

# **NC MS4 Stormwater Management Program Evaluation and Improvement Guide**

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## **Propose**

This guide does not impose any new legally binding requirements on the local government. The primary purpose of the MS4 (municipal separate storm sewer system) Stormwater Management Improvement Guide is to assist MS4s in strengthening their stormwater management programs. The objective of the guide is to facilitate the creation of MS4 stormwater management programs which are clear, consistent with applicable regulations, and enforceable.

## **How to Use this Guide**

While not intended to be definitive or comprehensive for all MS4s, this guide contains examples to identify and evaluate activities local governments perform to comply with the MS4 permit requirements. Local governments vary widely in storm water management experience and sophistication, size, topography, land use, receiving water conditions, resources, needs, and other factors. Programs suggested in this guide are not intended to replace or override existing, more stringent or differently-worded provisions and programs that are equally effective in meeting the applicable regulations, permit conditions, and are protective of water quality standards.

DWQ recommends that local government review the questions presented in this guide, evaluate their existing programs and consider how they might incorporate similar programs into their Stormwater Management Program as appropriate. DWQ anticipates that local governments will tailor provisions to meet their specific needs, goals, and resources.

## **Contents**

The first section identifies basic information about the MS4, followed by sections based largely on the six minimum control measures required in the Phase II stormwater regulations. For each minimum measure, the guide is further broken down:

- What Federal Regulations mandate
- What State Regulations mandate
- How to Evaluate the Program Effectiveness

Again, the questions presented in this guide are meant to evaluate existing programs and assist the local government in identifying programs that they may want to consider as appropriate to meet their various needs and goals based on their resources, storm water management experience and sophistication, size, topography, land use, receiving water conditions and other factors.

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## Background Information

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### Staff and Capital Improvement Projects

- \_\_\_ Number of staffed stormwater management position(s)
- \_\_\_ Does the have an organizational chart that shows where the responsible parties fit into the structure of the stormwater program?
- \_\_\_ Does the local government maintain a list of stormwater staff, their job descriptions, training requirements and records, SOP, etc.
- \_\_\_ Number of new stormwater management position(s) created or staffed for the reporting year.
- \_\_\_ Total annual budget (excluding Capital Improvement Projects) for the NPDES stormwater management program for the reporting year.
- \_\_\_ Number of Capital Improvement Projects planned.
- \_\_\_ Number of Capital Improvement Projects active.
- \_\_\_ Number of Capital Improvement Projects completed.
- \_\_\_ Total annual budget for Capital Improvement Projects for the reporting year.

### Stormwater Utility Fee

- \_\_\_ Has the local government established a Stormwater utility Fee?
- \_\_\_ If so, how much revenue is generated annually and what is the money spent on?

### Local Programs

- \_\_\_ Does the local government rely on another entity perform one or more of their Stormwater Programs?
- \_\_\_ Does the local government rely on Interagency Agreements?

### Partnerships

- \_\_\_ Has the local government entered into any partnerships with other organizations to pursue a stormwater management objectives? For example, CWEP, County soil and water, chamber of commerce, river-watch organizations.
- \_\_\_ Has the local government worked with EEP, the Clean Water Trust Fund or NCSU BAE on any local stormwater projects?
- \_\_\_ Does the local government have a stormwater stakeholder group of private citizens and organization representative to work on stormwater issues?

### Legal Authorities (Check all that apply)

- Stormwater Ordinance
- Stormwater Management Program
- Unified Development Ordinance
- IDDE Ordinance
- Flood Damage Protection Ordinance
- Interagency and/or local agreements
- Cooperative agreements
- MOU or partnerships and/or contracts
- Does the community have a pet waste/litter ordinance?
- Other

## Background Information

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### Buffer Rules

\_\_\_\_\_ Does the local government comply with the Buffer Rules?

