inclusion in West Virginia's small MS4 general permit.

43.

Part II.B.2. The permittee shall use all known, available, and reasonable methods of prevention, control and treatment to prevent and control stormwater pollution from entering waters of the State of West Virginia. ~~[Delete this – the permittee should implement its SWMP rather than this general statement]~~

RESPONSE: Section 402(p)(3)(B)(iii) of the Clean Water Act states: "Permits for discharges from municipal storm sewers... shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants." DWWM believes this statement is consistent with the provisions set forth in the Clean Water Act.

44.

Part II.B.3. The SWMP shall follow the public notice procedures set forth in 47 CSR § 10-12. ~~[[This makes no sense. First, sections 10 and 11 are not relevant to public notice. Section 12 describes the public notice process for an NPDES discharge permit. A SWMP should have to follow this process. Does DEP intend for DEP to handle the public notice as with a draft permit or the MS4 community? This should be changed to require publication of the SWMP on an MS4 community's website but not formal public comment in accordance with Chapter 12. Public notice and comment is unnecessary given the public involvement requirement below (Section C.b.2).~~

RESPONSE: The stormwater management program is subject to the Clean Water Act's public availability and public hearing requirements. The Clean Water Act requires that "[a] copy of

each permit application and each permit issued under [the NPDES permitting program] shall be available to the public,” 33 U.S.C. §1342(a)(j), and that the public shall have an opportunity for a hearing before a permit application is approved.

West Virginia Title 47 Section 10-12 describes the public notice procedure for NPDES permits. The small MS4 general permit is a NPDES discharge permit. Further, the DWWM believes this requirement meets the intention of the 2003 Ninth Circuit Court of Appeals decision by providing the public adequate opportunity to make comments on local stormwater management programs.

DWWM has clarified the language in this section.

45.

Part II.B.4. The SWMP must include the minimum control measures described in Section C of this part along with measurable goals and milestones, [as appropriate](#) for each measure and justifications for each milestone.

RESPONSE: The language has been modified.

46.

Part II.B.5. ~~Subject to the five year year limitation noted below in this paragraph, extension of milestones will be granted for good cause shown. Failure to implement effective BMP's is not good cause to extend milestones. Language is unnecessary.~~

RESPONSE: DWWM believes this language is necessary for clarity.

47.

Part II.B.6. The SWMP must also provide details on how you will implement and enforce the program. The [approved](#) SWMP must be fully implemented, except where noted, within five years of the effective date of this permit.

RESPONSE: The language has been modified for clarity.

48.

C.a.1 Permittees that are already implementing some or all of the SWMP components of the previous WV small MS4 General Permit (WV0116025) shall continue implementation of those components [until](#) ~~of~~ their [updated](#) SWMP is approved, [at which time they should implement the updated SWMP.](#) ~~as long as those components meet the terms and conditions of this general permit.~~

RESPONSE: The language has been modified for clarity.

49.

C.a.2.a.

Coordination among entities covered under the small MS4 general permit may be necessary to comply with certain conditions of the SWMP. The SWMP shall include, when applicable, coordination mechanisms among entities covered under the small MS4 general permit to encourage coordinated stormwater related

policies, programs and projects within adjoining or shared areas. ~~Entities covered under the small MS4 permit include, municipalities, transportation agencies, universities, colleges, hospitals, prisons, and military bases.~~ [Unnecessary]

RESPONSE: DWWM believes that this language is necessary in the permit to inform permittees and readers that these types of entities are included in the MS4 program. This language will not change.

50.

C.a.2.b.

Coordination mechanisms shall specify roles and responsibilities for the control of ~~pollutants~~ stormwater between physically interconnected MS4s permittees covered by the small MS4 general permit.

RESPONSE: The word ‘stormwater’ has been added. The pollutants in stormwater necessitate its control and management.

51.

C.a.2.c.

Coordination mechanisms shall coordinate stormwater management activities for shared water bodies among permittees with the goal of ~~to avoid~~ avoiding conflicting SWMP ~~plans, policies and regulations~~.

RESPONSE: The language has been modified. However, plans, policies and regulations shall remain, as these too, should not conflict.

52.

C.a.2.d.

The SWMP shall include coordination mechanisms among departments within each permittee to ~~eliminate~~ address any barriers to compliance with the terms of this permit.

RESPONSE: This section has been removed.

53.

Part C.b.1 Public Education and Outreach

- a. No later than one year after the effective date of this permit, the permittee shall implement an education and outreach program for the area served by the MS4. The outreach program shall be designed to achieve measurable improvements in the target audience’s understanding of stormwater pollution and how they can help to ~~prevent~~ minimize it.

RESPONSE: This language has been modified for clarity.

54.

Part C.b.1

- b. ~~Each permittee shall measure the understanding and adoption of the targeted behaviors among the targeted audiences. The resulting measurements shall be used to direct education and outreach resources most effectively, as well as to evaluate changes in adoption of the targeted behaviors. [This is unrealistic. It is enough at this stage to document the educational outreach required below]~~

RESPONSE: 40 CFR § 122.34(g) states that small regulated MS4's "must evaluate program compliance, the appropriateness of your identified best management practices, and progress towards achieving your identified measurable goals." Stormwater management program components must be assessed and evaluated to know if measurable goals are being met and to make appropriate changes if necessary to meet those goals. This is why the MS4 program is iterative. See the USEPA/States guidance document entitled; "*Evaluating the Effectiveness of Municipal Stormwater Programs*". This document can be found on DWWM's stormwater webpage: http://www2.wvdep.org/dwwm/stormwater/MS4_docs.htm

55.

Part C.b.2. Public Involvement and Participation

The SWMP shall include ongoing opportunities for public involvement through advisory councils, watershed associations and/or committees, participation in developing rate structures, stewardship programs, environmental activities or other similar activities. The permittee shall facilitate opportunities for direct action, educational, and volunteer programs such as riparian planting, volunteer monitoring programs, storm drain marking or stream clean up programs. ~~Each permittee shall comply with any applicable State and local public notice requirements when developing their SWMP. [This makes no sense and would be overkill beyond 2.a below. After DEP approval, simply require publishing the plan on the MS4's website or otherwise making it available – see C.b.2.c below].~~

RESPONSE: DWWM believes that the MS4 should abide by any State and local public notice requirement that affects the public. These requirements make the public process as transparent as possible. This is required under the previous MS4 general permit.

56.

Part C.b.3. Illicit Discharge Detection and Elimination

The minimum performance measures are:

- a. A municipal storm sewer system map shall be developed no later than two years ~~[likely needs to be three years depending on how detailed the map must be – this will be a major effort for many MS4s....]~~ after the effective date of this permit. Storm sewer system maps shall be updated on an annual basis and shall include the following information:

RESPONSE: Storm sewer maps were required to be developed under the first MS4 general permit. At this point, MS4 have had more than five years to develop a map. According to 40 CFR 122.44(1), to avoid backsliding, standards and conditions must be at least as stringent as the previous permit.

57.

Part C.b.3a.i.

The location of all [\[this probably should be qualified to “major”\]](#) storm sewer outfalls, receiving waters and [major](#) structural stormwater BMPs owned, operated or maintained by the permittee. The location and type of [other major](#) ~~all other~~ stormwater conveyances and [the](#) land uses located within the boundaries of the permittees MS4 watershed.

RESPONSE: This language has been clarified. See responses to comments #143 and #144.

58.

Part C.b.3.a.ii.

Each permittee shall initiate a program to develop and maintain a map of all [\[This does not seem to be practicable\]](#) connections to the municipal separate storm sewer authorized or allowed by the permittee after the effective date of this permit.

RESPONSE: This language has been modified to reflect that MS4's are to update their MS4 maps with known connections to their separate storm sewer systems.

Furthermore, in order to implement an *effective* program to detect and eliminate illicit discharges the municipality must know where the connections to their MS4 system are located. Having an accurate map of connections makes investigating illicit dumping and discharges possible.

59.

Part C.b.3.a.iv

Each permittee shall submit this map to DWWM in the third year annual report. The map shall be a scale of 1" = 500 ft. and on pages sized 24"x36" or 22"x36" and folded to 8 x 11 inches. [\[Pretty specific? Is there a better way to do this? Electronic maps?\]](#)

RESPONSE: Yes, this requirement is specific. Maps that are submitted to DWWM must be consistent. Accurate and consistent maps are necessary when the Agency develops and implements TMDL wasteload allocations for MS4's. However, this language has been modified so that permittees do not have to submit maps to DWWM unless requested.

60.

Part C.b.3.b

Each permittee shall develop and implement an ordinance or other regulatory mechanism to [effectively](#) prohibit and [require the removal](#) of [eliminate](#) non-stormwater, illegal discharges, and/or dumping into the permittees municipal separate storm sewer system to the regulatory extent allowable under State and Local law. The ordinance or other regulatory mechanism shall be adopted no later than two years from the effective date of this permit.

RESPONSE: The language in 40 CFR § 122.34(b)(3)(ii)(B) states; "...*effectively* prohibit, through Ordinance, or other regulatory mechanism, non-stormwater discharges into your storm sewer system and implement appropriate enforcement procedures and actions...".

Furthermore, the language at 40 CFR § 122.34(b)(3) states; (i) You must develop, implement and enforce a program to *detect* and *eliminate* illicit discharges (as defined at § 122.26(b)(2)) into your small MS4.

61.

Part C.b.3.b i

The regulatory mechanism does not need to prohibit the following categories of non-stormwater discharges listed in Part I.C of this permit.

- ~~Diverted stream flows,~~
- ~~Rising ground waters,~~
- ~~Uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20)),~~
- ~~Uncontaminated pumped groundwater,~~
- ~~Foundation drains,~~
- ~~Air conditioning condensation,~~
- ~~Irrigation water from agricultural sources~~
- ~~Springs,~~
- ~~Water from crawl space sump pumps,~~
- ~~Footing drains,~~
- ~~Flows from riparian habitats and wetlands,~~
- ~~Non-stormwater discharges covered by another NPDES permit,~~
- ~~Discharges or flows from emergency fire fighting activities,~~

RESPONSE: Not all the discharges are listed in Part I.C of the permit are listed here. This list will remain.

62.

Part C.b.3.b. ii.

The regulatory mechanism shall prohibit the following categories of non-stormwater discharges unless the stated conditions are met: [This section is inconsistent with Part I.C. and unnecessary]

RESPONSE: Part I.C conditions the discharge of these categories with this caveat: This permit authorizes the following non-stormwater discharges provided they have been determined not to be substantial contributors of pollutants. Under the IDDE program, there is further action necessary to ensure these types of discharges do not contribute pollutants to stormwater runoff.

63.

- Delete this bullet Discharges from potable water sources, including water line flushing, hyperchlorinated water line flushing, fire hydrant system flushing, and pipeline hydrostatic test water. For planned discharges to the MS4, the discharge shall be dechlorinated to a concentration of 0.1ppm or less, pH adjusted, if necessary, and volumetrically and velocity controlled to prevent resuspension of sediments in the MS4. [Impractical]

RESPONSE: The language to this bullet has been modified for clarity. Hyper-chlorinated water is toxic to aquatic life and precautions must be taken to ensure that it does not enter the MS4 and thus cause a violation of water quality standards. Trout streams are especially susceptible to minimal chlorine concentrations. DWWM does not believe this requirement to be impractical; however it does take prior planning. This bullet will not be deleted.

64.

- [Delete this bullet](#) Discharges from lawn watering and other irrigation runoff. [\[Inconsistent with Part I.C. which authorizes these discharges.\]](#) These shall be minimized through; at a minimum, public education activities described in Part II, Section C.b.1. of this permit, and water conservation efforts. [\[No authority to require water conservation through the MS4 permit!\]](#)

RESPONSE: As specified in the paragraph ii. preceding the bulleted list, *if the stated condition is met*, this type of discharge is allowed. ‘Water conservation efforts’ has been removed.

65.

- Street and sidewalk wash water, water used to control dust, and routine external building wash down that does not use detergents. The permittee shall reduce these discharges through; at a minimum, public education activities described in Part II, Section C.b.1. of this permit, and water conservation efforts. To avoid washing pollutants into the MS4, permittees must minimize the amount of street wash and dust control water used. At active construction sites, street sweeping must be performed prior to washing the street. [\[Delete this bullet – impractical and unnecessary\]](#)

RESPONSE: As specified in the paragraph ii. preceding the bulleted list, *if the stated condition is met*, this type of discharge is allowed. The *stated condition* is to educate the target audience about sending street; sidewalk and external building wash water into the storm drain system, as it does not receive treatment before it flows to the nearest stream, lake or river.

Streets, sidewalks, external building wash down can produce waste water that contains petroleum hydrocarbons, oils, greases, other organic compounds, nutrients, heavy metals, and suspended solids. Dirty, soapy water flowing into local storm drains can harm water quality, as well as fish and wildlife in our streams, lakes, and rivers.

66.

Part C.b.3.b.iii.

The permittees SWMP shall, ~~at a minimum~~, address each category ~~in it~~ [of non stormwater discharge authorized in Part I.C](#) above ~~in accordance with the conditions stated therein~~.

RESPONSE: The commenter does not specify a reason for any language change in this paragraph. The three bulleted items shall be included in the SWMP.

67.

Part C.b.3.b. iv.

~~The SWMP shall further address any category of discharges in i or ii above if the discharges are identified as significant sources of pollutants to waters of the State.~~

RESPONSE: Preventing and reducing pollutants from entering the permittees MS4 and thus waters of the State is the central tenant of the MS4 stormwater program. If the MS4 permittee is aware of other significant sources of pollutants, then these sources must be addressed in the SWMP. This language will not change.

68.

- Screening for illicit connections shall be conducted consistent with using: Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments, Center for Watershed Protection, October 2004, or another methodology of comparable effectiveness.

RESPONSE: This language has been modified.

69.

Part C.b.3.c. iii.

Procedures for characterizing the nature of, and potential public or environmental threat posed by, any illicit discharges found by or reported to the Permittee. Procedures shall include detailed instructions for evaluating whether the discharge must be immediately contained and steps to contain ~~be taken for containment of~~ the discharge.

RESPONSE: This language has been modified.

70.

Part C.b.3.c.v

Compliance with this provision shall be achieved by initiating an investigation within fifteen (15) days of a report or discovery of a suspected illicit connection to determine the source of the connection, the nature and volume of discharge through the connection, and the party responsible for the connection. Upon confirmation of the illicit nature of a storm drain connection, termination of the connection shall be accomplished as soon as possible ~~verified within ninety (90) days, using enforcement authority as needed~~ in accordance with the permittee's enforcement response plan.

RESPONSE: DWWM believes that illicit discharges are serious because pollutants flow untreated to the nearest receiving water body. However, this language has been modified to allow the permittee to establish a prioritizing system for removing illicit discharges. Discharges that pose an eminent threat to receiving waters shall be removed in a timelier manner, and these discharges shall receive higher priority in response time from the permittee. Also, see response to comment #154.

71. Intentionally blank

72. 3.f. Each permittee shall provide appropriate training for municipal field staff on the identification and reporting of illicit discharges into MS4s.

- i. No later than ~~twelve eighteen~~ months after ~~the approval of the permittee's SWMP effective date of this permit~~, each permittee shall ensure that all municipal field staff who are responsible for identification, investigation, termination, cleanup, and reporting illicit discharges, including spills, improper disposal and illicit connections are trained to conduct these activities. Follow up training shall be provided on an annual basis to address changes in procedures, techniques or requirements. Permittees shall document and maintain records of the training provided and the staff trained.

RESPONSE: The time frames have been removed.

73.

- ii. No later than eighteen months after the effective date of this permit, an ongoing training program shall be developed and implemented for all municipal field staff, ~~[too broad – this could include police, etc.]~~ which, as part of their normal job responsibilities, might come into contact with or otherwise observe an illicit discharge or illicit connection to the storm sewer system. Employees shall be trained on the identification of an illicit discharge/connection, and on the proper procedures for reporting and responding to the illicit discharge/connection. Follow up training shall be provided on an annual basis to strengthen knowledge of illicit discharges/connections, to address changes in procedures, techniques or requirements. Permittees shall document and maintain records of the training provided and the staff trained.

RESPONSE: This section is stated exactly as intended. Far too many times, there are employees of the municipality, including police officers, that see illicit discharges in their day to day travels and duties and do not know what is occurring, or do not know which municipal department to contact. Training and informing municipal employees about illicit discharges and illegal dumping into the storm drain system is a very cost effective and efficient way to get more eyes in the field where these types of illicit discharges occur. It is far more cost effective to prevent illicit discharges than to clean up a stream after something has been dumped.

74.

- ii. Requirements for construction site operators to implement appropriate erosion and sediment control BMPs. More stringent requirements may be used, and certain requirements may be tailored to local circumstances through the use of basin or watershed plans or other similar water quality and quantity planning efforts ~~which are consistent with this permit. Such local requirements shall provide equal protection of receiving waters and equal levels of pollutant control to those provided by DWWM WV/NPDES stormwater permits.~~

RESPONSE: Any local requirements for erosion and sediment control must provide equal or greater protection afforded to receiving waters and provide equal to or greater levels of pollutant control as DWWM requires under the construction stormwater permit. Construction site operators are not exempt from compliance with DWWMs construction stormwater general permit. This language will not change.

75.

- vi. Establishment of authority for receipt and consideration of information submitted by the public. [\[this does not make sense?\]](#)

RESPONSE: 40 CFR § 122.34(b)(4)(ii)(E) requires procedures for receipt and consideration of information submitted by the public. Furthermore, this was required under the prior MS4 general permit. This measure allows the public to submit information about a construction project that may affect them.

76.

- c. The program shall include a permitting process with plan review, inspection and enforcement capability, for both private and public facilities. At a minimum, the construction site runoff program shall be applied to all sites that disturb a land area of one acre or greater, including projects less than one acre that are part of a larger common plan of development. The permitting process shall be in place no later than two [\[three at least; maybe phase this in by MS4 size with MS4s serving >20,000 population required to have these programs in place within three years and all others by year four\]](#) years from the effective date of this permit. In addition to an Ordinance described in Part II, Section C.b.4.a, the following elements shall be incorporated into this program:

RESPONSE: Portions of this section are currently required under the prior MS4 permit. DWWM will not distinguish and make special provisions for certain sized MS4s. All shall have the same requirements. Some of the language in this paragraph has been modified for clarity.

77.

- ii. Procedures for routine inspections of ~~all~~ [\[all seems to broad\]](#) ~~known~~ permitted construction sites during construction to verify proper installation and maintenance of required erosion and sediment controls. Enforcement shall be conducted as necessary based on the inspection.

RESPONSE: This language has been modified for clarity.

78.

5. Controlling Runoff from New Development and Redevelopment

Each permittee shall develop, implement and enforce a program to reduce pollutants in stormwater runoff to your small MS4 from new development and redevelopment activities. This program shall be applied to all sites that disturb a land area one acre or greater, including projects less than one acre that are part of a larger common plan of development or sale. The program shall apply to private and public development, including roads. The program must ensure that controls are in place that will increase groundwater recharge of stormwater runoff where and when possible, and would protect water quality and reduce the discharge of pollutants. The permittee shall also develop and implement strategies that include structural best management practices designed for maximizing groundwater recharge. [\[this is too vague and broad a requirement\]](#)

RESPONSE: The majority of this language is contained in the *prior* MS4 permit. DWWM believes that this language is sufficiently clear especially when taken in context with the remaining requirements of this minimum control measure.

The Clean Water Act (CWA) is the cornerstone of surface water quality protection in the United States. The statute employs a variety of regulatory tools to sharply reduce direct pollutant discharges into waterways and manage polluted runoff. These tools are employed to achieve the broader goal of restoring and maintaining the chemical, physical, and biological integrity of the nation's waters so that they can support the 'protection and propagation of fish, shellfish, and wildlife' and recreation in and on the water.