### Contract Operations and/or Reliance on another Entity (Check all that apply)

- Transit Authorities
- Pesticide Application
- Construction
- Post-construction
- Street Washing
- Maintenance of right-a-ways
- GIS Mapping
- Monitoring
- Stream Restorations
- Litter or Solid Waste Pickup
- Recycling
- Household Waste
- Other

### Local Government's Operations and Industrial Facilities (Check all that apply)

- Transfer Stations
- Fleet Maintenance , vehicle wash facilities, vehicle maintenance and/or services facilities
- Airports (Does the facility have an industrial NPDES Permit?)
- Animal Shelters
- Waste Water Treatment Plants (Does the facility have an industrial NPDES Permit?)
- Construction debris sites
- Transit Authorities
- Public Works
- City Operations Center and/or Equipment Storage Facility
- Prisons
- Emergency Services, Fire and Police Departments
- Landfills
- Water Plants
- Other

### Outfalls

- \_\_\_\_\_ Number of outfalls  
\_\_\_\_\_ Number of outfalls discharging to impaired waters  
\_\_\_\_\_ Number of retrofits for outfalls discharging to impaired waters

## Public Education

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### Federal Regulations 40 CFR Section 122.34 (b)

- (1) Public education and outreach on storm water impacts.
  - (i) You must implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff.
  - (ii) Guidance: You may use storm water educational materials provided by your State, Tribe, EPA, environmental, public interest or trade organizations, or other MS4s. The public education program should inform individuals and households about the steps they can take to reduce storm water pollution, such as ensuring proper septic system maintenance, ensuring the proper use and disposal of landscape and garden chemicals including fertilizers and pesticides, protecting and restoring riparian vegetation, and properly disposing of used motor oil or household hazardous wastes. EPA recommends that the program inform individuals and groups how to become involved in local stream and beach restoration activities as well as activities that are coordinated by youth service and conservation corps or other citizen groups. EPA recommends that the public education program be tailored, using a mix of locally appropriate strategies, to target specific audiences and communities. Examples of strategies include distributing brochures or fact sheets, sponsoring speaking engagements before community groups, providing public service announcements, implementing educational programs targeted at school age children, and conducting community-based projects such as storm drain stenciling, and watershed and beach cleanups. In addition, 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 storm water impacts. For example, providing information to restaurants on the impact of grease clogging storm drains and to garages on the impact of oil discharges. You are encouraged to tailor your outreach program to address the viewpoints and concerns of all communities, particularly minority and disadvantaged communities, as well as any special concerns relating to children.

### State Requirements Session Law 2006-246 Section 7

Permit Standards. – To obtain a Phase II National Pollutant Discharge Elimination System (NPDES) permit for stormwater management, an applicant shall, to the extent authorized by law, develop, implement, and enforce a stormwater management plan approved by the Commission that satisfies the six minimum control measures required by 40 Code of Federal Regulations § 122.34(b) (1 July 2003 Edition). Regulated entities may propose using any existing State or local program that relates to the minimum measures to meet, either in whole or in part, the requirements of the minimum measures.

### Evaluation of Program Effectiveness

The local government must administer a Public Education Program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff.

#### Goals and Objectives

\_\_\_\_\_ Has the local government defined goals and objectives of the Local Public Education and Outreach based on at least three high priority community wide issues? For example:

- ✓ Reduction of nitrogen in discharges from the MS4
- ✓ Promote pervious techniques used in the MS4; and
- ✓ Reduce floatables

## Public Education

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### Target Pollutants and Stormwater Issues

- \_\_\_ Has the local government identified target pollutants?
- \_\_\_ For each target pollutants, has the local government identified the appropriate target groups and developed stormwater educational material to appropriate target groups as likely to have a significant stormwater impact on the target pollutants?
- \_\_\_ Has the local government identified and described issues, such as specific pollutants, the sources of those pollutants, impacts on biology, and the physical attributes of stormwater runoff, in their education/outreach program?
- \_\_\_ Has the local government identified high quality watersheds in need of protection and the issues that may threaten the quality of these waters?
- \_\_\_ Has the local government identified targeted residential and industrial/commercial issues? The local government should identify at least three targeted residential issues and three targeted industrial/commercial.

Examples of residential issues:

- Residential car washing and auto maintenance control measures
- Off-pavement automobile parking
- Home and garden care activities
- Disposal of household hazardous waste
- Using rain barrels, rain gardens, porous pavers, permeable concrete, porous asphalt, etc.
- Litter prevention
- Importance of native vegetation for preventing soil erosion
- Public reporting of water quality issues
- Pet and other animal wastes

Examples of industrial/commercial issues:

- Automobile repair and maintenance
- Waste disposal
- Using rain barrels, rain gardens, porous pavers, permeable concrete, porous asphalt, etc.
- Equipment and vehicle maintenance and repair
- Importance of good housekeeping
- Illicit discharge detection and elimination observations

### Outreach

- \_\_\_ For each target pollutants, has the local government identified the appropriate target groups and developed stormwater educational material to appropriate target groups as likely to have a significant stormwater impact on the target pollutants? The local government may rely on state-supplied Public Education and Outreach materials, as available, when implementing its own program.
- \_\_\_ Has the local government established a stormwater hotline/helpline?
- \_\_\_ Has the local government developed and maintained a web site?
- \_\_\_ Does the web site include information on water quality, stormwater projects and activities, and ways to contact stormwater management program staff?

## Public Education

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\_\_\_\_\_ Has the local government distributed educational materials to the community, conducted public outreach activities, continued to raise public awareness on the causes and impacts of stormwater pollution, and informed the public on steps they can take to reduce or prevent stormwater pollution?

Does the local government's outreach program include at least two of the following (check all that apply):

- Newspaper articles and/or inserts?
- Kiosks and signage?
- Targeted direct mail?
- Displays at the point-of purchase?
- Utility bill inserts?

Does the local government's outreach program include at least two of the following (check all that apply):

- Public meetings?
- Community events?
- Contest?
- Storm drain marking?
- Stream and Litter cleanups?
- Group presentation and/or speeches?

Does the local government's outreach program, include at least three of the following (check all that apply):

- News coverage?
- Workshops and class room outreach?
- Distributing promotional giveaways and specialty items?
- Brochures, displays, signs, welcome packets, and pamphlets?
- Local cable access?
- Newsletters?

### Annual Assessment

Does the local government assess its education/outreach program annually through any of the following (check all that apply):

- Direct evaluations?
- Interviews?
- Surveys?
- Review of media clippings?
- Other?

\_\_\_\_\_ Does the local government track public education outreach activities (e.g., the number of attendees and/or stormwater-related calls/emails/letters received

\_\_\_\_\_ Does the local government adjust its educational materials and the delivery of such materials to address any shortcomings found as a result of this assessment?

\_\_\_\_\_ Does the local government document campaign reach and frequency to public for each broadcast media like radio and TV, (including those elements implemented locally or through a cooperative agreement)?

\_\_\_\_\_ For each media, event or activity, including those elements implemented locally or through a cooperative agreement does the local government measure and record the extent of exposure?

## **Public Education**

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### Documents and/or Records (check all that apply)

- List of identified target pollutants likely to be generated from urban settings
- For each target pollutants, list of identified the appropriate target groups
- Copies of stormwater educational material
- List or summary of public education and public involvement outreach and/or public involvement activities

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## Public Involvement

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### Federal Regulations 40 CFR Section 122.34 (b)

- (2) Public involvement/participation.
- (i) You must, at a minimum, comply with State, Tribal and local public notice requirements when implementing a public involvement/ participation program.
  - (ii) Guidance: EPA recommends that the public be included in developing, implementing, and reviewing your storm water management program and that the public participation process should make efforts to reach out and engage all economic and ethnic groups. Opportunities for members of the public to participate in program development and implementation include serving as citizen representatives on a local storm water management panel, attending public hearings, working as citizen volunteers to educate other individuals about the program, assisting in program coordination with other pre-existing programs, or participating in volunteer monitoring efforts. (Citizens should obtain approval where necessary for lawful access to monitoring sites.)