79.

a. Long-term Stormwater Controls

The permittee shall protect the physical, chemical and biological integrity of receiving waters, and their designated uses, from the impacts of stormwater discharges through the implementation of watershed protection elements and site and neighborhood design elements. The purpose of watershed protection elements is to manage the impacts of stormwater on receiving waters that occur because of regional or watershed-scale management decisions. The primary purpose of site and neighborhood design elements is to manage the impacts of stormwater on receiving waters that occur because of site and neighborhood design management decisions. The technical principles of these management practices have many complementary similarities, and must be implemented in tandem.

~~All elements and standards are required, and must be described in the stormwater management program plan.~~ [\[this makes no sense\]](#)

RESPONSE: The elements and standards are further described in succeeding language in the permit. The watershed protection elements along with the one inch runoff reduction standard are well documented in the fact sheet that accompanied this permit.

80.

i. Watershed Protection

The permittee shall incorporate watershed protection elements into the subdivision ordinance or equivalent document. In addition, the permittee shall incorporate watershed protection elements into all relevant policy (???) documents as they come up for regular review. If a relevant planning document is not scheduled for review during the term of this permit, the permittee must identify the elements that cannot be implemented until that document is revised, and provide the DWWM a schedule for incorporation and implementation that cannot exceed seven years from the effective date of this permit. Planning documents include, but are not limited to; comprehensive or master plans, subdivision ordinances, general land use plan, zoning code, transportation master plan, specific area plans, such as sector plan, site area plans, corridor plans, or unified development ordinances.

RESPONSE: The language has been modified for clarity. Municipalities generally have multiple policies that affect planning, land development, building and other aspects of governing. Examples of relevant policy documents include; *tree planting or removal, landscaping, green space, parking, street design criteria, comprehensive or master plans, general land use plan, and zoning*. If these policies complement strong stormwater standards, it will make it easier for developers to simultaneously meet multiple requirements. Inclusion of the elements into these legal authority and planning documents will act as the impetus to direct appropriate land use decisions to support the watershed elements.

81.

- (4) Prevent disturbances of natural water bodies and natural drainage systems caused by development, including roads, highways, and bridges. [\[this is too vague and broad – delete it\]](#)

RESPONSE: Language has been modified for clarity. Hydromodification is one of the leading sources of impairment in streams, lakes, aquifers, and other waterbodies in the United States. Three major types of hydromodification activities (1) channelization and channel modification, (2) dams, (3) streambank erosion change a waterbody's physical structure as well as its natural function. These changes can cause problems such as changes in flow, increased sedimentation, higher water temperature, lower dissolved oxygen, degradation of aquatic habitat structure, loss of fish and other aquatic populations, and decreased water quality. It is important to properly manage hydromodification activities to reduce the sources of impairment in surface water. More information and a downloadable guide about Hydromodification can be found on USEPA's website: <http://www.epa.gov/nps/hydromod/>

82.

- (5) ~~Avoid~~ [\[Seek to minimize\]](#) development in areas that are particularly susceptible to erosion and sediment loss.

RESPONSE: This language has been removed.

83.

- (6) Implement standards to protect trees, and other vegetation with important evapotranspirative qualities. [\[too vague\]](#)

RESPONSE: As documented in the fact sheet that accompanied this permit, trees, even in relatively unnatural settings such as street trees in tree boxes, still have a remarkable capacity to take up water and return it to the atmosphere. Tree protection standards can be in the form of Ordinances, policy or other relevant municipal planning tools.

84.

- (8) Implement water conservation policies that will reduce both stormwater and non-stormwater discharges via storm sewer systems. [\[Delete this – water conservation should not be a factor in this permit\]](#)

RESPONSE: DWWM believes that water conservation can ultimately reduce polluted stormwater flows as well as combined sewer flows. There is much documentation on the financial and environmental benefits of conserving water. In areas with both combined sewers and separate storm sewer systems non-stormwater flows to the system can exacerbate peak flows during wet

weather. A program that includes water conservation, aside from its other environmental benefits, will ensure that the sewer system has additional capacity during storm events.

However, DWWM has decided at this time to remove this watershed protection element. Reusing stormwater in an effort to capture the first one inch of rainfall will ultimately have the effect of water conservation.

85.

- B. Measurable Goals.* For each of the six watershed elements in i.A, the permittee shall develop quantifiable objectives [\[where appropriate\]](#) that include a time frame for achieving them. Short-term objectives (less than five years) and long-term objectives (greater than five years) are appropriate for many of these elements.

RESPONSE: 40 CFR § 122.34(g) states that small regulated MS4's "must evaluate program compliance, the appropriateness of your identified best management practices, and progress towards achieving your identified measurable goals." DWWM believes that the stormwater management program components must be assessed and evaluated to know if measureable goals are being met and to make appropriate changes if necessary to meet those goals.

86.

ii. Site and Neighborhood Design

The permittee shall develop a program to protect water resources by requiring all new and redevelopment projects to control stormwater discharge rates, volumes, velocities, durations and temperatures. These standards shall apply at a minimum to all new development and redevelopment disturbing one acre or greater, including projects less than one acre that are part of a larger common plan of development or sale. All requirements contained in section C.b.5.a.ii [other than C.b.5.a.ii.A(3) and C.b.5.a.ii.A(4)] must be fully implemented within two [\[three or four?\]](#) years of the effective date of this permit.

RESPONSE: DWWM has decided to allow four years for development of this program. In this time frame municipalities should seriously consider creating incentives for these types of standards as much as possible to get developers and other municipal officials accustomed to designing and implementing these practices.

87.

- A. Performance Standards.* The permittee must implement and enforce via ordinance and/or other enforceable mechanism(s) the following requirements for new and redevelopment: [\[NOTE: This should not apply to all new redevelopment; we should establish a threshold- is this construction affecting one acre or more?\]](#)

RESPONSE: As the permit states in Part II, Section C.5., each permittee shall develop, implement and enforce a program to reduce pollutants in stormwater runoff to your small MS4 from new development and redevelopment activities. This program shall be applied to all sites that disturb a land area one acre or greater, including projects less than one acre that are part of a larger common plan of development or sale.

Post construction controls for new development and redevelopment of one acre or greater are required under the previous MS4 permit.

88.

1. Site design standards for all new and redevelopment that require, in combination or alone, management measures that infiltrate, evapotranspire and reuse of, at a minimum, the first one inch of rainfall from a 24-hour storm preceded by 48 hours of no measurable precipitation. [Should specify a RETURN frequency such as the one-yea 24-hour storm] This first one inch of rainfall must be controlled to the maximum extent practicable ~~100% managed with no discharge to surface waters.~~ An Underground Injection Control permit may be issued ~~required~~ when certain conditions are met.

RESPONSE: As the fact sheet that accompanied this permit explains, this permit proposes a simple performance standard to approximate 10% discharge, with most of the remainder handled on-site. Analysis of precipitation data for West Virginia indicates that 90% of the 24 hour (or less) rainfall events are one inch or less. Therefore stormwater systems designed to manage one inch of rain will reasonably mimic the natural hydrologic process. All new and redevelopment projects must design, implement and maintain a system of controls that will reduce runoff volumes of the first inch of rain from a 24-hour storm preceded by 48 hours of no measurable precipitation.

There are cases where stormwater infiltration practices are regulated as Class V wells under the Underground Injection Control (UIC) program. The DWWM encourages the use of infiltration and notes that most of these practices do not meet the Class V definition and can be installed without requiring UIC permits. However, in situations where a UIC permit may be required it is the responsibility of the permittee to obtain that permit.

To provide clarification on which stormwater infiltration techniques meet UIC Class V well definitions, USEPA's Office of Water has developed a "Class V Well Identification Guide." MS4 permittees are requested to refer to this guide when considering stormwater infiltration practices. The guide can be found at DWWM stormwater webpage: http://www.wvdep.org/dwwm/stormwater/MS4_docs.htm

89.

1. The following additional water quality requirements, as applicable:
 - i. ~~A project with reasonable potential for pollutant loading(s) must provide water quality treatment for pollutants of concern (e.g., petroleum hydrocarbons at a vehicle fueling facility) before infiltration. [this requirement is way too broad]~~
 - ii. ~~A project that cannot implement adequate preventive or treatment measures to ensure compliance with groundwater and/or surface water quality standards, must properly convey stormwater to a NPDES-permitted wastewater treatment facility or via a licensed waste hauler to a permitted treatment and disposal facility. [this is inconsistent with the MEP]~~

[requirement and is impracticable as storm water discharges can never guarantee compliance with WQS, especially for bacteria.\]](#)

RESPONSE: The permit language has been modified to include the ‘hot spot’ terminology, and it is now defined. Stormwater hot spots are sites where certain types of pollutants are generated. These facilities include, but are not limited to; vehicle salvage yards, fueling stations, vehicle service and maintenance facilities, fleet storage and maintenance, public works storage areas, and commercial greenhouses/nurseries, to name a few.

There may be some instances in which stormwater generated from a hot spot cannot be properly treated before it is discharged into the permittees MS4. This stormwater, due to its potential to cause a water quality violation, must be conveyed and treated at an NPDES permitted facility. In most instances, stormwater from these types of facilities can be treated on site therefore, off site treatment is not necessary.

The permittee should implement these water quality requirements via enforceable requirements within their jurisdictions.

90.

- iii. A project that discharges or proposes to discharge to any surface water or ground water that is used as a source of drinking water must comply with all applicable [requirements relating to](#) source water protection ~~policies and plans~~.

RESPONSE: The language has been modified as requested.

91.

4. For projects that cannot meet 100% of the infiltration/evapotranspiration/reuse requirement on-site, two alternatives are available: off-site mitigation and payment in lieu. The permittee must develop and fairly apply criteria for determining the circumstances under which these alternatives will be available. ~~A determination that standards cannot be met on-site may not be based solely on the difficulty or cost of implementing measures, but must include multiple criteria that would rule out an adequate combination of infiltration, evapotranspiration and reuse such as: too small a lot outside of the building footprint to create the necessary infiltrative capacity even with amended soils; a site use that is inconsistent with capture and reuse of stormwater; too much shade or other physical conditions that preclude adequate use of plants.~~ [This should be deleted (or at a minimum clarified)]

RESPONSE: Off-site mitigation and payment in lieu alternatives are clarified in detail in the fact sheet that accompanied this general permit.

If the municipality chooses not to implement off-site mitigation and payment in lieu, then this set of requirements does not apply. However, if the municipality chooses to use these alternatives, then they must develop criteria to establish an orderly process and prevent abuse.

92.

4. These alternatives are only available, in combination or alone, for up to 0.4 inches of the original obligation [\[this is arbitrary and will preclude high density redevelopment\]](#) at a 1:1.5 ratio, i.e., mitigation or payment in lieu must be for 1.5 times the amount of stormwater not managed on site. For either of these options to be available, the permittee must create an inventory of appropriate mitigation projects, and develop appropriate institutional standards and management systems to value, evaluate and track transactions. [\[this is too prescriptive. Permittee should be required to adopt mitigation and payment in lieu of rule and leave it at that\]](#)

RESPONSE: This language has been clarified to include up to 0.6 inches of stormwater obligation. DWWM believes that at any site, not implementing any of the incentives, 0.4 inches of runoff reduction is very feasible including redevelopment sites. The requirement is prescriptive to prevent abuse and waste of money for insignificant stormwater projects that will not contribute to improving water quality.

Furthermore, a *reduction* in the amount of stormwater that is managed on site by utilizing one or more of the incentives described in paragraph 3 does indeed make it attractive for developers to consider high density development. These sorts of incentives have been used very successfully in other parts of the United States.

93.

- i. *Off-site mitigation.* Infiltration/evapotranspiration/reuse measures may be implemented at another location in the same sewershed/watershed as the original project, approved by the permittee. The permittee shall identify priority areas within the sewershed/watershed in which mitigation projects can be completed. Mitigation must be for retrofit or redevelopment projects, and cannot be applied to new development, [except where the new development is a public-sponsored project.](#)

RESPONSE: DWWM declines the requested language change.

94.

5. When public streets or parking lots are repaired, modified or reconstructed opportunities to improve stormwater management using infiltration and evapotranspiration measures shall be ~~considered-included~~ in the design work. During the next permit term formal design standards for streets and parking lots will be required per the street and parking design assessment undertaken this permit term in accordance with Part II, Section C.b.5.b.

RESPONSE: DWWM has modified this paragraph for clarity. The commenter's proposed language change will render the paragraph unenforceable and this request is declined.

95.

- B. *Plan Review, Approval and Enforcement.* To ensure that all new development and redevelopment projects conform to the standards stipulated in Part II, Section C.b.5.ii, the permittee shall develop project review, approval and enforcement procedures. The review, approval and enforcement procedures shall apply at a

minimum to all new development and redevelopment disturbing greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, and shall include:

- (1) Requirements to submit for review ~~and approval~~ [\[MS4 should not be required to give such a preliminary approval – enough to review/comment\]](#) a pre-application concept plan that describes how the performance standards will be met. A pre-application meeting attended by a project land owner or developer, the project design engineer, and municipal planning staff to discuss conceptual designs may also meet this requirement.

RESPONSE: The previous MS4 general permit required the permittee to enact an ordinance that adequately addresses the implementation of the requirements in this control measure. In order to approve and/or enforce plans a permittee must first review them. Furthermore, addressing any requirements the municipality has *before* the design is complete will allow more flexibility in getting the proper design.

96.

- C. *Maintenance Agreements.* The permittee shall require that all development subject to the requirements of Part II, Section C.b.5.ii. of this permit develop a maintenance agreement and maintenance plan for approved management practices. The permittee shall require that property owners or operators provide verification of maintenance for the approved management practices. These agreements shall allow the permittee, or its designee, to conduct inspections of the management practices and also account for transfer of responsibility in leases and/or deed transfers. The agreement shall also allow the permittee, or its designee, to perform necessary maintenance or corrective actions neglected by the property owner/operator, and bill or recoup costs from the property owner/operator when the owner/operator has not performed the necessary maintenance within thirty (30) days of notification by the permittee or its designee. [\[Has DEP evaluated the legal authority for this requirement?\]](#) Verification shall include one or more of the following as applicable:

RESPONSE: DWWM believes that municipalities have authority to enforce their ordinances. The Legislature passed Senate Bill 323 in 2008 to give municipalities enforcement capability.

97.

- D. *Inventory and Tracking of Management Practices.* The permittee shall develop a system, within [twelve months](#) ~~180 days~~ of issuance of this permit, designed to track management practices deployed at new development and redevelopment projects. Tracking of management practices shall begin during the plan review and approval process with a database or geographic information system (GIS). The database or tracking system shall include information on both public and private projects that are within the jurisdiction of the permittee. In addition to the standard information collected for all projects (such as project name, owner, location, start/end date, etc.), the tracking system shall also include:

RESPONSE: The time stipulation has been removed from this paragraph.

98.

1. Perform inspections of at least 20% of the stormwater management facilities, or treatment control management practices annually, beginning in the third year following the effective date of this permit. [This requirement needs to be scaled back dramatically. 20% of all facilities is completely unrealistic. This should be limited to major facilities and such facilities should be designed and/or designated by the permittee]

RESPONSE: This language has been modified. DWWM believes that all stormwater management BMPs should be inspected at least once per permit cycle. Furthermore, the *prior* permit states that the permittee shall develop, implement, and provide adequate resources for a program to *inspect* development and redevelopment sites and to enforce and penalize violators. These provisions are activities MS4s in WV are to be doing *now*, not three years after this permit becomes effective.

99.

3. Ensure that management practices are maintained. The permittee shall follow its enforcement response plan to ensure that management practices are maintained. ~~promptly notify the management practice owner or operator of any deficiencies discovered during a maintenance inspection. The owner must correct the deficiency within thirty (30) days of the notice. The permittee must conduct subsequent inspection to ensure completion of all required repairs. If repairs are not made, the permittee shall enforce its correction orders and, if need be, perform the necessary work and assess against the owner the costs incurred for repairs.~~

RESPONSE: This language has been modified for clarity.

100.

- (5) A summary of management practice maintenance inspections conducted by the permittee, including a summary of the number requiring maintenance or repair, ~~the number brought into compliance within stipulated time frame~~, and the number of enforcement actions taken.

RESPONSE: This language has been modified. One of the requirements of the MS4 program is for the permittee to evaluate their program. By knowing the number of stormwater management practices being brought into compliance, the permittee can better evaluate their program.

101.

Street/Parking Design Assessment.

Within two years [for MS4s serving populations >20,000 and three years for those serving fewer than 20,000] of the effective date of this permit, the permittee shall submit to DWWM a report assessing current street design guidelines and parking requirements that affect the creation of impervious cover. The assessment shall include recommendations and proposed schedules for incorporating policies and standards into

relevant documents and procedures to minimize impervious cover attributable to parking and street designs. The local planning commission and the local transportation commission should be involved in the assessment.

REPOSE: DWWM will not establish lesser or more stringent time frames for this provision based on population. The USEPA has already made the distinction between large, medium and small MS4s.

102.

Pollution Prevention & Good Housekeeping for Municipal Operations

- ii. Each permittee shall establish an inspection schedule in which to perform inspections to determine if maintenance standards are being met. Inspections shall be performed no less than once per calendar year. [\[Too much; inspections should be pursuant to an inspection schedule that requires all major municipal facilities to be inspected during the five-year term of the permit\]](#)

RESPONSE: DWWM believes that municipal facilities should and can be inspected once per year. Municipal facilities include those industrial facilities that are operated by the permittee and are not covered under the Multi-Sector Stormwater General Permit. They include facilities such as wastewater treatment plants, vehicle maintenance areas, parks and recreation, fleet maintenance, and other such facilities.

103.

- d. Within ~~two~~ [three years for MS4s serving populations greater than 20,000 and four years for those MS4s serving less than 20,000](#), of the effective date of this permit, establish and implement policies and procedures to reduce the discharge of pollutants in stormwater runoff from all lands owned or maintained by the permittee and subject to this permit, including but not limited to: parks, open space, road right-of-way, maintenance yards, water/sewer infrastructure and stormwater treatment and flow facilities. These policies and procedures shall address, but are not limited to:

RESPONSE: DWWM will not establish different time frames for this provision based on population.

104.

- c. Using training materials that are available from WVDEP, USEPA or other organizations, develop and implement an on-going training program for employees of the permittee whose construction, operations or maintenance job functions may impact stormwater quality. However, the training program shall include, but is not limited to those employees who work in the following areas: [\[This is very broad – we need to discuss how to provide appropriate training efficiently\]](#)

RESPONSE: DWWM has offered to all the regulated MS4s in the state of West Virginia a video training tool targeted to meet the requirements of this measure. USEPA has an excellent

guidance manual addressing this minimum control measure. The guidance manual is entitled; “Municipal Pollution Prevention/Good Housekeeping Practices” and can be found on WVDEP’s website: http://www2.wvdep.org/dwwm/stormwater/MS4_BMP.htm

Furthermore, training is required under the previous MS4 general permit.

105.

- i. The training program shall address, [as appropriate to the audience](#), the importance of protecting water quality, the requirements of this permit, operation and maintenance standards, inspection procedures, selecting appropriate BMPs, ways to perform their job activities to prevent or minimize impacts to water quality, and procedures for reporting water quality concerns, including potential illicit discharges. Follow-up and refresher training shall be provided at a minimum of once every six months, [\[this is overkill – leave the frequency of follow-on training to the permittee’s training program\]](#), and shall include any changes in procedures, techniques or requirements. Permittees shall document and maintain records of training provided.

RESPONSE: This section is stated exactly as intended. Training is to be provided to employees who job functions, such as street or utility construction, park and public land maintenance, or any other operations or maintenance duties that may affect stormwater quality.

DWWM believes that in order to be effective, this training should be conducted on a regular basis. Training and informing municipal employees about their actions that affect polluted stormwater runoff is a very cost effective and efficient way to prevent water pollution rather than to attempt to remove pollutants after they reach receiving waters. The language has been modified to require training once every twelve months.

106.

d. **Industrial Stormwater coverage for Municipal Operations**

Each permittee that owns or operates a publicly owned treatment works, including sanitary boards, maintenance garages and/or any other industrial activity must obtain coverage for their stormwater discharges, unless coverage is already granted under DWWM WV/NPDES General Permit for Storm Water Discharges associated with Industrial activity, or an individual WV/NPDES permit.