### State Requirements Session Law 2006-246 Section 7

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### Evaluation of Program Effectiveness

The local government must administer a Public Involvement and Participation Program that provides opportunities for the public, including major economic and ethnic groups, to participate in program development and implementation. Describe how the local government actively involves potentially affected stakeholder groups, including commercial and industrial businesses, trade associations, environmental groups, homeowners associations, students, and educational organizations, among others.

### Public Involvement

- \_\_\_ Did the local government conduct at least one public meeting to allow the public an opportunity to review and comment on the Stormwater Plan? Public meetings may include Public Hearings, stakeholder meetings, HOA, or other meetings.
- \_\_\_ Does the local government promote participation in the development and implementation of the SWMP?
- \_\_\_ Does the local government provide a mechanism for public involvement (e.g., a citizens' or stakeholders' group(s) and/or partnerships)? The local government may establish a stand-alone group or utilize an existing group or process.
- \_\_\_ Does the group consist of a balanced representation of affected parties, including residents, business owners, and environmental organizations in the MS4 area and/or affected watershed?
- \_\_\_ Does the mechanism for public involvement include education briefings and information for the general public and other branches of local government (i.e., Planning Board, the Board of Aldermen)?
- \_\_\_ Prior to changes being made to the Stormwater Management Plan and Ordinances does the local government hold public hearings to gather the public's input?
- \_\_\_ Does the local government promote participation in the development and implementation of the SWMP?

## Public Involvement

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Does the local government's public involvement program include (check all that apply):

- A Stormwater Steering Committee (or similar advisory group)?
- Stream clean-up events?
- Adopt-a-stream, Adopt-a-drain, Adopt-a-highway or Adopt-a-trail programs?
- Reforestation programs or wetland planting programs?
- Volunteer monitoring programs?
- Storm-drain stenciling?
- Neighborhood coordinators to become active in the program (i.e., building a rain garden)?
- Working with citizen volunteers willing to educate others about the program?
- Sponsoring and participating in Big Sweep?
- Forming partnerships with local businesses?
- Poster contest?

### Hot-line and Web Site

\_\_\_\_\_ Has the local government established a stormwater hotline/helpline?

The hotline/helpline does not have to be a dedicated Stormwater hotline/helpline, provided it is clear that input on stormwater issues and the stormwater program can be submitted to appropriate staff.

\_\_\_\_\_ Does the web site should include information on ways to get involved and participate in the local government's stormwater management program?

### Annual Assessment

\_\_\_\_\_ Does the local government assess its public involvement program annually?

### Documents and/or Records (check all that apply)

- Minutes of Public Hearings, stakeholder meetings, HOA, or other meetings
- Records of Stream clean-up events
- Records Adopt-a-stream, Adopt-a-drain, Adopt-a-highway or Adopt-a-trail programs
- Records of reforestation programs or wetland planting programs
- Records of volunteer monitoring programs
- Records of storm drain stenciling and other activities (i.e., building a rain garden)

## **Illicit Discharge Detection and Elimination Program (IDDE)**

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### **Federal Regulations 40 CFR Section 122.34 (b)**

- (3) Illicit discharge detection and elimination.
  - (i) You must develop, implement and enforce a program to detect and eliminate illicit discharges (as defined at Sec. 122.26(b)(2)) into your small MS4.
  - (ii) You must:
    - (A) Develop, if not already completed, a storm sewer system map, showing the location of all outfalls and the names and location of all waters of the United States that receive discharges from those outfalls;
    - (B) To the extent allowable under State, Tribal or local law, effectively prohibit, through ordinance, or other regulatory mechanism, non-storm water discharges into your storm sewer system and implement appropriate enforcement procedures and actions;
    - (C) Develop and implement a plan to detect and address non-storm water discharges, including illegal dumping, to your system; and
    - (D) Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste.
  - (iii) You need address the following categories of non-storm water discharges or flows (i.e., illicit discharges) only if you identify them as significant contributors of pollutants to your small MS4: water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20)), uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, and street wash water (discharges or flows from fire fighting activities are excluded from the effective prohibition against non-storm water and need only be addressed where they are identified as significant sources of pollutants to waters of the United States).
  - (iv) Guidance: EPA recommends that the plan to detect and address illicit discharges include the following four components: procedures for locating priority areas likely to have illicit discharges; procedures for tracing the source of an illicit discharge; procedures for removing the source of the discharge; and procedures for program evaluation and assessment. EPA recommends visually screening outfalls during dry weather and conducting field tests of selected pollutants as part of the procedures for locating priority areas. Illicit discharge education actions may include storm drain stenciling, a program to promote, publicize, and facilitate public reporting of illicit connections or discharges, and distribution of outreach materials.

### **State Requirements Session Law 2006-246 Section 7**

Permit Standards. – To obtain a Phase II National Pollutant Discharge Elimination System (NPDES) permit for stormwater management, an applicant shall, to the extent authorized by law, develop, implement, and enforce a stormwater management plan approved by the Commission that satisfies the six minimum control measures required by 40 Code of Federal Regulations § 122.34(b) (1 July 2003 Edition). Regulated entities may propose using any existing State or local program that relates to the minimum measures to meet, either in whole or in part, the requirements of the minimum measures.

### **Evaluation of Program Effectiveness**

The local government must develop, implement and enforce a program to detect and eliminate illicit discharges (as defined at Sec. 122.26(b)(2)).

## **Illicit Discharge Detection and Elimination Program (IDDE)**

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### Ordinance and Enforcement

To meet this requirement, the local government must establish and maintain adequate legal authorities to prohibit illicit discharges and enforce the approved Illicit Discharge Detection and Elimination Program. If the local government does not have the legal authority to develop an enforceable ordinance to prohibit illicit discharges to their MS4, their Stormwater Program must describe how they will rely on other entities that do have the necessary authority to prohibit illicit discharges.

- \_\_\_\_\_ Does the local government have an ordinance to prohibit illicit discharges?
- \_\_\_\_\_ Does the local government have written procedures for implementing and enforcing the IDDE Program including appropriate enforcement procedures and actions?

Written procedures may include:

- Right-of Entry
- Appropriate enforcement procedures and actions
- A plan to detect and address illicit discharges to the local government's system, including discharges from illegal dumping and spills,
- A written inspection program to detect dry weather flows at system outfalls
- A description of procedures for tracing the source of an illicit discharge, including the specific techniques local government will use to detect the location of the source,
- A description of procedures for removing the source of the illicit discharge,

- \_\_\_\_\_ Has the local government developed and implemented an Enforcement Response Plan (ERP), which describes the action to be taken for common violations associated with the IDDE program?
- \_\_\_\_\_ Does the local government have the ability to require that violators cease and desist illicit discharges or discharges of stormwater in violation of any ordinance or standard and/or cleanup and abate such discharges, including the ability to require the discharger to abate and clean up their discharge, spill, or pollutant release; or perform the clean up and abatement work and bill the responsible party, or if a situation persists where pollutant-causing sources or activities are not abated, provide the option to order the cessation of activities until such problems are adequately addressed?
- \_\_\_\_\_ Does the local government have the ability to levy citations or administrative fines against responsible parties and require recovery and remediation costs from responsible parties.
- \_\_\_\_\_ Does the local government have the ability to impose civil or criminal sanctions and escalate corrective response for persistent non-compliance, repeat or escalating violations, or incidents of major environmental harm?
- \_\_\_\_\_ Does the local government use verbal warnings and written notices of non-compliance and/or violation?
- \_\_\_\_\_ Does the local government have the legal ability to employ a combination of the enforcement actions and to escalate enforcement responses where necessary to address persistent non-compliance, repeat or escalating violations, or incidents of major environmental harm?
- \_\_\_\_\_ Does the local government have the legal ability to assess monetary fines, which may include civil and administrative penalties?
- \_\_\_\_\_ Does the local government have the legal authority to issue stop work orders that require construction activities to be halted, except for those activities directed at cleaning up, abating discharge, and installing appropriate control measures?