The following monitoring requirements apply: [\[This is too general – sampling from one representative outfall?\]](#)

RESPONSE: This comment does not make sense; sampling from one representative outfall is not used in this section.

107.

Stormwater samples shall be collected during the “first flush” of rainfall runoff, at least twenty minutes, but not more than fifty minutes after rainfall, [where](#)

~~practicable, of at least 0.5 inches has begun, with such a storm event being~~ preceded by a period of dry weather of at least 48 hours.

RESPONSE: Stormwater samples *shall* be collected in the time frame specified in order to capture the first flush representative pollutants that are washed off of impervious surfaces of the MS4. There are several sampling devices that can be put in place and programmed or triggered to sample stormwater discharges after a certain amount of rainfall.

The pollutants contained in a particular MS4's stormwater are to be identified so that the stormwater management program can be tailored to address those pollutants.

108.

D. Discharge to Impaired Waters

1. 303(d) Listed Waters:

~~This permit does not authorize new sources or new discharges of pollutants of concern to impaired waters unless consistent an approved Total Maximum Daily Load (TMDL) and applicable state law. [The preceding sentence must be removed from the permit - it is an incorrect application of the law]~~ Impaired waters are those that do not meet applicable water quality standards. Impaired waters are identified on the West Virginia, Section 303(d) list until a TMDL is developed and approved by USEPA. Pollutants of concern are those pollutants for which the water body is listed as impaired.

RESPONSE: The DWWM believes the sentence in question is appropriate for NPDES permits, based on the provisions contained in 40 CFR § 122.44.

109.

- a. 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 ~~address control~~ the discharge of the pollutant(s) of concern, ~~and must ensure that there will be no increase of the pollutants of concern.~~ [There is no way an MS4 can commit to no increase in the pollutant of concern; stormwater loadings are highly variable and such a requirement applied, say to sediment, would preclude any new or redevelopment projects]

RESPONSE: The Clean Water Act in Sections 301(b)(1)(C) and 402(p)(3)(B) include provisions that all permits for MS4s must include any requirements necessary to achieve water quality standards. Where waterbodies are already impaired, increased discharges of the pollutant of concern would have a *reasonable* potential to cause or contribute to the impairment. Therefore, the permittee must demonstrate that there will be no increase of the pollutants of concern.

110.

- b. If a TMDL is approved during this permit cycle by USEPA for any waterbody into which an MS4 discharges, the MS4 must review the applicable TMDL to see if it includes requirements for control of stormwater discharges. Within six (6) months

of the TMDL approval, the MS4 must modify its stormwater management program to include best management practices specifically targeted to achieve the wasteload allocations prescribed by the TMDL. The MS4 must include a monitoring component in the SWMP to assess the effectiveness of the BMPs in achieving the wasteload allocations.

- b. [If a TMDL is approved during this permit cycle by USEPA for any waterbody into which an MS4 discharges, the MS4 must review the applicable TMDL to see if it includes requirements for control of stormwater discharges. Within one year of the TMDL approval, the MS4 must modify its SWMP to include BMPs specifically targeted toward the goal of achieving the wasteload allocations identified in the TMDL to the maximum extent practicable. The MS4 must include a monitoring component in the SWMP to assess the effectiveness of the BMPs toward the goal of achieving the wasteload allocations to the maximum extent practicable.](#)

RESPONSE: In waterbodies where a [TMDL] wasteload allocation has been established and approved for the MS4, that wasteload allocation is a specific water quality requirement that must be met, for that pollutant of concern. MS4 must meet wasteload allocations assigned to them in the TMDL *in addition* to the MEP standard.

Further, 40 CFR §122.44(d)(1)(vii)(B) requires that the permitting authority shall ensure that: (B) **“Effluent limits developed to protect a narrative water quality criterion, a numeric water quality criterion, or both, are consistent with the assumptions and requirements of any wasteload allocation for the discharge prepared by the State and approved by EPA.”**

NPDES permits must contain effluent limits and conditions that are consistent with the requirements of the wasteload allocations in the TMDL, and that discharges to such waterbodies attain or maintain water quality. [40 CFR §122.44(d)(2)]

111.

2. **Discharging into Waters with Approved TMDLs**

If a MS4 discharges into a water body with an approved TMDL, and the TMDL contains requirements for control of pollutants from the MS4 stormwater discharges, then the 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.

[If a MS4 discharges into a water body with an approved TMDL, and the TMDL contains requirements for control of pollutants from the MS4 stormwater discharges, then the SWMP must include BMPs specifically targeted toward achieving the wasteload allocations identified in the TMDL to the maximum extent practicable. A monitoring component to assess the effectiveness of the BMPs toward the goal of achieving the wasteload allocations, to the maximum extent practicable, must also be included in the SWMP.](#)

RESPONSE: See response to #110.

112.

E. Endangered and Threatened Species

If a MS4 discharges to a stream where federally endangered or threatened species or its habitat are present, the applicant shall contact the US Fish and Wildlife Service to insure that requirements of the Federal Endangered Species Act are met. [\[This \(locality-level ESA consultations\) is completely unworkable and not required by law\]](#)

RESPONSE: The Endangered and Threatened species clause is required in all NPDES permits.

113.

B. Stormwater Monitoring

The permittee shall monitor stormwater from a minimum of one outfall that is representative of the stormwater discharge from the MS4. The permittee shall choose, at a minimum, one outfall to monitor for the following parameters:

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

~~Total Load basis. The Annual Total Load Limitations shall be attained in accordance with the following: [\[This makes no sense\]](#)~~

RESPONSE: This sentence has been removed.

114.

Effluent monitoring for the above pollutants shall be conducted using the most sensitive methods and detection levels commercially available and economically feasible. The methods and detection levels in the table above are recommended to be used unless the permittee desires to use an EPA Approved Method with a lower detection level.

~~Effluent monitoring for the above pollutants shall be conducted using the most sensitive methods and detection levels commercially available and economically feasible. The methods and detection levels in the table above are recommended to be used unless the permittee desires to use an EPA Approved Method with a detection level equal to or lower than those specified above.~~

RESPONSE: The language has been modified.

115.

Stormwater samples shall be collected during the “first flush” of rainfall runoff, at least twenty minutes, but not more than fifty minutes after rainfall of at least 0.5 inches has begun, preceded by a period of dry weather of at least 48 hours.

Stormwater samples shall be collected during the “first flush” of rainfall runoff, at least twenty minutes, but not more than fifty minutes after rainfall onset, where practicable. Such sampling shall be preceded by a period of dry weather of at least 48 hours.

RESPONSE: See response to comment #107.

116.

C. Recordkeeping and Public Availability of SWMP and Annual Report

The permittee shall keep records under this general permit for at least three years after termination of this general permit. Records shall be submitted to the DWWM only when permittees are specifically asked to do so.

The permittee shall keep records under this general permit for at least three years. [Federal and State law only require that records be retained for three years, not three years after permit expiration, which would make the requirement and 8-year retention requirement.] Records shall be submitted to the DWWM as specified herein or upon request by DEP.

RESPONSE: This is required under the prior MS4 general permit. While one year of the record retention cycle will be eight years, the records generated during the last year of the permit cycle will only be retained for three years. This requirement will not change.

117.

Appendix B

Definitions

Remove hydromodification, as the word is not used in the permit.

Additional definitions are needed, such as major stormwater facility for purposes of MS4 inspections.

RESPONSE: The word is used and defined. Additional definitions have been added to appendix B.

118.

Appendix C

I. MANAGEMENT CONDITIONS:

~~**12. Water Quality**~~

~~The effluent or effluents covered by this permit are to be of such quality so as not to cause violation of applicable water quality standards adopted by the Environmental Quality Board. [This requirement is inconsistent with the MEP requirement for storm water]~~

RESPONSE: This language is required for all NPDES permits, until such time as Title 47, Series 10 Section 6 of the West Virginia Code removes this requirement.

119.

2. Reporting [This should be tailored to this permit and not POTW permits]

- a) Permittee shall submit, according to the enclosed format, a Discharge Monitoring Report (DMR) indicating in terms of concentration, and/or quantities, the values of the constituents listed in Part A analytically determined to be in the plant effluent(s). DMR submissions shall be made in accordance with the terms contained in Section C of this permit.
- b) Enter reported average and maximum values under "Quantity" and "Concentration" in the units specified for each parameter, as appropriate.
- c) Specify the number of analyzed samples that exceed the allowable permit conditions in the columns labeled "N.E." (i.e., number exceeding).
- d) Specify frequency of analysis for each parameter as number of analyses/specified period (e.g., 3/month is equivalent to 3 analyses performed every calendar month). If continuous, enter "Cont.". The frequency listed on format is the minimum required.

RESPONSE: With the addition of stormwater monitoring, MS4s will be submitting Discharge Monitoring reports. This language is required in all NPDES permits.

120.

We the members of the Beckley Sanitary Board Stormwater Advisory Committee are in agreement with the comments set forth in a letter dated August 29, 2008 from Steptoe & Johnson, PLLC on behalf of the City of Morgantown and the City of Beckley regarding proposed changes to the MS-4 general permit.

We feel these changes would cause development to occur outside of the MS-4 areas, thus causing the stormwater problems to worsen. Some of these changes would make development in a MS-4 area cost prohibitive.

RESPONSE: See response to comments numbered # 121 through #207.

121.

It is important to note though that the issuance of this draft was not preceded by any type of stake holder process or open, inclusive review. Perhaps as a result, the permit includes many changes in program content and manner that, as a practical matter, will be counterproductive - and perhaps even destructive - as we continue our progress toward effective and successful MS4 programs in West Virginia. Moreover, these parties find the draft permit to include unfunded mandates and expansive and overreaching requirements that will harm existing programs and discourage new programs and innovations. As proposed, this permit will transform the program from a community based needs and resources driven program to a more traditional command-and-control model. If this unfortunate path is chosen, the MS4 program will devolve into confusion, contention and failure.

Given the significant legal and policy issues raised by this draft, the parties agree that the best course of action at this time is to withdraw the draft permit and convene a stakeholder process to reconsider the requirements and prerogatives necessary for a successful MS4 program. The parties are committed to this success and will devote resources to working with the Agency to develop a practical and feasible MS4 permit.

RESPONSE: DWWM and the USEPA including Region III believe the proposed permit is an excellent permit and a good example of how permits should be. There are no *changes* to program content. The six minimum controls are still the same six minimum control measures as specified in the previous permit; there are no new ones. Many permittees found the prior MS4 permit very vague and broad, to the point that many of the MS4s in West Virginia did not understand their obligations. Permit provisions are to be clear and enforceable, and if not would be grounds for USEPA to disapprove the permit.

Furthermore, the stormwater program is very specifically intended to be an iterative program, with the bar being continuously raised until such time as all water quality standards/designated uses are met in receiving waters.

MS4s in West Virginia have had six years to implement their programs. DWWM believes that the MS4 permit requirements do not require anything more, they do require that the practices that are already required to be underway, be improved.

122.

The parties further believe that the stakeholders must work from and amend the 2003 permit, discarding completely the 2008 draft. The underlying theory is simple: The 2003 permit was the "crawl phase" of the program. This should be amended to move next to the "walk phase" of the program. Once we have succeeded in mastering the walk phase, then we may begin to run with a more aggressive permit.

Unfortunately, the permit proposed by the agency skips through the crawl phase (which many West Virginia MS4s have not yet mastered) and moves directly to the run phase - and a most aggressive run. We believe this mistake, if implemented, will do immeasurable harm to MS4s that are struggling to crawl, as well as those prepared to incrementally stand up a more extensive and aggressive program.

RESPONSE: It is unfortunate that some regulated MS4 communities have made a decision to not comply with the terms and conditions of the previous permit. DWWM granted the first MS4 permit cycle as a time to get programs implemented without worry of enforcement actions by the Agency. Unfortunately, those MS4 communities who chose to do nothing will now be in noncompliance of this MS4 permit. DWWM disagrees that the reissued MS4 permit should reward those municipalities that did not choose to comply to continue another permit cycle in the "crawl phase".

123.

Page 1 of the permit states the site application registration will be known as the Storm Water Management Program ("SWMP"). While the site registration may be incorporated into the SWMP, the form does not include the actual SWMP which will be developed and

submitted over a six month time frame. Further, the permit should be clarified to state that the SWMP, once approved, becomes a part of the permit. The parties request that this term and condition of the permit be clarified consistent with this comment.

RESPONSE: The language in Part II.A has been modified for clarity. The site registration application is a form used to write out and describe the MS4's stormwater management program. The information contained on the site registration application does become the program that the MS4 is required to implement once reviewed and approved by the DWWM. The site application registration should not be confused with the Notice of Intent.

124.

Further, for purposes of clarity and consistency, the Storm Water Management Program should be referred to as the SWMP throughout the permit.

RESPONSE: According to the fifteenth edition of the Chicago Manual of Style, using an acronym and then subsequently spelling out the acronym is acceptable. The acronym SWMP is spelled out in subsequent paragraphs to provide the reader ease of reading and to occasionally refresh memory.

125.

Part I.B.I, page 2 states that municipalities, and communities located within the boundaries of an "urbanized area" as defined by the Bureau of Census based upon the "latest decennial census" are subject to and eligible for coverage under the permit.

The term and condition contained in the permit limits the permit coverage to municipalities and counties only. This term and condition of the permit should be amended to assure that political subdivisions of both entities, such as utility boards, will be eligible for coverage if so delegated by their parent governmental entities.

RESPONSE: This permit grants stormwater discharge coverage to the municipality, not a sub-department of the municipality. If a sanitary or utility board is managing stormwater for a municipality, then the municipality has at some point delegated that authority to the sanitary board. It is important to understand that there are many units, or departments, of a municipality that may participate or be included in some form of the management of stormwater in a municipality.

Further, it is imperative that all departments in the municipality and not just those of a sanitary or utility board understand they are subject to the terms and conditions of the MS4 general permit. For example the minimum control measure; "Pollution prevention and good housekeeping for municipal operations" does not exclude operations of other departments within the municipality. These types of municipal operations can and do include other entities of the MS4 such as parks, streets, vehicle maintenance, trash collection, and many other types of operations that may be conducted by the municipality.

126.

Part II.A, page 3 states that all MS4s shall submit a Notice of Intent to obtain coverage pursuant to the terms and conditions of the permit within thirty (30) days of permit

issuance. All requirements contained in the permit should relate back to the date upon which the permit becomes effective, not the date of issuance. The parties request that the permit be amended to reflect this position.

REPOSE: The language has been modified.

127.

Part II. B.1, page 3 states that the SWMP is designed not only to reduce the discharge of pollutants to the MEP standard, but also generally protect water quality and satisfy requirements of the Clean Water Act. This term and condition of the permit should be clarified to assure that the MEP standard applies to all goals contained in the permit.

RESPONSE: CFR § 122.34(a) states: “Your NPDES MS4 permit will require at a minimum that you develop, implement and enforce a stormwater management program designed to reduce the discharge of pollutants from your MS4 to the maximum extent practicable, to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act.” The DWWM believes the permit language is accurate, meets the intent of the MS4 program under the Federal Rule and is appropriate for inclusion in West Virginia’s small MS4 general permit.

128.

Part II. B.2, page 3, requires that the permittee use all known available and reasonable methods to prevent and control storm water pollution. Communities should be required to implement all methods as approved in the SWMP to prevent storm water pollution. As written, the permittee is necessarily in violation of the permit if it does not use "all" means of control. This term and condition of the permit is therefore inconsistent with the use of community specific controls and the use of the SWMP as the means of controlling storm water pollution.

RESPONSE: This language has been modified for clarity.

129.

Part II. B.4, page 3, the parties request that the permit be modified to insert "as appropriate" between ""milestones" and ""for."

RESPONSE: This language has been modified.

130.

Part II. B.6, page 3, the parties request that the permit be modified to insert "approved" between "The" and "SWMP."

RESPONSE: The SWMP is submitted to DWWM as a draft before it is approved. Before approval, these details must be included.

131.

Part II.B.3, page 3 requires that the SWMP follow the public notice procedures found in 47 CSR 10-12. Sections 10 and 11 of this rule are not relevant to public notice procedures. Section 12 sets forth the process by which the WVDEP requests public comment and is

likewise not relevant in this application.

RESPONSE: The State regulation citation is correct. However, to avoid confusion, the citation will be spelled out completely.

Regulated MS4 stormwater management programs are subject to the Clean Water Act's public availability and public hearing requirements. The Clean Water Act requires that "[a] copy of each permit application and each permit issued under [the NPDES permitting program] shall be available to the public," 33 U.S.C. §1342(a)(j), and that the public shall have an opportunity for a hearing before a permit application is approved.

West Virginia Title 47 Section 10-12 describes the public notice procedure for NPDES permits. The small MS4 general permit is a NPDES discharge permit. Further, the DWWM believes this requirement meets the intention of the 2003 Ninth Circuit Court of Appeals decision by providing the public adequate opportunity to make comments on local stormwater management programs.

132.

Public participation and comment with regards to the SWMP are addressed in Part II.C.b.2 of this permit and should be limited to those requirements. Further requirements proposed here are redundant and excessive. The parties request that this term and condition be removed.

RESPONSE: The DWWM believes this requirement meets the intention of the 2003 Ninth Circuit Court of Appeals decision by providing the public adequate opportunity to make comments on local stormwater management programs. Further, Section 402 of the Clean Water Act includes a provision for public hearings of permits. This requirement is also contained in West Virginia's previous small MS4 general permit.

133.

Part II.B.8, page 4 states that the "SWMP must document how the proposed BMP's will control the discharge of pollutants of concern" to waters designated as impaired pursuant to Section 303(d) of the Clean Water Act or waters with an approved Total Maximum Daily Load ("TMDL").

This term and condition of the permit, in combination with Part III of the permit, should be clarified to state that the implementation of BMPs per an approved SWMP will be considered compliance for any and all requirements of the permit.

As with any BMP based program, adjustments and refining of the BMPs may be required to obtain eventual achievement with program goals.

RESPONSE: Compliance with the terms and conditions of the permit is not necessarily contingent upon DWWM approving the SWMP. In instances where the MS4 discharges into impaired waterbodies or waterbodies with a TMDL, it is incumbent on the MS4 to make sure that any wasteload allocations assigned to the MS4 are being met, and that their discharge does not cause or contribute to impairment of the waterbody.

Furthermore, Stormwater management programs are meant to be adapted and improved over the course of a permit cycle. Permittees may discover that one method of managing stormwater is not effective, but another method is better and/or more cost effective. In this regard, the permittee is encouraged to alter its mix of BMPs to better implement the stormwater management program. Alteration of BMP's does not require approval from DWWM.

The USEPA guidance entitled; **“Evaluating the Effectiveness of Municipal Stormwater Programs”** states; *“Operators of regulated MS4s are required to develop a stormwater management plan (SWMP) that includes measurable goals and to implement needed stormwater management controls (BMPs). The process of developing a plan, implementing the plan, and evaluating the plan is a dynamic, iterative process that helps move communities toward achievement of their goals”*.

Also, see the responses to comments #194 and #195

134.

Part II.C.a.1, page 4 should be modified to state that permittees implementing the six minimum controls pursuant to their current SWMP may continue to do so until such time as their SWMP is updated and further approved.

RESPONSE: The language has been modified.

135.

Part II.C.a.2.a, page 4, the final sentence describes entities covered by the MS4 permit. This is redundant with Part I.B.I, and the parties request that this term and condition be removed.

RESPONSE: It is not completely redundant and the specific entities are set forth for clarity.

136.

Part II.C.a.2.a, page 4, relates to internal coordination. The parties would request that the term "necessary" be removed and replaced with "advisable" and the further term "shall" be removed and replaced with "may" to evidence the voluntary nature of such coordination and maintain the community/BMP based origins of the permit.

Part II.C.a.2.b, c, and d, page 4, relates again to coordinated efforts. Consistent with the general flexibility which should be maintained in the permit, the parties would request that the term "shall" be removed and replaced in each named subsection above with the term "should."

RESPONSE: Part II.C.a.2.a refers to the coordination between physically connected MS4's. Not the internal departments of an MS4. The section describes coordination activity between municipalities, universities, hospitals, and transportation agencies due to their proximity to another regulated MS4. The language does state; 'when applicable'. MS4's that are adjacent to or that are 'nested' within the political boundaries of another MS4 are still regulated under West Virginia's small MS4 general permit and subject to the terms and conditions of this permit.

Paragraphs b and c describe what the coordination mechanisms should look like. Paragraph d has

been removed.

137.

Part II.C.a.2.b, page 4, states coordination mechanisms by and between MS4 entities shall specify roles and responsibilities of those entities for the control of "pollutants."

Use of the term "pollutant" is improper in this context. The parties would request that the term "pollutant" be struck and replaced with "storm water."

RESPONSE: This language has been modified.

138.

Part II.C.b.1, pages 5-6, regarding implementation of the public education portion of the six minimum controls, is extremely expansive and *requires* the permittee to provide not only "public" outreach and education, but also education and outreach to a wide variety of specific industries and groups, including engineers, contractors, developers, review staff and land use planners.

Such a requirement presents a significant challenge for small MS4s of limited means and staffing and a substantial burden on even larger MS4s in the state. Any such training which goes beyond education of the general public or community homeowners should be encouraged, but not mandated.

Further, the permittee is required to "measure" the understanding and adoption of the targeted behaviors among these "targeted" audiences. See, Part H.C.b. 1 .b. There is no guidance or discussion regarding how a permittee will accomplish or make this measurement. This overly expansive and broad requirement should be removed from the permit.

Finally, a review of USEPA guidance documents and the Phase II Final Rule finds no requirement that individual permittees be required to offer these types of educational courses to the select audiences contained in the permit. The parties request that the permit be amended to state the proposed educational opportunities are guidance to be considered by the permittee.

REPOSE: Public Education and Outreach involves reaching out and educating the public, *which includes businesses and industry*, about their impacts on stormwater. West Virginia municipalities have creatively utilized brochures, newspaper ads, and other methods to reach out to the public in their jurisdictions about stormwater issues.

DWWM believes that educational materials on stormwater do need to target the appropriate audience. For instance, literature targeted to the fast food restaurant businesses would contain information germane to fast food restaurants and the type of activities they engage in that affects the quality of their stormwater discharge. The same brochure would not be appropriate for a homeowner.

DWWM also acknowledges that certain types of business and industry contribute far more pollutants to stormwater runoff than do homeowners and residents not engaged in those

businesses or industries. For example, we've all seen an employee at a fast food restaurant hosing off the parking lot. This parking lot 'waste water' flows untreated into the MS4.

Providing this kind of educational outreach to the specified audience will meet the requirement found in Part II.B.3.d.i. of this permit.

EPA recommends that some of the materials or outreach programs be directed toward targeted groups of commercial, industrial, and institutional entities likely to have significant stormwater impacts. For example, providing information to restaurants on the impact of grease clogging storm drains and to garages on the impact of oil discharges.

Audience specific stormwater outreach materials are widely available on the USEPA's website and the World Wide Web. Much of the existing material can be tailored for use by the MS4. Further, this minimum control measure does not specify that 'educational courses' be offered. However, this is not precluded if the MS4 wishes to develop educational courses.

Operators of regulated MS4s are required to develop a stormwater management plan (SWMP) that includes measurable goals and to implement needed stormwater management controls (BMPs). The process of developing a plan, implementing the plan, and evaluating the plan is a dynamic, iterative process that helps move communities toward achievement of their goals. 40 CFR 122.26(d)(2)(v) and 122.34(g) requires MS4s to assess controls and the effectiveness of their stormwater programs.

Measurable goals are described in the Phase II rule as BMP design objectives or goals that quantify the progress of program implementation and the performance of your BMPs. They are objective markers or milestones that the MS4 and the DWWM will use to track the progress and effectiveness of your BMPs in reducing pollutants to the MEP. For more information on measurable goals and how to evaluate the effectiveness of your BMP's and SWMP see USEPA's guidance document "Measureable Goals Guidance for Phase II Small MS4's" and "Evaluating the Effectiveness of Municipal Stormwater Programs". Both of these documents are available on the USEPA's website.

139.

Part II.C.b.1.a, page 5 states that outreach programs should be designed to prevent the introduction of pollutants to storm water. Consistent with the MEP standard, the parties would request that this term and condition of the permit be modified to state that these programs would attempt to "minimize" pollutant impacts.

RESPONSE: The language has been modified for clarity.

140.

Part II.C.b.2, page 6, states that each permittee shall comply with any applicable State and local public notice requirements.

The parties hereby incorporate those comments set forth above in Comment No. 5 and again request that the term and condition at Part II.B.3 be removed.

RESPONSE: The permit language states; “shall comply with any *applicable* State and local public notice requirements...” Aside from the State NPDES public notice requirements, if there are no applicable local public notice requirements then the MS4 would not be required to take action on this.

141.

Part II.C.b.2.a, page 6, states that the public shall be made part of the "decision making" process. While the parties to these comments agree that public participation in this process is essential to a healthy MS4 program, final decision making authority lies exclusively with the utility. The parties would request that the term "decision making" be removed from the permit.

RESPONSE: The language does not preclude the MS4 from being the final decision making authority. The permit simply states that the public be afforded opportunities to participate in the decision making process. The term will not be removed.

142.

Part II.C.b.2.b, page 6 mandates and makes the permittee responsible for developing a "method of communication" to "groups" such as "environmental groups" located within the watershed to encourage their participation in the process.

This requirement is extremely vague with regard to how the permittee would comply with this requirement. Further, given the general public outreach and participation requirements of the MS4 permit, this requirement is redundant and unnecessary, and should therefore be removed.

RESPONSE: The requirement allows flexibility purposefully to allow the MS4 to choose how they wish to establish communication with outside groups. Methods of communication include written correspondence, phone calls, face to face spoken communication and e-mails.

143.

Part II.C.3.a.i, page 7 requires that all storm water outfalls *shall* be identified and placed upon a storm sewer system map. The parties believe that the permit should be amended to require that all *known major* storm sewer outfalls be placed upon a storm sewer map.

While there is no disagreement that permittees should continue to identify storm water discharge points in an MS4, given the nature of these types of discharges, there is no assurance at any given time that a map contains all actual discharge points. The parties request that this term and condition of the permit be amended consistent with this comment.

RESPONSE: The language has been changed to include “all known” stormwater outfalls. If an outfall is not known by the MS4, it will not appear on their storm sewer system map. However, in the course of updating maps, these outfalls may become known, at this point they are placed on the map.

Furthermore, this provision was required under the previous MS4 general permit. See response to comment #144.

144.

Further, this term of the permit requires that all other storm water conveyances and land uses within the boundaries of the MS4 be further identified. The location of all other conveyances will include an exponentially greater number of facilities than simply outfalls. Further, the permit fails to define in any detail the term "land uses" which makes compliance with this term and condition impractical. Further, the requirement adds a level of complexity to the tasks of West Virginia MS4s not currently required by federal rules or guidance. Each of these requirements vastly exceeds the federal requirements and/or standards, and therefore the parties request that they be removed from the permit.

RESPONSE: DWWM disagrees that these requirements exceed the federal requirements. 40 CFR § 122.34(b)(3)(ii)(A) requires that small MS4's develop a storm sewer map, showing the location of *all outfalls* and the names of and location of all waters of the United States that receive discharges from these outfalls. This section of the Federal rule does not differentiate "major" outfalls with any other size outfall.

All other stormwater conveyances are a part of the regulated MS4. According to 40 CFR 122.26(b)(8), "*municipal separate storm sewer* means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains)." If these conveyances make up the municipal storm sewer system, then they are to be placed on the map. Further, these conveyances convey stormwater pollution to the receiving water body and must be addressed in the IDDE program.

It is well known and accepted that certain types of business and industry affects water quality. And, certain types of business can be more detrimental to water bodies. These include auto fueling stations, vehicle maintenance facilities and other types of businesses that may have hazardous chemicals present. However, this requirement has been changed to be optional.

145.

Part II.C.3.a.ii, page 7, relates directly to Comment No. 20 above. In light of the above comments, the parties assert that this term and condition of the permit should be moot and therefore removed from the permit.

RESPONSE: This language has been modified.

146.

Part II.C.3.a.iii, page 7, the parties request that the term "into" be removed and replaced with the term "within."

RESPONSE: This would change the meaning of the requirement. If an adjacent geographical area is discharging into the MS4, it would be improper to change the word to "within".

147.

Part II.C.3.b. page 7, the parties request that the term "eliminate" be removed and replaced with the term "require the removal of."

RESPONSE: 40 CFR § 122.34(b)(3)(i) requires that MS4s develop, implement and enforce a program to detect and *eliminate* illicit discharges into your small MS4.

148.

Part II.C.3.b.ii, page 7 prohibits the discharge of certain non-storm water related discharges unless certain stated conditions are met. This prohibition is in direct opposition to existing rules and guidance for the Phase II program which in fact specifically authorizes these very same discharges unless they are determined by the permittee to be a significant contributor of pollutants.

As written, the permit is inconsistent with existing federal rules. The parties request that this term and condition of the permit be modified to be consistent with the federal rules and guidance.

REPOSENSE: If the stated conditions are met, these types of discharges are allowed.

149.

Part II.C.3.b.iii and iv, page 7, based upon Comment No. 24 above, the parties request that these terms and conditions of the permit be removed.

RESPONSE: If the discharges are identified as significant sources of pollutants to waters of the State, they shall certainly be prohibited. The permit states in Part II, Section B.1. that; "The permittee must develop a stormwater management program designed to reduce the discharge of pollutants from your small municipal separate storm sewer system to the maximum extent practicable (MEP), to protect water quality, and satisfy the appropriate requirements of the Clean Water Act". The language in Part II.C.3.b.i has been modified to reflect this provision. Prohibiting significant sources of pollutants is especially important if the MS4 discharges into impaired water bodies or water bodies with an established TMDL.

Furthermore, this provision is contained in the previous MS4 general permit.

150.

Part II.C.3.c.ii, page 8 requires that "receiving waters" be prioritized for visual inspection. The parties request that this term and condition of the permit be clarified to define that this term applies only to natural waters such as streams and rivers.

RESPONSE: Receiving water has been defined.

151.

Part II.C.3.c.i-v, pages 8 and 9 contains several mandatory requirements regarding the development and implementation of an illicit discharge detection program. Clearly, the identification and elimination of illicit discharges is an important part of the Phase II Program and is a proper requirement of the permit. Unfortunately, the requirements outlined in this term and condition denies local communities any flexibility in the manner in which the program is developed and implemented. These command and control style requirements are inconsistent with the Phase II Final Rule and guidance that included authority to local communities to make these program decisions based upon available

resources and needs.

USEPA guidance states that any illicit discharge identification and elimination program will be dependent upon a number of factors, including available resources and the size of staff, and therefore, any permit requirement must allow for flexibility to allow for community based needs programs.

USEPA's guidance states that the measures which are **mandated** in the current draft permit should be viewed as **guidance and suggestions** by the USEPA, *not requirements*. The parties request that this term and condition of the permit be modified to acknowledge that the requirements contained in the permit regarding the development and implementation of an illicit discharge program is guidance to be considered by the permittee and not a requirement of the program.

Further, the parties request with regard to these terms and conditions of the permit that, consistent with an individual community/BMP based program, all references to "shall" contained in these sections be removed and replaced by "may" or "should."

RESPONSE: The IDDE requirements contained in the permit are the minimum that DWWM believes, if implemented, will effectively eliminate illicit discharges into the MS4. Identifying and eliminating illicit discharges is critical because these discharges flow *untreated*, into receiving waters. DWWM is obligated to develop permit provisions that will be protective of water quality. In West Virginia all MS4s discharge into *impaired* waterbodies. This should further impel the permittee to pursue the provisions in this section.

Further, Section 402 of the Clean Water Act, [402(p)(3)(B)(iii)] authorizes the State to require more specific or stringent provisions deemed necessary to control pollutants. These requirements are not inconsistent to developing and enforcing a program to detect and eliminate illicit discharges into the MS4. The program is prescriptive because pollutants entering the storm sewer system flow untreated to waters of the State. This is an approach that will reduce the discharge of pollutants from the small municipal separate storm sewer system to the maximum extent practicable (MEP), protect water quality, and satisfy the appropriate requirements of the Clean Water Act.

Rule language is not, and was never intended to be, permit language. DWWM is obligated to develop permit provisions that will be protective of water quality. Permit provisions are meant to be clear and enforceable, and if not would be grounds for the USEPA to disapprove the permit.

152.

Further, regarding sub-section iii, page 9, consistent with the comments below, the parties request that the number of days for implementing an investigation be modified to state that such actions shall be consistent with the time frames contained in the SWMP.

RESPONSE: The number of days for starting an investigation into illicit discharges has been increased to fifteen. However, in some situations where an imminent threat to water quality exists, investigations must be initiated immediately.

153.

Part II.C.3.c.v, page 9 further requires the permittee to provide "technical assistance" for eliminating an illicit discharge and provides further specific time frames and dates pursuant to which certain actions must be taken by the permittee to assure removal of an illicit discharge.

The term "technical assistance" is vague and not defined in the permit. More importantly, this requirement imposes a burden which exceeds the responsibility of the MS4 which should be responsible only for proper investigation of the situation and enforcement of the appropriate provisions of the SWMP. The requirement to provide technical assistance should be removed from the permit.

RESPONSE: The language has been modified.

154.

Further, the parties cannot identify any document or guidance which supports the time frames contained in this term and condition of the permit or whether any review of data or any investigation was made as to the appropriateness of these requirements in West Virginia.

Time frames for the initiation of investigations and removal of discharges are dependent upon the available resources of a community and included in the SWMP. These time frames should not be set forth in the permit and the parties request that the permit be amended to remove these time frame requirements.

RESPONSE: In the guidance manual titled; "Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments", chapter 2: Components of an effective IDDE program, states; "*Effective programs typically respond to citizen reports within 24 hours, acknowledge their help, and send them storm water education materials*". This permit allows a generous fifteen days to investigate a complaint, report or monitoring information that indicates illicit discharges.

Illicit discharges are serious and if *not* investigated in a timely manner will result in lost opportunity to; 1) Determine who is responsible for the illicit discharge, 2) Reduce or eliminate the illicit discharge from entering waters of the State, and, 3) Determine the severity of the illicit discharge. These time frames reflect an appropriate schedule of response to illicit discharges and in some instances the permittee will need to investigate immediately.

155.

Part II.C.3.f, pages 9-10 requires that the permittee provide appropriate training to "municipal field staff with regard to the identification and reporting of illicit discharges. The term "municipal field staff" is vague and not defined in the permit and may include any number of municipal employees. The parties request that this term and condition of the permit be clarified to identify employees required to obtain training or allow for this issue to be agreed to through the drafting of the SWMP.

RESPONSE: Municipal field staff has been defined.

156.

Further, this term and condition of the permit requires that appropriate training for staff begin no later than eighteen months after the effective date of the permit.

As the training requirements will be part of the SWMP which must receive approval from the WVDEP, implementation of this term and condition of the permit should be based upon the date of approval of the SWMP by the WVDEP. The parties request that this term and condition of the permit be amended to require that training as set forth in this term and condition of the permit begin no later than twelve months after approval of the SWMP.

RESPONSE: The language has been modified.

157.

Part II.C.3.f.ii, page 10 requires that the permittee provide IDDE training. To the parties' knowledge such training is not currently available in West Virginia. The mandating of such training, without review of availability and potential costs is unreasonable. The parties request that this term and condition of the permit be removed. Further, the parties would request that the term "all" be removed from the permit and be replaced with appropriate phrasing compatible with Part II.C.3.f.

RESPONSE: The permittee is to *develop* such training for its staff. DWWM recommends that the permittees staff training be crafted based on the IDDE manual developed by the Center for Watershed Protection. However, there may be other training materials available that are appropriate for the local jurisdictions. The requirement does allow MS4s to tailor training to their specific needs. 40 CFR § 122.34(b)(3)(ii)(D) states that the permittee is to inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste. The language in the permit provides for training so that field staff are able to identify and understand procedures for reporting and responding to illicit discharges and connections.

158.

Part II.C.4.a.i, page 11 requires that BMPs implemented therein be consistent with those contained in West Virginia's Erosion and Sediment Control Best Management Practices Manual. To the knowledge of the parties, the manual referenced in the permit is not published in final form and is not readily available in hard copy. Further, the parties believe that the reference contained therein to Appendix F is incorrect and should be removed and replaced with the term "Appendix E."

Mandating that BMPs be consistent with the manual without it being readily and generally available is unreasonable. The parties request that this term and condition of the permit be removed.

RESPONSE: The language has been modified to reflect the correct appendix. West Virginia's Erosion and Sediment Control manual is readily available on WVDEP's website. The manual is 'published' on the website and will remain there so that it can be easily updated and modified. Most States and local jurisdictions post their stormwater manuals online and leave it to interested parties to download and print out sections they need.

Furthermore, the BMP's contained in West Virginia's online manual are complete and accurate for the State of West Virginia. DWWM believes that utilizing the BMP's contained therein for construction sites is not unreasonable.

159.

Part II.C.4.a.ii, page 10 requires that local requirements related to controlling construction site run-off be as stringent as other "DWWM/NPDES" permits. This language is unnecessarily broad and the parties request that the term and condition of the permit be modified to require that local requirements be consistent with the requirements of the permit.

RESPONSE: This language allows the MS4 the *flexibility* to establish more stringent controls over construction stormwater if they choose. It is not required that the MS4 be more stringent, but does require equal protection as DWWM/NPDES permits. In no instance would the MS4 construction stormwater program be less stringent than the State program.

160.

Part II.C.4.a.vi, page 11 requires the "establishment of authority for receipt and consideration of information submitted by the public."

The parties do not understand the meaning or basis of the requirement and would request that this term and condition of the permit be clarified or removed.

RESPONSE: 40 CFR § 122.34(b)(4)(ii)(E) requires procedures for receipt and consideration of information submitted by the public. Further, this requirement is contained in the previous MS4 general permit. This measure allows the public to submit comments or information about a construction project that may affect them. To clarify this section, the language has been modified.

161.

Part II.C.4.b and Part II.C.5 of the permit requires that all "public" facilities be subject to potential inspection and enforcement by the permittee.

The term "public facility" is not defined by the permit and vague. As the WVDEP is aware, there is occasional resistance from county, state and federal facilities in regards to compliance with local municipal storm water ordinances.

Prior to placing this onus upon the permittee, the parties request that WVDEP pursue discussions with third party governmental entities to discuss these inspection and enforcement issues. Absent these discussions and agreement amongst all the parties, the parties request that this term and condition of the permit be removed.

RESPONSE: The language has been modified for clarity. Both private and public sector construction sites are subject to this permit condition. Public sector sites also include those owned and/or operated by the municipality.

162.

Part II.C.4, page 11 discusses construction and post-construction site run-off. The parties

note that the terms and conditions contained in the permit are substantially more stringent than those found in the WVDEP's General Permit for Construction activities. For purposes of fairness and consistency, the parties request that the terms and conditions contained in the permit be equivalent to and no more stringent than those found within the West Virginia General Permit for Construction activities. By creating starkly different and more stringent permit requirements for MS4 permittees than the rest of the state on the same particular issues (construction site runoff and post development storm water management), the agency is not providing a consistent, equal playing field for environmental regulation for municipalities and property owners/taxpayers within these communities. Such approaches are not holistic and the atmosphere this policy will create will place additional burdens upon economic development efforts and commerce within MS4s that can easily be skirted by developing outside of MS4 limits. The consequences of such a policy will be economic harm to the interests of Municipalities and their MS4s and will unintentionally promote urban sprawl. The agency should have equivalent terms and conditions within the two permit programs and allow the local MS4s to determine if more stringent requirements are necessary based on local needs and objectives as is set forth in the Phase II rules.

RESPONSE: Part II.C.4 contains the requirements for controlling runoff from construction sites, it does not include post construction requirements.