## **Illicit Discharge Detection and Elimination Program (IDDE)**

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- \_\_\_\_\_ Does the local government have the legal authority to perform work necessary to improve erosion control measures and collect the funds from the responsible party in an appropriate manner, such as collecting against the project's bond or directly billing the responsible party to pay for work and materials?
- \_\_\_\_\_ Does the local government track instances of non-compliance?

Do enforcement case documents include (check all that apply):

- Name of owner/operator of facility or site of violation?
- Repeat or chronic violator?
- Location of stormwater source?
- Description of violation?
- Required schedule for returning to compliance?
- Description of enforcement response used, including escalated responses if repeat violations occur or violations are not resolved in a timely manner?
- Accompanying documentation of enforcement response (e.g., notices of noncompliance, notices of violations)?
- Any referrals to different departments or agencies?
- Date violation was resolved?

### Storm sewer system map

- \_\_\_\_\_ Has the local government developed a storm sewer system map, showing the location of major outfalls and the names and location of all waters of the United States that receive discharges from those outfalls?
- \_\_\_\_\_ Has the local government mapped stormwater drainage system components?

Does the map include (check all that apply):

- Drainage areas
- Storm sewer pipes
- Detention ponds and other structural BMPs
- Location and dimensions of any culvert crossings
- Catch basins
- Manhole locations
- Number and size of connections (inlets/outlets) to catch basins and manholes, and the direction of flow?
- Type of conveyance system (i.e., either closed pipe or open drainage)
- For closed pipe systems - pipe material, shape, and size
- For open drainage systems - channel/ditch lining material, shape, and dimensions.

Major municipal separate storm sewer outfall (or "major outfall") means a municipal separate storm sewer outfall that discharges from a single pipe with an inside diameter of 36 inches or more or its equivalent (discharge from a single conveyance other than circular pipe which is associated with a drainage area of more than 50 acres); or for municipal separate storm sewers that receive storm water from lands zoned for industrial activity (based on comprehensive zoning plans or the equivalent), an outfall that discharges from a single pipe with an inside diameter of 12 inches or more or from its equivalent (discharge from other than a circular pipe associated with a drainage area of 2 acres or more).

## **Illicit Discharge Detection and Elimination Program (IDDE)**

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### Reporting

- \_\_\_\_\_ Has the local government established and publicized a reporting mechanism for the public to report illicit discharges?
- \_\_\_\_\_ Does the local government conduct reactive inspections in response to complaints and follow-up inspections as needed to ensure that corrective measures have been implemented?
- \_\_\_\_\_ Does the local government have a written spill/dumping response procedures?
- \_\_\_\_\_ Does the written spill/dumping response procedure include a flow chart or phone tree, or similar list for internal use, that shows the procedures for responding to notices of illicit discharges, the various responsible agencies and their contacts, and who would be involved in illicit discharge incidence response?

### Dry Weather Flows

- \_\_\_\_\_ Has the local government developed and implemented a plan to detect and address non-storm water discharges, including illegal dumping, to the MS4?
- \_\_\_\_\_ Does the local government conduct dry weather inspections and take reasonable steps to mitigate any illicit dumping discovered during these inspections? Describe the steps taken for any illicit discharge and/or dumping discovered during these inspections.
- \_\_\_\_\_ Does the local government implement, assess annually and update as necessary a written dry weather field screening procedure for detecting and tracing the sources of illicit discharges and for removing the sources or reporting the sources to the State to be properly permitted?
- \_\_\_\_\_ Does the local government establish benchmark concentration levels for dry weather field screening and analytical monitoring whereby exceedance of the benchmark requires follow-up investigations to be conducted to identify and eliminate the source causing the exceedance of the benchmark?
- \_\_\_\_\_ Do dry weather field screening procedures identify field screening station and the bases for the selection (e.g., major or priority outfalls)?
- \_\_\_\_\_ If flow or ponded runoff is observed and there has been at least seventy-two (72) hours of dry weather, does the local government determine the source(s)?
- \_\_\_\_\_ If flow or ponded runoff is observed and there has been at least seventy-two (72) hours of dry weather, does the local government collect a sample for field screening and analytical monitoring if necessary to determine the source(s)?