DWWM disagrees that the requirements contained in this MS4 general permit for construction site runoff is substantially more stringent than the terms and conditions found in WVDEP's Construction Stormwater (CSW) General Permit. Most of the requirements for construction site operators under the MS4 program are generally the same as what is required in the CSW general permit. However, the MS4 general permit does contain programmatic elements for implementing a program that exercises control over construction sites that are located within the jurisdiction of an MS4. In this regard, the MS4 general permit does differ from the CSW general permit, as it should because the MS4 is the regulating entity.

The MS4 requirements for construction site operators under Part II.C.b.4 are found in the Federal Rule at 40 CFR § 122.34(b)(4)(ii).

163.

Part II.C.4.b, page 11 requires construction site run-off programs be developed and implemented by the permittee within two years of issuance of the permit. The time frame contained herein is unreasonable for those smaller MS4 communities with limited resources. The parties would recommend that the time for compliance with this term and condition of the permit be modified to require development and implementation of the program within four years of the effective date of the permit.

RESPONSE: Development and implementation of construction stormwater runoff control is required under the prior MS4 permit. MS4's are to already be implementing construction site runoff programs. To avoid backsliding, according to 40 CFR § 122.44(l), the standards and conditions in reissued permits must be at least as stringent as the standards and conditions in the previous permit. All regulated MS4s in the State have had six years to establish their stormwater programs. The previous permit is very clear in the language stating that; "You must fully implement your program within five years of the effective date of this permit", (Part II.A).

The language in the permit has been modified to reflect the provision in 40 CFR § 122.44(l)

164.

Part II.C.4.b.ii, page 11 states that the MS4 program shall include a procedure for routine inspections of "all known permitted" sites. The term "all known" is unnecessary given that permitted sites are those which would be known to the permittee. The parties request that the term be modified to remove "all known."

RESPONSE: The language has been modified.

165.

Part II.C.5. pages 12 through 18 discuss long-term storm water goals and contain a series of mandates requiring the implementation of "water shed protection elements" and "Site and Neighborhood Design" standards. The requirements set forth in this term and condition of the permit goes well beyond any requirement contained in the Phase II Final Rule. Implementation of these command and control style requirements is in direct opposition to a program previously based upon the implementation of BMPs and the MEP standard. Further, the parties see no basis in any of the Phase II rules which support these standards and requirements.

In addition, the parties see this requirement as programmatic overreaching. While desirable, these requirements are well beyond the abilities of most start-up MS4 management programs. Doing too much too soon is a sure recipe for frustration and failure and the parties request that they be removed from the permit.

RESPONSE: Phase II rule provisions are only meant to provide a framework on which permit writers build more specific permit conditions. Rule language is not, and was never intended to be, permit language. Permit writers are obligated to develop permit provisions that will be protective of water quality. Permit provisions are supposed to be clear and enforceable, and if not would be grounds for USEPA to disapprove the permit.

The stormwater program is very specifically intended to be an iterative program, with the bar being continuously raised until such time as all water quality standards/designated uses are met in receiving waters.

MS4s in West Virginia have had six years to implement their programs. DWWM believes that the MS4 permit requirements do not require anything more, they do require that the things that are already required to be underway, be improved. MS4s are already obligated to adopt standards for new and redevelopment, and programs (including plan review, inspections, O&M, etc.) to ensure that those standards are adhered to.

This proposed MS4 permit stipulates a standard and requirements for the program, which should level the playing field in municipalities across the state and in some ways, make it easier for developers to comply. The incentives for development types and the payment in lieu provisions are optional; MS4s may choose not to use them.

As documented in the fact sheet that accompanied the proposed permit, there are volumes of scientific justification for the proposed provisions. The MS4 permit provisions can be linked directly to what we know about the causes and solutions of water quality degradation.

The watershed elements section is very flexible and leaves specific goals, objectives, standards, policies, etc. entirely up to the MS4. It only requires communities to consider several specific issues in the context of larger community planning in order to ensure that they don't end up with municipal policies that are contradictory with each other.

DWWM understands that that the new provisions, just like in any other type of permit, will be a short-term challenge for communities. DWWM plans to provide technical training and assistance throughout this permit cycle. And, there are certainly many other training opportunities available throughout the U.S. Technical assistance can also be found in the guidance documents and manuals mentioned in the fact sheet, available on WVDEPs and USEPAs website.

166.

Part II.C.5 should be considered guidance and the term "must" should be removed and replaced with the term "should." Further, the final sentence contained in this section is broad and vague and should be removed from the permit.

RESPONSE: Part II.C.5 contain the provisions for one of the six minimum control measures. This minimum control measure is contained in the previous MS4 general permit. According to 40 CFR § 122.44(l) new permits cannot be less stringent than current permits.

Furthermore, terms such as “should” and “may” are not enforceable. DWWM is obligated to develop permit provisions that will be protective of water quality. Permit provisions are meant to be clear and enforceable, and if not would be grounds for the USEPA to disapprove the permit.

167.

Part II.C.5.a contains several mandates. Consistent with the community/BMP based origins of the permit, the parties request that the term "shall" contained in the permit be replaced with "may" properly indicating that the language contained in the permit should be used as guidance.

RESPONSE: The goal of the Clean Water Act is to protect the physical, chemical and biological integrity of receiving waters, and their designated uses. DWWM believes this language is consistent with goal of the MS4 general permit. Permits must be enforceable, words like ‘may’ and ‘should’ are not consistent with enforceable permits.

168.

Part II.C.5.a.i - Please see Comment 37. Further, this permit term and condition fails to explicitly recognize that some MS4 agencies are sub-departments of a larger entity and lack the jurisdictional authority to enact the ordinances and planning documents suggested. This section is therefore overly broad and must be modified to recognize these limitations.

RESPONSE: Registration under this permit to discharge stormwater is appropriately issued to

the municipality or governing body of an MS4. It is the municipality that owns the municipal separate storm sewer system. In most cases in West Virginia, the permittee is the City or the County. This permit is not, nor was ever intended to be issued to a 'sub' department of a municipality. All departments of a municipality fall under the 'governing umbrella' of its City Council. And, this permit covers the entire municipal separate storm sewer *system*, not just select portions.

Public Works and Utility Boards are created, appointed and function on behalf of the City Council, which represent the citizens that live in that municipality. City Councils enact Ordinances that its departments implement and enforce. This permit cannot be adequately implemented without all the appropriate departments of the regulated MS4 working together. Doing so would make it impossible to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP), to protect water quality, and satisfy the appropriate requirements of the Clean Water Act.

Because the creation of impervious surfaces and the generation of runoff pollutants are created by activities and decisions at the site scale, neighborhood scale, and watershed or regional scale, this permit sets up a framework to consider pivotal activities at multiple scales. A program to implement site level controls for new and redevelopment *are* an evolution of activities required under the prior MS4 permit and cannot be implemented by one sub department of a municipality.

169.

Part II.C.5.a.i (A) (5), page 13 states that permittees should avoid development in areas susceptible to erosion and sediment loss. This requirement is overly broad and vague. The parties would request that the term "avoid" be replaced with ""seek to minimize."

RESPONSE: This element has been eliminated.

170.

Part II.C.5.a.i (A) (6), page 13 states that the permittee is to implement "standards" to protect trees and other vegetation important to evapotranspiration. This requirement is extremely vague and should be deleted entirely.

RESPONSE: This allows flexibility in how the MS4 would like to implement tree protection standards. Standards could include inclusion in an ordinance, a policy, or as an incentive for developers.

171.

Part II.C.5.a.i (A) (4) and (8), page 13 requires that the permittee develop and implement policies to "prevent disturbances of natural water bodies and natural drainage systems" and further implement water conservation policies.

This term and condition is vague and/or beyond the jurisdiction of this permit and should be removed from the permit. The terms disturbances, natural water bodies and natural drainage systems are undefined terms. Neither the permit nor any guidance document provides guidance regarding implementation of this requirement.

RESPONSE: "Waters" has been defined. The language has been modified.

172.

Further, while water conservation is an admirable goal, this permit was never meant to be a vehicle to require permittees to assure the implementation of water conservation measures. Inclusion of this term and condition of the permit is improper and it should be removed.

RESPONSE: DWWM has decided to remove this requirement. Reusing stormwater in an effort to reduce runoff volumes will, in some instances, have the effect of water conservation.

173.

Part II.C.5.a.ii.A. pages 13-15 requires and mandates that ordinances be passed to require the capture without discharge of the first one inch of rainfall in a twenty four hour period from new development, the treatment of and/or collection and hauling of storm water, and implementation of a mitigation program.

These terms and conditions of the permit once again go well beyond any requirements found in the Phase II Final Rule and represent an attempt to mandate program terms and conditions which is again in opposition to the manner in which the MS4 program has been developed.

RESPONSE: The previous permit required that the post construction program *ensure that controls are in place that will increase groundwater recharge of stormwater runoff, where and when possible*. Increasing groundwater recharge is accomplished by infiltration. Permittees are to already have a program in place that *will* infiltrate stormwater! This permit actually provides additional methods and alternatives to infiltration than the previous permit.

A program to implement site level controls for new and redevelopment *are* an evolution of activities required under the prior MS4 permit. See response to comment # 165.

174.

Further, there is no record indicating that any investigation has been made to determine what the potential costs would be to implement this requirement and whether there has been any proven technologies implemented in West Virginia which have been shown effective to achieve this requirement. Moreover, there is no evidence that this requirement is even achieved (or achievable) with land in a natural state.

Also, the permit mandates that the permittee "ensure" compliance with water quality standards. The stated program standard to be achieved is MEP. Therefore, any term or condition of the permit should state that compliance will be achieved to the maximum extent possible.

RESPONSE: The case studies presented in "Reducing Stormwater Costs through Low Impact Development (LID) Strategies and Practices" report show that LID runoff reduction practices can be both fiscally and environmentally beneficial to communities. Site-specific factors influence project outcomes, but in general, for projects where open space was preserved and cluster development designs were employed, infrastructure costs were lower. In most cases, significant savings were realized due to reduced costs for site grading and preparation, stormwater

infrastructure, site paving, and landscaping. Total capital cost savings ranged from 15 to 80 percent when LID methods were used, with a few exceptions in which LID project costs were higher than conventional stormwater management costs. This report can be found at this website: <http://www.epa.gov/owow/nps/lid/costs07/>

Current research is showing some exciting and tremendous triple bottom line (Financial, Ecological and Social) benefits to this type of development. Not only are runoff reduction practices more cost efficient, they yield better environmental and social benefits. As more and more municipalities across the nation implement these practices, realize the cost savings and benefits, we will wonder why we ever managed stormwater any other way.

Furthermore, West Virginia is not so unique in soils, climate or topography that these requirements are automatically deemed unworkable. There are thousands of sites across the country where these technologies are working and will work in West Virginia. It may mean some adjustments, and this adjustment period is allowed, as the permit allows four years to develop and implement this program.

It is unclear what the commenter meant by 'this requirement is not achievable with land in a natural state'. Land in a natural state, (undeveloped) is nature's way to manage stormwater runoff. Capturing the first one inch is based on the premise that a natural approach to stormwater management is best. In forests and other natural areas, most rainfall percolates through the soil, is absorbed by forest duff, vegetation, and/or evaporates to the atmosphere. This requirement is a means of enabling developed areas to simulate nature to preserve predevelopment flow conditions and reduce the volume of stormwater runoff.

Under natural conditions approximately 10% of the volume of precipitation falling to earth runs off to surface waters via surface/overland flow. Nearly all of the remaining amount of stormwater infiltrates, or is intercepted or taken up by plants. Nature's elegant system can be successfully adapted in developed and developing watersheds to protect receiving waters from both pollutants and altered hydrology.

This permit proposes a simple performance standard to approximate 10% discharge, with most of the remainder handled on-site. Analysis of precipitation data for West Virginia indicates that 90% of the 24 hour (or less) rainfall events are one inch or less. Therefore stormwater management systems, or BMPs designed to manage one inch of rain will reasonably mimic the natural hydrologic process.

The prior permit and this permit clearly state that the SWMP must reduce the discharge of pollutants from your small municipal separate storm sewer system to the maximum extent practicable (MEP), protect water quality, and satisfy the appropriate requirements of the Clean Water Act.

175.

As written, and given the nature of storm water and the use of BMPs, the permit will almost assuredly require entities to capture and provide treatment to storm water possibly through a wastewater treatment facility. It was never the intent of the storm water program at a state or federal level to require the capture, transmission to treatment and/or treatment of storm water.

RESPONSE: It is not the intent that any municipality or entity to capture and treat stormwater at a wastewater facility. In fact, implementation of these runoff reduction requirements will cause CSO communities to treat *less* stormwater at their wastewater treatment plants!

The permit does include several additional water quality requirements, *as applicable*, that the permittee should implement via enforceable requirements within their jurisdiction. For activities/operations with demonstrable potential for pollutant loadings (now defined as stormwater hot spots), water quality treatment for pollutants of concern must be provided if infiltration measures are to be used. Activities such as automobile service stations, lawn care operations/greenhouses/nurseries that handle fertilizers and pesticides and operations that handle chemicals are all activities with demonstrable potential for pollutant loading.

If an activity/operation cannot implement adequate preventive or treatment measures to ensure compliance with groundwater and/or surface water quality standards, *then* stormwater must be properly treated via an NPDES-permitted facility or licensed waste hauler. These requirements are an evolution of what was required in the prior MS4 general permit.

176.

Finally, the mitigation program contained within this term and condition of the permit seemingly contain arbitrary requirements that only 0.4 inches of the original one inch rain fall obligation may be mitigated and then places a further burden upon the permittee to create an inventory of appropriate mitigation projects and develop standards and management systems to value and evaluate mitigation transactions. These types of mandates again are wholly unrealistic given the size and resources of MS4s in West Virginia.

While the suggestions contained in the permit are useful potential guidance, they should not be mandated by the WVDEP. The level of complexity alone, much less lack of underlying legal authority, brings into question the propriety of these requirements. The parties would request that these terms and conditions of the permit be removed or corrected and modified to emphasize that they are guidance to be considered by the permittee in the development of its SWMP.

RESPONSE: These alternatives are available as an alternative to sites where the one inch capture rain fall is infeasible. These are offered as additional options for the permittee. The amount of mitigated runoff has been changed for consistency with the fact sheet.

177.

Part II.C.5.a.ii.A.1, page 14 references a "24 hour storm" event. The parties assert that use of a "one year (return frequency) 24 hour storm" event would be more applicable. Consistent with the MEP standard, the parties request that certain portions of this term and condition of the permit be removed, including that storm water "must be 100% managed with no discharge to surface waters." Rather, consistent with the standards contained in the permit, the parties request that the language be replaced with "should be controlled to the maximum extent practicable." Finally, the parties would request that the term "required" be replaced with "issued".

RESPONSE: The term is meant to be the first one inch of rainfall. The management requirement will remain, however the language has been modified for clarity. See response to comment #88.

178.

Part II.C.5.a.ii.A.2.i and ii, page 14 includes terms and conditions that are overly broad and inconsistent with the MEP standard contained in the permit. The parties would request that these terms and conditions of the permit be removed.

RESPONSE: This language has been clarified and the term; "hot spot" defined. Activities such as automobile service stations, lawn care operations/greenhouses/nurseries that handle fertilizers and pesticides and operations that handle chemicals are all activities with demonstrable potential for pollutant loading. These types of pollutants can cause much harm to aquatic life if allowed to discharge into receiving streams. Keep in mind, that these requirements do not mean that the MS4 has to go back and implement these standards to existing businesses, but rather to new and redevelopment that meets the criteria in Part II.B.5.

179.

Part II.C.5.a.ii.A.2.iii, page 14 - delete "policies and plans" and replace with "requirements".

RESPONSE: The language has been modified.

180.

Part II.C.5.a.ii.A.4, pages 14-15 is arbitrary and excessively restrictive and should be removed. If modified, this section should simply authorize the permittee to adopt mitigation and payment in lieu of rules.

RESPONSE: Mitigation and payment in-lieu are offered as alternatives to sites where runoff reduction practices are infeasible. These are offered as additional options for the permittee. The purpose of these provisions is to disincentivize the use of alternatives unless really needed, but also to provide a financial foundation for implementation of public stormwater management projects, including retrofits where those needs have been identified. There should be very few sites where runoff reduction practices are infeasible. See response to comment # 23.

181.

Part II.C.5.a.ii.A.5, page 15 requires that evapotranspiration measures be included in project design. This is again overly burdensome. The parties would request that the permittee "consider" such measures.

RESPONSE: The language has been modified for clarity and to include most of the runoff reduction practices. Not all techniques are required to be included in the design of public streets and parking lots, but the permit allows flexibility to choose one or a combination of several techniques that are appropriate.

182.

Part II.C.5.a.ii.C, page 15 of the permit should be clarified to state that its requirements apply only to projects begun after the effective date of the renewed permit.

RESPONSE: The language has been modified.

183.

Part II.C.5.a.ii.D, page 16 requires that the permittee develop a system to inventory and track management practices within 180 days of the issuance of the permit. This term and condition of the permit presents a substantial challenge to small MS4s in West Virginia.

The parties request that this term and condition of the permit be amended to require development of such a tracking system within one year of the effective date of the permit.

RESPONSE: The language specifying a time limit has been removed.

184.

Part II.C.5.a.ii.E.1, page 17 requires the permittee to inspect at least 20% of storm water management facilities annually. This term and condition of the permit should first be clarified to incorporate inspection of "known" structures. Further, the arbitrary requirement to inspect 20% of all facilities may not be manageable for MS4s which is why the permit has emphasized flexibility in the program.

The parties request that this term and condition of the permit be amended to require that the permittee develop an inspection calendar which would be subject to approval by the WVDEP and inclusion in the SWMP. Such a condition would maintain program flexibility and ensure the WVDEP input in assuring inspections.

RESPONSE: The language has been modified.

185.

Part II.C.5.a.ii.E.3, page 17 sets forth specific dates and timelines regarding enforcement issues. In order to maintain flexibility, and consistent with the initial MS4 permit, the parties request that all portions of this term and condition of the permit following the first sentence be removed and replaced with, "The permittee shall follow its enforcement response plan to ensure that management practices are maintained."

RESPONSE: This language has been modified.

186.

Part II.C.5.a.ii.F (5), page 17 requires that the permittee summarize "the number [of entities] brought into compliance within the stipulated timeframe." The parties would request that this portion of this permit term and condition be removed from the permit consistent with Comment No. 37.p.

RESPONSE: This language has been modified.

187.

Part II.C.5.b.1, page 18 of the permit is over-reaching and overly-broad and fails to recognize that some MS4 agencies are sub-departments of a larger municipal entity and lack the jurisdictional authority to enact the assessments and changes suggested. The parties would request that this term and condition of the permit be removed.

RESPONSE: The Pollution Prevention/Good Housekeeping for municipal operations minimum control measure is a key element of the small MS4 stormwater management program. This measure requires the MS4 operator to examine and subsequently alter their own actions to help ensure a reduction in the amount and type of pollution that enters stormwater from their own operations. This minimum control measure is applicable to the entire municipality and not just a sub department.

It would be impossible to carry out the goals and objectives of this permit without communication between departments within an MS4. For at least two of the six minimum control measures, communication is especially critical to the success. If a stormwater department within a municipality is not communicating with the street department, building/zoning department and/or the folks at the city garage, then the Good Housekeeping for municipal operations MCM or the Post Construction MCM cannot be effective.

188.

Part II.C.6.a.i, page 18 of the permit relates to the development of maintenance standards. The parties would request that the term "help" be inserted before the term "protect."

RESPONSE: The language has been modified.

189.

Part II.C.6.a.ii, page 18 mandates the development of an inspection regimen to review maintenance at storm water facilities in the MS4 jurisdiction. Further, the permit mandates that these inspections be performed on a yearly basis.

Inspections of all facilities on a yearly basis present a substantial burden upon small MS4s in West Virginia. The parties request that this term and condition be modified to require that facilities included in the SWMP be subject to inspection during the permit cycle and set forth in an inspection schedule in the SWMP.

RESPONSE: Keep in mind this section pertains to the permittee owned facilities. These include municipal vehicle maintenance garage, parks, wastewater treatment facilities, salt and chemical storage facilities and other municipally owned facilities.

The language has been modified to remove the term "stormwater management facility". Inspections of stormwater management facilities (BMPs) are required under the provisions in the Post Construction Minimum Control measure. Part II.C.5.

Inspecting municipally owned facilities is a critical component of the pollution prevention at municipal facilities. These types of facilities are found to be significant sources of pollution to the MS4.

190.

Part II.C.6.c.i, page 19 mandates follow-up training within six months of initial training of permittee employees. Follow-on training should be performed at a frequency consistent with the overall permittee training program as contained in the SWMP. At most, the parties request that the terms and conditions of the permit be amended to require annual training.

RESPONSE: The language has been modified.

191.

Part II.C.6.d, pages 19 - 20 of the permit discusses sampling of storm water. The permit is vague and the parties request that the sampling location described therein be clarified (at one representative outfall). Further, the parties request that in the last sentence of this section the term "of at least 0.5 inches has begun" be removed and replaced with "where and when practicable."

RESPONSE: Part II.C.6.d does not use the word "one representative outfall". This word is used in Part IV. This section covers the requirements for sampling at municipally owned industrial facilities such as maintenance garages, wastewater treatment facilities, and other facilities with a Standard Industrial Code (SIC) that are owned or operated by the permittee. See response to comment #107.

192.

Part III.B, page 20 of the permit contains terms and conditions inconsistent with the concept of community based flexible/BMP based programs. The parties request that the term "all" be removed and replaced with "a sufficient number of and further insert "reasonably pursue the goal to" between "to" and "prevent."

RESPONSE: Discharge compliance with water quality standards is required by the Clean Water Act.

193.

Part III.D.1 and D.2, page 21, first sentence, is an incorrect application of the law as the permit authorizes discharges from MS4s generally to waters of the state and requires implementation of BMPs to control pollutants to the maximum extent practicable. The parties request that term and condition of the permit be modified and the sentence be removed from the permit.

RESPONSE: The DWWM believes the sentence in question is appropriate for NPDES permits, based on the provisions in 40 CFR § 122.44.

The Clean Water Act in Sections 301(b)(1)(C) and 402(p)(3)(B) include provisions that all permits for MS4s must include any requirements necessary to achieve water quality standards.

Where waterbodies are already impaired, increased discharges of the pollutant of concern would have a *reasonable* potential to cause or contribute to the impairment. Therefore, the permittee must demonstrate that there will be no increase of the pollutants of concern contributing to the impairment.

194.

Further, this term and condition of the permit requires that the permittee must ensure that any discharge from the MS4 must not contribute to a pollutant of concern if it is discharging to an impaired stream. Even through the implementation of effective BMPs, the variability of storm water loadings, particularly with regards to certain pollutants such

as sediment or bacteria, prevents making such absolute guarantees and if required would necessarily preclude new development or re-development.

RESPONSE: The Clean Water Act in Sections 301(b)(1)(C) and 402(p)(3)(B) include provisions that all permits for MS4s must include any requirements necessary to achieve water quality standards. Where waterbodies are already impaired, increased discharges of the pollutant of concern would have a *reasonable* potential to cause or contribute to the impairment. Therefore, the permittee must demonstrate that there will be no increase of the pollutants of concern.

NPDES permittees cannot contribute pollutants of concern to impaired waterbodies.

Further, implementing stormwater runoff reduction practices designed to capture and manage on site the first one inch of rainfall, there would be no increased discharges of the pollutant of concern. And, in the case where the MS4 has a wasteload allocation, the wasteload allocation would surely be met for all but the most extreme storms, at least 90% of the time in WV, and would be one of the *few* approaches to stormwater management that could *demonstrate* that there will be no increase of pollutants of concern. And instead of necessarily precluding development, this kind of stormwater management would be the only way development *could* occur.

195.

The parties request that the terms and conditions of the permit be modified and state that, once a TMDL is approved, a permittee must modify its SWMP to include BMPs specifically targeted toward the goal of achieving compliance with the waste load allocations contained in the TMDL to the maximum extent practicable. Such language would be consistent with the stated preface of the storm water program and the stated standards to be achieved by the permit. Moreover, this treatment is consistent with TMDL treatment of other non-point source contributors.

Similarly, for MS4 discharges into a stream with an already approved TMDL for control of pollutants which may emanate from the MS4 storm water discharge, the parties request that the term and condition of the permit be modified to state that the permittee must develop BMPs specifically targeted toward the goal of achieving compliance with the TMDL to the maximum extent practicable. Again, this treatment is consistent with other non-point source contributors to a TMDL stream.

RESPONSE: A regulated MS4 is not considered a non-point source contributor. MS4s are considered a point sources and wasteload allocations from NPDES regulated entities are a requirement *in* the TMDL. The MS4 must review the applicable TMDL to see if it includes requirements for control of stormwater discharges. If so, the MS4 must modify its SWMP to include BMPs specifically targeted to achieve the wasteload allocation.

The wasteload allocation for waters with an approved TMDL is a specific water quality requirement, and is applicable in addition to the MEP standard.

196.

Part III.E, page 21 requires consultation with the United States Fish and Wildlife Service if a permittee discharges to a water where a federally endangered species or its habitat is present. This consultation is not required by any law or regulation and is wholly

inconsistent with any requirement in the rules and regulations governing discharges to waters of the State. This requirement would result in the needless consumption of limited resources for consultations not required by any rule or regulation.
The parties request that this term and condition of the permit be removed.

RESPONSE: This is required in the prior MS4 general permit and is standard language for all NPDES permits.

197.

Part IV.A, page 21. See, Comment No. 43 above. The parties request that the term "all" be removed and replaced with "a sufficient number of."

RESPONSE: Language has been modified.

198.

Part IV..B, page 22 contains a sentence fragment below the parameter table regarding total load basis. The parties would request that this sentence be removed from the term and condition of the permit.

RESPONSE: This sentence has been removed.

199.

Part IV.B, page 22 contains conflicting statements. For purposes of clarification, the parties request that the following sentence be removed, "Effluent monitoring for the above pollutants shall be conducted using the most sensitive methods and detection levels commercially available and economically feasible." Further, that the following sentence be amended to state, "The methods and detection levels in the table above are recommended to be used unless the permittee desires to use an EPA Approved Method with a detection level equal to or lower than those specified above."

RESPONSE: This language has been modified.

200.

Part IV.B, page 22. The parties would request that the permit be modified by inserting, "onset, where and when practicable," after "fifty minutes after rainfall."

RESPONSE: DWWM believes the timing of stormwater sampling is critical for assessing what is contained in the MS4s stormwater runoff. See response to comment #107.

201.

Part IV.C, page 22 states that the permittee shall be required to keep records to three years after termination of this general permit. Federal and state law only requires that records be retained for three years. The parties would request that the permit be modified consistent with this comment.

RESPONSE: This is required under the prior MS4 general permit. While one year of the record retention cycle will be eight years, the records generated during the last year of the permit cycle will only be retained for three years. This requirement will not change.

202.

Part IV.D, page 23. The parties would request that this term and condition of the permit be modified appropriately in accordance with the cumulative effect of all comments above.

RESPONSE: Annual reporting is required so that effectiveness and compliance with the stormwater management program can be ascertained.

203.

Page 24. Paragraph two above the Director's signature line (begins with "Failure to comply..." should be modified appropriately so that it applies only to the current, most recently approved SWMP as the draft permit imprecisely refers to "previous" submissions.

RESPONSE: Language has been modified.

204.

Appendix B, page 26. The definition for "hydromodification" should be struck as the term does not appear in the permit.

RESPONSE: The term appears in the watershed protection elements of Part II.C.5.i.A.

205.

Appendix C, pages 27-31 should be removed from the permit as the blanket application of WWTP language is inappropriate. Any term and conditions contained herein should be based upon standard conditions developed specifically for storm water.

RESPONSE: This language is required in all NPDES permits.

206.

The permit is obviously the work of well-intentioned and aggressive authors. However, as written, it is incompatible with the framework contained in the Phase II Final Storm water rules for small MS4s. The permit contains a command and control, one-size fits all, approach to the storm water program. It consistently mandates the implementation of specific control devices and standards which are in direct contradiction to the BMP/MEP approach contained in the Phase II Final Rule.

RESPONSE: DWWM believes the draft MS4 general permit is very compatible with the framework of the Phase II stormwater rules and the guidance, information and materials that the USEPA has been developing and publishing for the last ten years. The stormwater program is very specifically intended to be an iterative program, with the bar being continuously raised until such time as all water quality standards/designated uses are met in receiving waters.

DWWM believes that the proposed MS4 permit is a solid, clear, and enforceable permit that, if implemented will make a positive change in water quality of our urban waterways.

DWWM believes that the MS4 permit requirements do not require anything more, they do require that the things that are already required to be underway, be improved. MS4s are already

obligated to adopt standards for new and redevelopment, and programs (including plan review, inspections, O&M, etc.) to ensure that those standards are adhered to.

Furthermore, many of the requirements are simply stating a goal to achieve (performance standard). The permit allows flexibility in how to reach that goal.

Furthermore, the MEP standard will, over time, rise with technologies, information and understanding about stormwater and the impacts that land use and humans have on water quality.

207.

While the parties do not necessarily object to all of the concepts contained in the permit, they do object to the mandatory nature of the requirements. The concepts contained in the permit should be referred to as suggestions and guidance to be considered by the individual permittees based upon individual permittee circumstances which may differ as a result of available resources and costs.

The draft permit should be withdrawn for reconsideration to once again establish a flexible regulatory regime that allows individual permit holders to mold and implement the MS4 program in a fashion best suited for their community. The comments enumerated above show conclusively that the current draft is so thoroughly flawed that it is beyond repair. Withdrawal of the draft permit and implementation of a stakeholder group will allow for creation of an improved permit that will better serve the storm water environment and all parties involved.

RESPONSE: DWWM believes the proposed MS4 general permit is protective of water quality and meets the goals of the Clean Water Act. DWWM believes that suggestions and guidance do not make for an enforceable permit. Suggestions and guidance are meaningless when they are not implemented.

DWWM believes the proposed MS4 general permit is a significant improvement over the previous permit and is a strong, doable and enforceable permit that, if implemented will make a positive change in our urban water quality.

208.

Comment: Before listing detailed comments. Beckley and Morgantown have two fundamental and universal comments regarding this draft permit: First, it is essential that the MS4 program include regulatory flexibility that will allow the regulated entities to address and adjust for local conditions. Local prerogative must be allowed to accommodate the wide variety of water and soil conditions throughout our state, as well as the wide spectrum of economic growth patterns and resources within our communities.

RESPONSE: DWWM acknowledges that this MS4 general permit is more prescriptive in many aspects. Many of West Virginia's MS4s did not understand how to implement the minimum control measures, there wasn't much framework to develop a stormwater management program.

However, DWWM believes that there is a great deal of flexibility in this permit. Especially in the post construction minimum control measure. The one inch runoff reduction is a performance standard that can be achieved by various practices.

209.

Second, the Agency must exert greater effort, and afford additional assistance, regarding the many West Virginia communities that have not yet achieved compliance with the initial MS4 permit. The iterative and increasingly demanding regulatory approach applied in this permit renewal is in theory, appropriate. However, we believe that state and local resources would be better devoted to ensuring full compliance with the basic requirements of the initial MS4 permit prior to progressing to the tasks included in this draft. A sound foundation is indispensable before we may successfully continue with new and increasingly demanding requirements. Unfortunately, the permit now proposed by the agency ignores significant compliance shortcomings in many MS4 communities and, with this significantly more demanding permit, places these communities even further from achieving success in their MS4 programs and at greater risk of sanction under the Clean Water Act. While it is axiomatic that the MS4 communities are responsible for compliance, the agency has failed in its oversight duties to facilitate and enforce compliance with the initial permit.

RESPONSE: It is unfortunate that some regulated MS4 communities made a decision to not comply with the terms and conditions of the previous permit. DWWM granted the first MS4 permit cycle as a time for regulated municipalities to get programs implemented without worry of enforcement actions by the Agency. Unfortunately, those MS4 communities who chose to do nothing will now be in noncompliance of this MS4 permit. As a result, they are subject to enforcement action by the Agency or the USEPA.

Editor's remark - Comments #210 through #239 have the original edit/comment embedded in the permit language. The commenter's additions and struck text to the original permit language appears in blue. The commenter's comments appear in black. DWWM responses will appear after the comments.

210.

Part II.A-Page3

Within six months of the effective date of this permit, *or at a later time as proposed in writing by the permittee and approved by DWWM*, all operators of regulated small MS4s shall submit a stormwater management program (SWMP) to the DWWM....

Comment: Because meaningful public participation is required and desirable in the development of a SWMP the six month deadline may be unreasonably short to allow for such a process. Moreover, some MS4s will require third party consultant assistance in the development of the management plan. Such assistance may not be readily or conveniently available to meet this inflexible deadline. Accordingly, the parties suggest that the agency allow for additional time when reasonably requested by the MS4.

RESPONSE: In most MS4s the framework of the prior SWMP that already exists under the previous permit should provide a foundation for the new SWMP. MS4s that can demonstrate their need for additional time to prepare and submit a SWMP may request an extension.

211.

Part II.B.8 - Page 4

If the permittees small MS4 discharges into waters listed on the Clean Water Act Section 303(d) list of impaired waters or waters with an approved Total Maximum Daily Load (TMDL) the SWMP must document how the proposed BMP's will control the discharge of the pollutants of concern, as described in Part III.D. ~~Permittees discharging to waters with an approved TMDL shall meet the applicable wasteload allocations of that TMDL.~~

Comment: Capture, storage and treatment to a numeric limit of stormwater flows is neither realistic nor desirable. Compliance with appropriate BMPs should be considered compliance for purposes of MS4 discharges into a TMDL water. We request a meeting with WV DEP to discuss this important issue.

RESPONSE: DWWM did meet with interested parties to discuss impaired waters, TMDLs and MS4s on February 17th, 2009. DWWM is not mandating a numeric effluent limitation of stormwater flows.

212.

Part II.C.b.1.-Page5 - Public Education and Outreach

Education and outreach efforts shall be prioritized *based upon the local need as determined by the Permittee and shall he generally* targets/ **to the** following audiences and subject areas: [no further changes suggested for this section].

Comment: Federal rules and guidance, and the sound administration of this program, require that the permit requirements be sufficiently flexible to allow for permittees to adjust for and address local needs and conditions. The suggested change is consistent with this principle.

RESPONSE: All audiences shall remain a target for education and outreach activities. However, the words 'shall be prioritized' have been removed.

213.

Part II.C.3.b.i and ii – Page 7, 8

- i. The regulatory mechanism does not need to prohibit the following categories of non-stormwater discharges, unless they are identified to be significant sources of pollutants to waters of the State:
 - Diverted stream flows,
 - Rising ground waters.
 - Uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20)),
 - Uncontaminated pumped groundwater.
 - Foundation drains,
 - Air conditioning condensation,

- Irrigation water from agricultural sources,
- Springs,
- Water from crawl space sump pumps,
- Footing drains,
- Flows from riparian habitats and wetlands,
- Non-stormwater discharges covered by another NPDES permit,
- ~~Discharges or flow from emergency fire fighting activities,~~
- *Discharges from lawn watering and other irrigation runoff*
- *Street, parking lot and sidewalk wash water, water used to control dust, and routine external building wash down, that does not use detergents.*

Comment: EPA guidance (See: Federal Register, December 9, 1999, p. 68756 Notice on Phase II Rules) states that a discharge from fire fighting activities is not an illicit discharge. The guidance does not discriminate between emergency and routine fire fighting activities. Routine hydrant maintenance falls under the duties of most fire companies as such should be considered an exempt "fire fighting activity". This change is desirable because the permit should not discourage the routine maintenance and testing of fire hydrants.

RESPONSE: The language states that the regulatory mechanism does **not** need to prohibit the following categories of non-stormwater discharges, **unless** they are identified to be significant sources of pollutants to waters of the State. If any of the bulleted activities are identified to be significant sources of pollutants, then they are to be prohibited.

In the same manner, discharges from lawn watering, irrigation, street, parking lot and sidewalk wash water is not necessarily precluded, but these types of discharges are to be prohibited unless your public education and outreach efforts addresses these types of discharges as described in Part II.C.b.3.b.ii.

214.

- ii. The regulatory mechanism shall prohibit the following categories of non-stormwater discharges unless the stated condition is met:

~~Planned discharges from potable water sources, including water line flushing such as hyperchlorinated water line flushing, fire hydrant system flushing, and pipeline hydrostatic test water. For these planned discharges to the MS4, the discharge shall be dechlorinated to a concentration of 0.1 ppm or less, pH adjusted, if necessary, and volumetrically and velocity controlled to prevent reasonably reduce~~ resuspension of sediments in the MS4.

~~Discharges from lawn watering and other irrigation runoff; These shall be minimized through; at a minimum public education activities described in Part II, Section C.I. of this permit.~~

~~Street, parking lot and sidewalk wash water, water used to control dust, and routine external building wash down that does not use detergents. The permittee shall reduce these discharges through; at a minimum, public education activities described in Part II, Section C.I. of this~~

~~permit. To avoid washing pollutants into the MS4 permittees must minimize the amount of street wash and dust control water used. At active construction sites, street sweeping must be performed prior to washing the street.~~

Comment: Comment: This change is proposed in order to ensure that the desirable practices of fire hydrant testing and water line flushing are not discouraged by the permit constraints and requirements. On balance, the potential harm to the public by failing to flush or test is significantly greater than the potential to harm the environment resulting from these untreated activities. Moreover, the chlorine residual in normal potable water will quickly dissipate over time and distance, and not pose a significant threat to the water environment such as would justify the treatment requirements.

The federal rules explicitly exclude as illicit discharges water from fire fighting activities. This exclusion is not limited to emergency fire fighting activities. Therefore, all activities associated with fire fighting, including hydrant flushing and testing (and the ancillary water main flushing), are recommended to be excluded from classification as illicit discharge. As discussed above, this exclusion is sound and desirable for significant public policy reasons. The deleted sections are unnecessary and will cause significant confusion among the regulated public.

RESPONSE: The language in Part II.C.b.3.b.ii., second bullet has been modified so that these types of discharges are prohibited only if they have the potential to violate water quality standards when discharged.

The second and third bulleted paragraph in this section addresses discharges from lawn watering, irrigation, street, parking lot and sidewalk wash water. These discharges are only prohibited if your public education and outreach efforts do NOT address them.

215.

Part II.C.3.c.v - Page 9

- v. Procedures for removing the source of the discharge; including notification of appropriate authorities; notification of the property owner; ~~assistance for eliminating the discharge, if necessary~~; follow-up inspections; and escalating enforcement and legal actions if the discharge is not eliminated.

Compliance with this provision shall be achieved by initiating an investigation within fifteen (15) days of a report or discovery of a suspected illicit connection to determine the source of the connection, the nature and volume of discharge through the connection, and the party responsible for the connection. *The Permittee shall establish a priority system for responding to and verifying elimination of illicit connections based upon the eminent danger of the situation as determined by the Permittee.* ~~Upon confirmation of the illicit nature of a storm drain connection, termination of the connection shall be verified within ninety (-90) days, using enforcement authority as needed.~~

Comment: Elimination of the illicit discharge is the regulatory duty of the discharger. Of course, the regulated MS4 must work with the discharger to accomplish this task. However, the

proposed regulatory mandate to assist the discharger unnecessarily introduces risk to the MS4 both from the perspective of the defending discharger ("The MS4 did not help me as required") and from third parties who may be injured by illicit discharges ("The MS4 did not help them as required").

RESPONSE: This language "assistance for eliminating the discharge" has been removed. The language has also been modified for clarification.

216.

Comment: The ninety day termination deadline is unnecessarily restrictive and ignores many aspects to remedial funding, design and permitting that may require additional time, final elimination requirements should be tailored to local and specific conditions, and therefore left to the prerogative of the local MS4.

RESPONSE: This language has been modified.

217.

Part II.C.5.a.i - Page 12

Comment: The six proposed watershed protection elements that begin on page 13 may either directly or indirectly have water quality benefits and we value their potential to improve water quality in our communities. We also recognize that at the federal level Phase II rules state it is appropriate for communities to evaluate existing policy, planning documents and ordinances in regards to stormwater management and water quality impacts. However, we question the breadth and scope of what is required in these elements, if in fact they exceed what is required at a federal level or if they fail to provide or prohibit necessary local flexibility.

RESPONSE: The watershed protection elements are consistent with the requirements and guidance in the Phase II rule. In the rule, EPA says "When developing a program that is consistent with this measure's intent, EPA recommends that you adopt a planning process that identifies the municipality's program goals (e.g., minimize water quality impacts resulting from post-construction runoff from new development and redevelopment), implementation strategies (e.g., adopt a combination of structural and/or non-structural BMPs), operation and maintenance policies and procedures, and enforcement procedures." The watershed protection elements are specific requirements that help MS4 improve the planning process to ensure water quality goals are addressed in policy and/or planning documents.

218.

The agency will note that these elements are essentially land use/source control activities. In West Virginia, the authority of municipal governments to enact such policies and requirements must be delegated from the Legislature. Absent legislative authority, it is doubtful that municipalities have the authority to enact and/or enforce these requirements. As a result, an attempt to do so will likely result in litigation and, ultimately, unnecessary expense and program frustration. Finally, many of these policies may be characterized by landowners as a taking of private property. It will not benefit either the agency or our municipalities to spend our water protection dollars defending legal suits. We urge the agency to sponsor and incorporate into this program necessary legislation to allow local governments to proceed in the desired manner, and to modify this permit consistent with legislative guidance and properly delegated authority.

RESPONSE: Chapter 8A of the Planning code of West Virginia gives Municipal and County governments control over the growth and land use within their respective municipality or county. There are elements of land use in many of the development activities that are already regulated by a municipality. Subdivision and zoning ordinances are land use control tools that are authorized by Article 4 and Article 7 of Chapter 8A of the West Virginia Code.

All six of these watershed elements are appropriate for inclusion in the municipal comprehensive plan. Some, if not all, of the watershed protection elements are appropriate for inclusion into the municipal subdivision and zoning rules. Subdivision ordinances are specifically required to contain provisions for stormwater management among other things as noted below:

§8A-4-2 Contents of subdivision and land development ordinance

- (a) A subdivision and land development ordinance shall include the following provisions:
(5) “The standards for setback requirements...storm water management and...”

A. Watershed protection elements. As relevant, policy and/or planning documents must include the following, except where noted:

(1) Minimize the amount of impervious surfaces (roads, parking lots, roofs, etc.) within each watershed, by minimizing the creation, extension and widening of parking lots, roads and associated development.

Example: Minimizing impervious surfaces by amending policies and ordinances that dictate the parking lot size and spaces requirement. The municipality could;

- Allow flexibility in meeting parking space requirements through shared parking, off-site parking, and similar approaches.
- Permit businesses with different peak demand periods to share their required parking spaces.

Incentives to reducing parking lot size:

- Allow reduction in vehicle parking spaces when minimum number of bicycle parking space is provided.
- Allow reduction in parking spaces required (e.g., 25%) in mixed-use and transit-oriented developments and districts.
- Permit developers to undertake parking studies to establish that specific developments (e.g., senior housing, affordable housing) require fewer parking spaces than typical projects.

Most municipalities have a rule that sets a minimum number of parking spaces for certain types of buildings based on use and square footage of the building. In many cases, the amount of parking spaces is excessive and the parking lot is underutilized. Controlling the amount of parking spaces is well within the authority of a municipality. If businesses do not wish to reduce the size of their parking lots or reduce the amount of parking spaces, an alternative could be that the ‘excessive’ parking spaces be constructed of impervious material. This would effectively reduce or minimize the amount of impervious surfaces – which is the goal of this particular watershed protection element.

A further look at Chapter 8A, Article 3 contains information concerning comprehensive plans. Listed under purposes and goals is the following:

- (9) Focus development in existing developed areas and fill in vacant or underused land near existing developed areas to create well designed and coordinated communities; and
- (10) Promote cost-effective development of community facilities and services.
 - (e) A comprehensive plan may provide for innovative land use management techniques, including:
 - (1) Density bonuses and/or density transfer;
 - (2) Clustering;
 - (3) Design guidelines, including planned unit developments;
 - (4) Conservation easements;
 - (5) Infill development;
 - (6) Consolidation of services; and
 - (7) Any other innovative land use technique that will promote the governing body's development plans.

Optional components include:

- (2) *Environmental.* -- Recommend programs where appropriate to appropriate regulatory agencies to protect the area from all types of pollution and promote a healthy environment.
- (4) *Conservation.* -- Recommend programs to conserve and protect wildlife, natural habitats, sensitive natural areas, green spaces and direct access to sunlight.

§8A-3-4. Mandatory components of a comprehensive plan

- (c) The comprehensive plan shall have, but is not limited to, the following components:
 - (1) Land use. -- Designate the current and set goals and programs for the proposed general distribution, location and suitable uses of land, including, but not limited to:
 - (A) Residential, commercial, industrial, agricultural, recreational, educational, public, historic, conservation, transportation, infrastructure or any other use of land;
 - (B) Population density and building intensity standards;
 - (C) Growth and/or decline management;
 - (D) Projected population growth or decline; and
 - (E) Constraints to development, including identifying flood-prone and subsidence areas.

Utilizing all of the above components in a comprehensive plan will reduce impervious surfaces in the watershed. And, most of the components listed above are complimentary to the five development incentives that are found in Part II.C.b.5.a.ii.A.3.

While a municipal comprehensive plan is not a requirement of county or municipal planning commissions and their governing bodies, they are authorized by State Law and can include the six watershed protection elements.

- (2) Preserve, protect, create and restore ecologically sensitive areas that provide water quality benefits and serve critical watershed functions. These areas may include, but are not limited to; riparian corridors, headwaters, floodplains and wetlands.

Example: This can be accomplished by an ‘open space’ or ‘green space’ provision in development rules.

- (3) Implement stormwater management practices that prevent or reduce thermal impacts to streams, including requiring vegetated buffers along waterways, and disconnecting discharges to surface waters from impervious surfaces such as parking lots.

Example: This can be accomplished by a 'tree preservation' or 'green space' ordinance or, requiring impervious areas be disconnected.

- (4) Seek to avoid or prevent hydromodification of streams and other water bodies caused by development, including roads, highways, and bridges.

Example: Rather than 'burying a stream' with a culvert, an alternative is bridging the stream. This particular watershed protection element is not mandatory, but should be addressed. There are some situations where avoiding hydromodification might be an easier alternative.

- (5) Implement standards to protect trees, and other vegetation with important evapotranspirative qualities.

Example: Tree protection ordinance or green space requirements in new development. Green space requirements could easily incorporate landscaping that is conducive to infiltration and/or evapotranspiration.

- (6) Implement policies to protect native soils, prevent topsoil stripping, and prevent compaction of soils.

Example: Top soils that are removed for new development is stockpiled so that it can be used in the green space or landscaped areas when construction is finished. On large construction sites heavy equipment stay in areas designated for heavy equipment traffic in an effort to preserve the infiltrative capacity of soils.

Further, Chapter 8A provides that subdivision ordinances include stormwater management provisions. Soil protection measures can be worked into subdivision ordinances.

219.

Part II.C.S.a.ii.A.1 - Page 14

1. Site design standards for all new and redevelopment that require, in combination or alone, management measures that keep and manage on site the first one inch of rainfall from a 24-hour storm preceded by 48 hours of no measurable precipitation. Runoff volume reduction can be achieved by canopy interception, soil amendments, evaporation, rainfall harvesting, engineered infiltration, extended filtration and/or evapotranspiration and any combination of the aforementioned practices. This first one inch of rainfall must be 100% managed with no *direct* discharge to surface waters, except when the permittee chooses to implement the conditions in paragraph 4 below. This can be achieved through on site utilization of practices to include dry swales, bioretention, rain tanks and cisterns, soil amendments, roof top disconnections, permeable pavement, porous concrete, permeable pavers, reforestation, grass channels, green roofs and other practices that alone or combined will capture the first one inch of rainfall runoff volume. An Underground Injection Control permit may be required when certain conditions are met.

RESPONSE: The original language in the provision requires that the first one inch of rainfall be managed fully on-site. The modification to prohibit only direct discharges would create confusion as to the level of stormwater management required and the appropriate design and performance of selected BMPs. DWWM, therefore, will not add the “direct” to the language of the provision. However, the language has been modified to clarify the “extended filtration” discharge that is permissible.

220.

These site design standards shall be instituted within 2 years of completion of the West Virginia Stormwater Management Manual by WV DEP.

RESPONSE: DWWM does intend to initiate development of a stormwater management manual this year. In the interim, during development of West Virginia’s manual, there are numerous other guidance materials and stormwater manuals that can provide stormwater practice design that utilize many of the runoff reduction techniques.

221.

Part II.C.5.a.ii.A.4,5 - Page 15

4. For projects that cannot meet 100% of the infiltration/evapotranspiration/reuse requirement on-site, two alternatives are available: off-site mitigation and payment in lieu. If these alternatives are chosen, then the permittee must develop and fairly apply criteria for determining the circumstances under which these alternatives will be available. A determination that standards cannot be met on site may not be based solely on the difficulty or cost of implementing measures, but must include multiple criteria that would rule out an adequate combination of the practices set forth in section 1, above, such as: too small a lot outside of the building footprint to create the necessary infiltrative capacity even with amended soils: *a site that has a potential for producing a slip plane or other soil instability*; a site use that is inconsistent with capture and reuse of stormwater; too much shade or other physical conditions that preclude adequate use of plants.

RESPONSE: The list in the permit language as provided are examples of site conditions that may be determined to prevent full on-site management of the first inch of rainfall. The list is not all inclusive, however, DWWM will modify the language to include:

“...too small a lot outside of the building footprint to create the necessary infiltrative capacity even with amended soils; soil instability as documented by a thorough geotechnical analysis; a site use that is inconsistent with capture and reuse of stormwater; too much shade or other physical conditions that preclude adequate use of plants.”

It should be noted, however, that in all instances where alternatives to complete on-site management of the first inch of rainfall are chosen, technical justification as to the infeasibility of on-site management is required to be documented.

222.

These alternatives are only available, in combination or alone, for up to 0.4 inches of the original obligation at a 1:1.5 ratio, i.e., mitigation or payment in lieu must be for 1.5

times the amount of stormwater not managed on site. *If, in the opinion of the MS4, site conditions are such that mitigation or payment in lieu must be used for the remaining 0.6 inches, it will be applied at a 1:2 ration for that portion.* For either of these options to be available, the permittee must create an inventory of appropriate mitigation projects, and develop appropriate institutional standards and management systems to value, evaluate and track transactions....

Comment: The 1" capture requirement is unreasonably inflexible and incongruent with the current state of the MS4 program in West Virginia and the soils in many parts of our state. Accordingly, and for the reasons discussed in detail below, this requirement should be removed from the permit. In the alternative, these comments are proposed to allow for a process by which this standard may be met in the future.

RESPONSE: By adopting a performance based standard as the basis of the permit, DWWM believes it has allowed a great deal of flexibility to comply with the requirements. There are a large number of strategies, practices, and BMPs are acceptable for meeting the requirements of the permit. In addition, the permit specifically allows for off-site mitigation or payment in lieu when it is demonstrated that site conditions make it technically infeasible to manage all or a portion of the first inch of rainfall on site.

223.

Comment: While desirable, these post development requirements are not practical and will result in a number of unintended negative consequences, including urban sprawl and the related stress upon existing water, sewer and road infrastructure. The requirement for one inch capture of precipitation with no discharge to surface waters also has significant technical and public policy challenges that must be accounted for and addressed prior to inclusion as permit terms and conditions. While we appreciate the agency's willingness to extend the deadline for this requirement from 2 to 4 years. the agency must recognize that the significant challenge to meet this permit condition will not rest exclusively with the MS4s. The agency must provide technical resources to all MS4 communities and the development community that will be required to implement 1 inch capture. The agency must also commit to necessary Legislative action to support this program, including, but not limited to, amendment of the state's planning and zoning code.

RESPONSE: The post development requirements under the *prior* MS4 permit required that MS4s ensure that controls are in place to *increase groundwater recharge of stormwater*, protect water quality and reduce the discharge of pollutants. The controls provided in the new MS4 permit are performance based and allow a great deal of flexibility to comply. There are a large number of strategies, practices and management practices that are acceptable for meeting the requirements of the permit. DWWM does not agree that these post development requirements are so different from the previous permit that they are not practical and pose significant technical and public policy challenges, if so, then they also existed under the previous permit. Furthermore, runoff reduction practices should *reduce the stress* upon existing water, sewer and road infrastructure.

Technical resources for designing and implementing runoff reduction practices currently exist in a number of places. Some of these resources can be found on WVDEP MS4 webpages. The USEPA has several web pages devoted to low impact development, green infrastructure and municipal guidance for MS4s so that these runoff reduction principles can be incorporated into the post construction

requirements of the MS4. Another technical resource is the Low Impact Development Center's website.

http://www2.wvdep.org/dwwm/stormwater/MS4_BMP.htm

<http://cfpub.epa.gov/npdes/greeninfrastructure/technology.cfm>

<http://cfpub.epa.gov/npdes/greeninfrastructure/munichandbook.cfm>

http://www.cwp.org/Resource_Library/Controlling_Runoff_and_Discharges/sm.htm#pc

DWWM is planning to host several technical training meetings for MS4s, consulting engineers and the development community in 2009.

As explained in the response to comment #218, DWWM believes that Chapter 8A of the West Virginia Code give authority to municipalities for stormwater management.

224.

Comment: The agency must recognize that most of the other states that have or are moving to incorporate this requirement have much larger budgets and staffing levels within the stormwater programs of their regulatory agencies, as well as significantly more power and prerogative delegated from state to local government. While we believe we can come to consensus with the agency on these issues, we strongly feel our concerns cannot be addressed by suggesting minor revisions to the proposed language. Instead, we request the agency convene an appropriate process in which we can in detail review what these requirements mean, work through the problems that are going to arise and in partnership achieve the agency's objective for runoff reduction. In summary, this review effort should consider:

RESPONSE: DWWM agrees that solid implementation of the MS4 six minimum control measures does cost money. However, the cost of the program is not especially relevant to the one inch runoff reduction standard. As stated previously, MS4s are required under the prior permit to ensure that controls are in place to increase groundwater recharge of stormwater, protect water quality and reduce the discharge of pollutants. Site plan reviews, approvals, inspections, tracking, etc will cost about the same whether the *standard* is runoff reduction or traditional end-of-pipe treatment systems.

225.

Comment: In summary, this review effort should consider: The term "no discharge to surface waters" is impractical due to the site constraints in WV development sites will have to discharge in most areas because of soils and depth of bedrock, etc. Therefore, the permit should allow indirect discharge of surface runoff through an underdrain or other type of subsurface system after passing through the management practice.

RESPONSE: The original language in the provision requires that the first one inch of rainfall be managed fully on-site. The modification to prohibit only direct discharges would create confusion as to the level of stormwater management required and the appropriate design and performance of selected BMPs. DWWM has modified the language to clarify the "extended filtration" discharge that is permissible.

The permit does allow for alternatives if site conditions are such that on site management of the first one inch of stormwater is not feasible.

Also note that discharge to surface waters is only prohibited for the first inch of rainfall. Rainfall amounts exceeding one inch can be discharged in accordance with the permit. A number of design alternatives are available, taking site conditions into account, that allow for stormwater retention and the discharge of flows in excess of the first inch of rainfall. In addition, off-site mitigation and payment if lieu are available when site conditions make it technically infeasible to manage the full first inch of rainfall on site.

226.

Comment: As proposed, the mitigation and fee in lieu programs will only account for .4 of an inch of the water quality volume that must be managed, allowing no offsite option for the remaining .6 of an inch. This must be changed to allow for the entire 1.0 of rainfall/runoff equivalent to be managed offsite. Different mitigation ratios may be used for these levels. It should also be noted that the permit factsheet and permit are in conflict with one another regarding this section. The factsheet states .4 inch has to be managed on site, while the permit states only .4 inch can be managed offsite, thus .6 inch has to be managed onsite.

RESPONSE: The language in the permit has been modified so that, if it is demonstrated to the permittee that the one inch of rain fall cannot be managed on site, then payment in lieu and mitigation are options. This provision now includes a tiered approach to the mitigation and payment in lieu ratios. The fact sheet and permit have been modified so that there is no conflict.

227.

Comment: Because it is unclear as to how the agency calculated the credit amounts for each 0.1 inch of reduction, these amounts appear arbitrary. If the intent is to encourage these types of activities, the credit levels are too low and will therefore not promote the intended behavior. For instance, for a 1 acre redevelopment site that is 90% impervious a .10 inch reduction will translate into about 2400 gallons of runoff volume that will not have to be managed. This will have only marginal benefit to the developer because most of the suggested management approaches require significant fixed capital costs (planning/design, contractor mobilization, materials, etc.) for the remaining 22,000-23,000 gallons that will have to be managed. This is compounded for ongoing controls (practice inspection, practice maintenance, etc.) which have a lot of fixed costs that will not diminish much for a 10% reduction. Thus, a 10% reduction in runoff volume may translate into a much smaller reduction in capital and operational costs (life cycle) that will not translate into cost savings to the developer at these small credit increments. Without larger incentives we will not see intended behavior changes. The proposed credit levels should be reevaluated in light of this.

RESPONSE: The rationale for the 0.1 inches per incentive is that it developers should be required to manage some of the stormwater on site that is generated from a one inch rainfall. Since these incentives are additive, they could potentially cut the management requirement by 50%.

If stormwater is being managed in accordance with the provisions of the previous permit, then 'significant fixed' capital costs already exist. Under the prior permit the MS4 should be requiring that the developer increase groundwater recharge of stormwater runoff, protect water quality and reduce the

discharge of pollutants. Capturing and managing *a portion* of the first one inch of rainfall on site should not cause a ‘significant’ increase in capital costs. Likewise, the ongoing controls such as inspection and maintenance of BMP’s are already occurring under the prior permit, so practices that reduce runoff, while they are different in the way they manage stormwater runoff – do not require anything new.

DWWM has reevaluated the incentive credits and decided to assign a higher credit value for each of the incentives. However, this provision still requires that the developer manage at least 0.25 inches of stormwater on site. DWWM believes this to be an easy target given the array of runoff reduction practices that exist.

228.

Comment: The proposal for brown field credit of .2 of an inch is positive, but the agency must recognize that suitable practices on a brownfields site will be significantly limited because of regulatory constraints which will prevent most infiltration practices due to the ability of the infiltrated water to mobilize remaining contaminants in the soil. These constraints most likely will drive such a development into an offsite program, which will have to mitigate at much higher ratios. Thus, brownfield redevelopment may not be realized as currently structured. The runoff reduction requirements available reduction credit and/or mitigation policies for brownfields must reflect this reality.

RESPONSE: With the increased incentive amount and the changes in the language for the mitigation and in lieu program, redeveloping on a brownfield site should become easier. However, DWWM does acknowledge that site constraints do exist and will probably always exist on brownfield sites. Infiltration may not work, but there are other runoff reduction practices, such as green roofs, rainwater harvesting that will work very well on brownfield sites.

229.

Comment: The 1 inch requirement for the 24 hour storm as written does not provide recognition of the role rainfall intensity plays in the generation and management of stormwater runoff. For example 1 inch of rainfall falling over 1 hour in 24 is much different than 1 inch of rainfall in 24 hours when it comes to how we start planning, designing and building these facilities.

RESPONSE: To satisfy the one inch on site management provision in the permit, it is required to demonstrate that sufficient volume has been provided to infiltrate, evaporate, or reuse the volume generated by one inch of rainfall. DWWM intends this to be a straightforward volume calculation dependent upon the area of the site and its runoff potential. If it is demonstrated that sufficient volume is provided to fully capture the first inch of rainfall from a site, the MS4 will not be out of compliance if the intensity of the storm diminishes the capture potential of the practices for a short period of time. It should be noted, however, that proper design of many on-site systems can provide greater than one inch per hour of stormwater management.

230.

Comment: To ensure the 1 inch capture rule is applied consistently in MS4s across the state and to address a significant learning curve for the design and construction community, the agency must provide guidance to include a stormwater management manual, which would contain design guidance and technical specifications for the management measures as well as

decision support tools (like spreadsheets, etc) that could be utilized to size and review the design. This will be a significant undertaking and should be an agency responsibility. To promote the adoption and buy-in of these practices, the technical requirements and resources should be developed with input by a technical advisory committee of practicing professionals in the stormwater discipline. (Similar efforts have been successful in other states, including MN, NC, MD, and VA.) Once this guidance is developed, a concerted effort must be shown by the agency to collaborate with MS4s to train designers and constructors on these new practices. Evidence of such commitment from the agency to this need is necessary before our communities can accept such requirements. As such we recommend the timetable for the 1 inch capture rule be revised to state at the *end* of item 1 on page 14 that "These site design standards shall be instituted within 2 years of completion of the West Virginia Stormwater Management Manual by WV DEP." This manual must detail how to calculate the water quality volume at the site level, provide common sizing tools (i.e. spreadsheets or other models) and give guidance and technical specifications for all applicable management measures detailed in this permit.

RESPONSE: DWWM agrees that the consulting and development community including MS4 personnel will need guidance on runoff reduction practices as well as all the other minimum control measures. DWWM has already started planning for training sessions this year [2009].

DWWM does intend to initiate development of a stormwater management manual this year. In the interim, during development of West Virginia's manual, there are numerous other guidance materials and stormwater manuals that can provide stormwater practice design that utilize many of the runoff reduction techniques. A spreadsheet tool is also being anticipated to be developed for WV.

231.

Comment: Our communities acknowledge the movement of the stormwater management discipline on a regional and national level to move towards runoff reduction approaches. However, it is not apparent to us at this time that any states are doing this via the NPDES permit program, but instead have incorporated the requirements within state stormwater management manuals or through legislative act. We believe that this is the best approach for West Virginia as well. Other states are instituting the requirements holistically across the state and not exclusively within the MS4 permitted communities. Such an approach is more appropriate than this proposal because it acknowledges that the minimum rules for developers should be universal at the state level regardless of where the project may be located (within or outside of MS4 service area). If a local community needs or wishes to be more stringent regarding these controls, that should be their prerogative, but not a universal requirement. Incorporation of such language in design manuals and not permit terms also acknowledges runoff reduction approaches are complex issues that have many site specific variables that must be accounted for. It is both more practical and more appropriate to provide that flexibility within a design manual that is referenced in the permit than in the permit language.

RESPONSE: There are indeed several other states that are in the process of incorporating runoff reduction requirements in their NPDES permits. The US EPA has taken a strong position on utilizing "green infrastructure" and runoff reduction practices for the post construction development requirements in MS4 permits.

DWWM has opted to place a performance standard in the MS4 permit to address the *urban* water quality in the State of West Virginia. It is revealing that all WV MS4s discharge their stormwater

runoff into impaired water bodies. And, DWWM does not have to necessarily follow what other surrounding states are doing or not doing in their NPDES permits. It is up to the individual State how they approach cleaning up their urban waters.

DWWM disagrees that it is more appropriate to address stormwater standards in design manuals. Design manuals are not enforceable, but are guidance to communities. Permits are meant to be enforceable.

232.

Comment: The exclusive application of the 1 inch capture rule to regulated MS4s only further increases the disparity between the MS4 permit obligations and the construction stormwater permit obligations. Due to the significant larger amount of acreage in the latter program, the parties feel the agency would better fulfill its mission by devoting the resources necessary to strengthen the construction stormwater program than to institute these additional costly demands on our MS4 citizens and businesses. The agency must acknowledge that construction sites outside of a regulated MS4 also have post development impacts and require management measures post development to reduce those impacts.

RESPONSE: The Phase II regulations require that small MS4s implement the six minimum control measures. Two of these six minimum controls address construction site stormwater runoff control and post construction stormwater management in new development and redevelopment. US EPA recognized the distinction of these two minimum control measures or they would have combined them as one minimum control.

In the construction stormwater permitting program, the Phase II regulations do not address post construction stormwater management. US EPA goes as far as to state that their general permit for construction stormwater is not intended to address post-construction stormwater management. Due to US EPA not mandating post-construction stormwater management in their general permit and the fact that the WVDEP does not have the regulatory authority to mandate statewide post construction stormwater management, the WVDEP does not require post-construction stormwater management in its construction stormwater general permit.

233.

Comment: The agency has failed to provide guidance on how to couple runoff reduction methods with traditional water quantity management for flood control purposes. It is difficult, if not impossible, to size a runoff reduction method for large storm events. Our MS4s must manage the larger storm events to protect life and property. Most of our communities will be talking about a hybrid approach where runoff reduction is incorporated into designs that must also have structures in place for flood control. The agency must recognize because of the hybrid approach, these green infrastructure approaches may not necessarily be cheaper than gray infrastructure. We are also uncertain how much these green infrastructure approaches reduce the size/volume of needed flood control structures.

RESPONSE: DWWM recognizes that more information needs to be provided to the MS4s as to how to integrate on-site management practices with measures taken for flood control. This issue will be specifically addressed by DWWM in its guidance materials and training programs to be delivered in this permit cycle. In general, however, the analysis for water quality management and flood control with green infrastructure approaches will be similar to those currently used with conventional

controls. Protocols have been established nationally for using standard modeling programs (e.g., TR-55) to account and take credit for the performance of green infrastructure.

It is anticipated that the requirements of this permit will benefit flood control efforts by reducing the total volume of runoff that is generated and requires subsequent management. Because of the uniqueness of each MS4, the variety of strategies and practices that may be employed to meet the permit requirements, and the performance of existing infrastructure, it is difficult to predict the cost outcomes of green infrastructure approaches. Research nationally into the cost factors that predict overall stormwater management costs have demonstrated that the reduced volume of stormwater runoff, the decreased demand on existing infrastructure, and multiple associated cost benefits of green infrastructure have the potential to reduce the long-term cost of permit compliance.

234.

5. When public (local or otherwise) streets or parking lots are repaired, modified or reconstructed opportunities to improve stormwater management using canopy interception, soil amendments, evaporation, rainfall harvesting, engineered infiltration, extended filtration and/or evapotranspiration and/or any combination of the aforementioned practices shall be included in the design work *when deemed practical and desirable by the MS4*. These requirements apply only to projects begun after the effective date of this permit.

RESPONSE: The language has been modified to remove the word 'repair'.

235.

Part II.C.5.a.ii.A.2.i and ii - Page 14

2. The following additional water quality requirements, as applicable:
 - i. ~~A project with reasonable potential for pollutant loading(s) must provide water quality treatment for associated pollutants (e.g. petroleum hydrocarbons at a vehicle fueling facility) before infiltration.~~
 - ii. ~~A project with reasonable potential for pollutant loading(s) that cannot implement adequate preventive or water quality treatment measures to ensure compliance with groundwater and/or surface water quality standards, must properly convey stormwater to a NPDES permitted wastewater treatment facility or via a licensed waste hauler to a permitted treatment or disposal facility.~~

Comment: Because "reasonable potential for pollutant loading(s) is vague and undefined, these paragraphs must be removed from the permit. In addition, treatment of stormwater at a WWTP is contrary to the objective to remove inflow and infiltration from treatment flows, and attempted treatment of large volumes of stormwater may upset the WWTP treatment process. The permit should implement the Phase II guidance that allows for water quality compliance via BMPs that reduce pollutant load to the maximum extent practicable. These more stringent requirements are undesirable, counterproductive and inconsistent with sound WWTP operation and the CSO program requirements assigned to many of our municipalities.

RESPONSE: The language has been modified for clarity. DWWM has also included a definition for the term “hot spot”.

Hot spots can include the following types of industries:

- Vehicle salvage yards and recycling facilities
- Vehicle fueling stations
- Vehicle service and maintenance facilities
- Vehicle and equipment cleaning facilities
- Fleet storage areas (bus, truck, etc.)
- Industrial sites subject to an NPDES industrial stormwater permit
- Marinas (service and maintenance)
- Outdoor liquid container storage
- Outdoor loading/unloading facilities
- Public works storage areas
- Facilities that generate or store hazardous materials
- Commercial container nursery

Note that this requirement is for new development or redevelopment. Because of the nature of the discharges of these types of businesses or industries, infiltrating stormwater runoff could have a detrimental impact on groundwater. Requiring further treatment of stormwater before it is infiltrated is imperative. It is also acceptable to utilize other methods to capture stormwater such as rainwater harvesting.

This provision does not in any way imply or direct that Inflow and Infiltration be allowed to remain in sanitary sewage flows. This pertains to polluted stormwater runoff from stormwater Hot Spots.

236.

Part II.C.5.a.ii.E.3 - Page 17

1. Ensure that stormwater BMPs are maintained. The permittee shall promptly notify the stormwater BMP owner or operator of any deficiencies discovered during a maintenance inspection. The owner must correct the deficiency within thirty (30) days of the notice. The permittee must conduct subsequent inspection to ensure completion of all required repairs. *The Permittee shall establish a process for enforcing its correction orders* if repairs are not made, ~~the permittee shall enforce its correction orders and if need be perform the necessary work and assess against the owner the costs incurred for such repairs.~~

Comment: The proposed change allows for local prerogative and flexibility in program enforcement.

RESPONSE: DWWM has modified the language to include this flexibility.

237.

Part II.C.6.d-Page 20

- d. Industrial Stormwater coverage for Municipal Operations

Samples shall be collected once every six months, during the spring and fall seasons. Monitoring results shall be submitted to the DWWM with the annual report.

Stormwater samples shall be collected during the "first flush" of rainfall runoff. *Suggested criteria for sampling this event shall be*, at least twenty minutes, but not more than fifty minutes after rainfall of at least 0.5 inches has begun, preceded by a period of dry weather of at least 48 hours.

Comment: This requirement can be particularly burdensome for MS4's that have multiple facilities located within its boundaries. Sampling requirements should be linked to storm events measured during regular business hours. The proposed criteria are impractical because it is not possible to pre-determine the magnitude of a rain event prior to sampling.

RESPONSE: There are several sampling protocols (and bottles) that are manufactured expressly for the purpose of setting up before a storm event and then triggered to sample at a certain time and flow. See response to comment #107.

238.

Part III.D.1.2 - Page 21. 22

Comment: Capture, storage and treatment to a numeric limit of stormwater flows is not a realistic goal. Compliance with appropriate BMPs should be considered compliance for purposes of MS4 discharges into a TMDL water. It is inappropriate to assign a wasteload allocation to a BMP-related discharge. We request a meeting with WV DEP to discuss MS4 management as part of the West Virginia TMDL program.

RESPONSE: See response to comment #211.

239.

Part IV.B-Page 23

Stormwater samples shall be collected once every six months, during the spring and fall seasons.

Stormwater samples shall be collected during the "first flush" of rainfall runoff. *Suggested criteria for this sampling this event shall be*, at least twenty minutes, but not more than fifty minutes after rainfall of at least 0.5 inches has begun, preceded by a period of dry weather of at least 48 hours.

Comment: Sampling requirements should be linked to storm events measured during regular business hours. The proposed criteria are impractical because it is not possible to pre-determine the magnitude of a rain event prior to sampling.

RESPONSE: DWWM disagrees, stormwater events are not limited to 'business hours'. A Wastewater Treatment plant doesn't just treat sewage during business hours. There are some regulated activities that go beyond business hours. There are several sampling devices that can collect stormwater samples when triggered by a certain event. It is recommended that these types of protocols be used in the event samples need to be collected after business hours.

240.

The permit is also quite progressive when it comes to post-construction stormwater control, although I would like to offer one important change when it comes to defining the volume of runoff that must be treated (Section 5(ii)1 on page 14).

The current definition specifies a volume that must be controlled through infiltration, evapo-transpiration or reuse. This definition does not include all the low impact development (LID) practices that may be needed in the demanding terrain and geology of West Virginia.

I would propose an alternative and expanded definition termed “runoff reduction practices” that is currently being developed in Virginia, the District of Columbia and Maryland. The proposed definition is as follows:

“Runoff reduction maintains the predevelopment runoff volume delivered to the stream as defined by achieving the same predevelopment runoff coefficient for each storm up to the first inch of rainfall. Runoff reduction is quantified as the total annual post development runoff volume reduced through canopy interception, soil amendments, evaporation, rainfall harvesting, engineered infiltration, extended filtration or evapo-transpiration. Designers must maximize the use of on-site runoff reduction practices before designing any traditional stormwater treatment practices (such as wet ponds and sand filters)”

This expanded definition allows designers to choose from a list of runoff reduction practices, such as dry swales, bioretention, rain tanks, soils amendments, rooftop disconnections, permeable pavers, reforestation, specially designed extended detention ponds, grass channels, green roofs and others (see Schueler, 2008 for a complete list). Such flexibility is extremely important in the areas of the state where steep terrain, karst topography or bedrock makes infiltration problematic, yet it still promotes the use of a wide range of low impact development practices that control runoff at its source.

RESPONSE: Post construction runoff language has been modified to expand the options for runoff reduction.

241.

I also recommend that the statewide stormwater design manual define a specific treatment volume based on runoff coefficients for forest, disturbed soils and impervious cover. A simple method has been proposed for Virginia that is described by Schueler (2008).

RESPONSE: DWWM will consider this when the stormwater design manual is being developed.

242.

1. Discharges to Impaired Waters. The section on discharge to impaired waters in the proposed permit on page p.22 is excellent and is keeping with recent stormwater/ TMDL guidance issued by EPA and several recent federal court interpretations. The proposed language should not affect growing communities if they adopt the runoff reduction requirement for new development, but gives existing communities a clear guidepost as to the reductions in pollutant discharge that must be collectively achieved by their six minimum management measures for uncontrolled existing development.

RESPONSE: DWWM agrees.

The following comments are from USEPA Region III:

243.

First, we would like to thank West Virginia for its leadership and for working with EPA to address important issues in the stormwater arena and significantly improve this permit over the previous version. Based on the Agency's review to date, we have noted proposed permit conditions that require further clarification and refinement in order to ensure compliance with federal storm water Phase II regulations contained at 40 C.F.R. § 122. Areas of regulatory concern include, but are not limited to:

(1) Requirements under the current permit (40 CFR 122.44(l))

Several draft permit requirements state that the permittee shall develop maps, illicit discharge detection programs, or control mechanisms, etc. within a specific time frame yet these are program elements that should have been completed under the current Phase II MS4 permit. To avoid anti-backsliding, standards and conditions must be at least as stringent as the previous permit.

RESPONSE: The language has been modified to reflect the elements that were required with the previous permit.

244.

(2) Water Quality Standards

The Fact Sheet and Special Conditions section of the permit should be revised to clearly state that the applicable requirements are both "maximum extent practicable" (MEP) and to not cause or contribute to a violation of water quality standards. The permit incorporates this provision clearly in Part III B on page 3, but not in the Fact Sheet or in the Special conditions section of the permit on page 20.

RESPONSE: The language has been modified.

245.

Furthermore, EPA recommends the following permit conditions be considered:

(1) TMDL Language

The permit includes TMDL provisions, but should also include a specific requirement for the permittee to update Best Management Practices (BMPs) as needed based on performance monitoring to ensure wasteload allocations are being met.

RESPONSE: This language has been added.

246.

(2) Measurable Goals

The draft permit requires the permittees develop measurable goals and submit these to the State in their SWMP. EPA recommends that West Virginia provide more direction for these measurable goals and at the very least, reference EPA's Measurable Goals Guidance. <http://cfpub.epa.gov/npdes/stormwater/measurablegoals/part3.cfm>

RESPONSE: The language has been modified to reference the USEPA measurable goal guidance.

247.

(3) Monitoring

The draft permit recommends a minimum of one outfall be monitored for a series of parameters commonly found in municipal discharges. EPA recommends that the permit be revised to require at least 6 outfalls or a percentage of the total outfalls such that the results can be interpreted as sampling which is representative of the municipality. It is recommended that the permittees following regulatory requirements for monitoring found in CFR 122.26 and 122.34, as well as 122.44 and 122.48. EPA also recommends that the draft permit incorporate reference to EPA's "Municipal Stormwater Program Evaluation Guidance" EPA 833-R-07-003 and the Region III fact sheet titled "Evaluating Effectiveness of Stormwater Management Programs" posted on EPA's web site at <http://www.epa.gov/npdes/stormwater/municipal>.

RESPONSE: DWWM agrees, but would like to reserve this requirement for the next reissuance of the MS4 general permit in 2014. With most small MS4s in WV taking a more serious approach this permit cycle, DWWM feels that water quality will not be affected until after this entire permit term. The minimal water sampling requirements is to familiarize the permittees with taking samples. It also partially fulfills our Chesapeake Bay obligations and in the future, the Gulf of Mexico obligations.

248.

Department of Transportation

This permit provides coverage for the West Virginia Department of Transportation along with Phase II municipalities. Several states have issued individual permits to their transportation agencies which are more focused on expectations for a statewide agency rather than for individual communities. We suggest that West Virginia consider that option.

RESPONSE: DWWM agrees and will consider writing a WVDOT individual permit.

An electronic version of the draft permit is attached with our [USEPA] marked changes as well. These changes incorporate additional permit conditions that may also need refinement and/or clarification.

249.

Is a SWMP automatically accepted? How long does WVDEP have to review and/or approve the SWMP? How does permittee know if their SWMP is acceptable?

RESPONSE: Applications containing stormwater management programs are submitted to DWWM for review and approval. DWWM has ninety days to act upon applications that are deemed complete. Once approved, the permittee receives a letter of approval.

250.

Specify what is meant by “good cause shown”. (page 4)

RESPONSE: The language has been modified.

251.

Consider adding household hazardous waste and composting to the homeowners list (page 5).

RESPONSE: Household hazardous waste and composted are not necessarily excluded. DWWM believes the current list is prescriptive for this permit cycle.

252.

Specify what is meant by “water quality treatment”. (Page 15)

RESPONSE: Water quality treatment is now defined. The language has been modified in this section for clarity.

253.

Clarify what is meant by ‘accessory’. (page 15)

RESPONSE: Accessory impervious surfaces is defined in Appendix B. The language has been modified for clarity.

254.

Consider adding the name and signature of the inspector to the list of requirements for reports. (Page 18)

RESPONSE: The name and signature of the inspector has been added to this list.

255.

Recommend adding “maximizing vegetation” to the street/parking lot assessment. (page 19.)

RESPONSE: The language has been modified.

256.

Recommend itemizing relevant industrial dischargers for this permit, i.e.; landfills, hazardous waste, facilities subject to EPCRA Title III, Section 313. (page20)

RESPONSE: DWWM intends to place a list of examples of municipal industrial activity on the site registration application. Therefore, this information will be submitted to DWWM.

257.

Please define the term cut off concentration. Are these intended to be similar to EPA's benchmarks? If so, please explain. (page 20)

RESPONSE: The term 'cut off concentration' is defined. Cut off concentration is similar to EPA's benchmarks.

258.

Consider adding chemical/material storage, street sweeping, inlet/basin cleaning to this list. (page 20)

RESPONSE: The language has been modified to include these items.

259.

What are some of the reasons that an individual permit may be required? (page 21)

RESPONSE: Title 47, Series 10, Subsection 13.6.b.2 of the West Virginia Regulations specifies the instances where an individual permit may be required.

260.

Recommend monitoring more than one outfall so that results are considered representative. (page 23)

RESPONSE: DWWM has taken this recommendation into consideration. For this permit cycle, DWWM has decided to require only one sample outfall of WV's small MS4's. In future permits, more outfalls may be required to be sampled. It's also important to note that nearly 100% of WV's MS4s discharge into impaired waterbodies. It is anticipated that additional sampling will occur in order to meet the provisions in Part III.D

261.

Recommend following EPA's Program Evaluation Guidance. (page 25)

RESPONSE: The MS4 program evaluation guidance document link has been added to the fact sheet that accompanies this permit.