If the local government determines it is necessary to collect and analyze the sample does the local government (check all that apply):

- Identify the field screening station(s)?
  - Describe the site (e.g., conveyance type, land uses)?
  - Describe the flow estimation (e.g., width of water surface, approximate depth of water, approximate flow velocity, flow rate)?
  - Record visual observations (e.g., odor, color, clarity, floatables, deposits/stains, vegetation condition, structural condition, and biology)?
  - Compare analytical monitoring results to benchmark concentration levels?
  - Describe action taken?
- \_\_\_\_\_ When does the local government initiate an investigation(s) to identify and locate the source of any continuous or intermittent non-stormwater discharges? (i.e., within 24 hours of becoming aware of the illicit discharge).

## Illicit Discharge Detection and Elimination Program (IDDE)

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- \_\_\_ Once the source of the illicit discharge has been determined, when does the local government notify the responsible party of the problem?
- \_\_\_ Does the local government require the responsible party to conduct all necessary corrective actions to eliminate the non-stormwater discharge?
- \_\_\_ Upon being notified that the discharge has been eliminated, does the local government conduct a follow-up investigation and field screening, to verify that the discharge has been eliminated?
- \_\_\_ Does the local government track all investigations to document at the date(s) the illicit discharge was observed; the results of the investigation; any follow-up of the investigation; and the date the investigation was closed?

### Spills and Sanitary Sewer Overflows (SSOs)

- \_\_\_ Does the local government investigate and mitigate any reported illicit discharge?
- \_\_\_ Does the local government have written procedures for conducting investigations into the source of all identified illicit discharges, including approaches to requiring such discharges to be eliminated?
- \_\_\_ Does the local government assess annually and update as necessary written procedures to identify and report sanitary sewer overflows and sewer leaks to the system operator?

Written procedures can be a description of procedures to follow when SSOs are identified, e.g., SSO shall be tracked and a letter will be forwarded to appropriate department when a SSO is located with information as necessary for the department.

### Procedures to identify and eliminate failed septic system

- \_\_\_ Does the local government assess annually and update as necessary written procedures to identify and report to the County health department failed septic systems located within the permittee's planning jurisdiction?

Written procedures can be a description of procedures to follow when a failed septic systems is located, e.g., a letter will be forwarded to the health department when a failed septic systems is located with information as necessary for the health department.

### Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste.

- \_\_\_ Does the local government inform businesses and the general public of hazards associated with illegal discharges and improper disposal of waste?

### Illicit Discharge Management Tracking System

- \_\_\_ Does the local government track investigations and document at the date(s) the illicit discharge was observed; the results of the investigation; any follow-up of the investigation; and the date the investigation was closed?
- \_\_\_ Does the local government track the location of illicit discharges?

## Illicit Discharge Detection and Elimination Program (IDDE)

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### Training

- \_\_\_\_\_ Describe the local government employee and contractor training program.
- \_\_\_\_\_ Does the local government have a Training Plan (i.e., Who, What, and When) for both staff and contractors, materials used for training and training records?
- \_\_\_\_\_ Does the local government implement a training program for all municipal field staff, who, as part of their normal job responsibilities, may come into contact with or otherwise observe an illicit discharge or illicit connection to the storm sewer system.?
- \_\_\_\_\_ Has the local government identified appropriate staff, the schedule for conducting the training and the proper procedures for reporting and responding to an illicit discharge or connection?
- \_\_\_\_\_ Does the local government provide follow-up training as needed to address changes in procedures, techniques, or staffing?
- \_\_\_\_\_ Does the local government document and maintain records of the training provided and the staff trained?

### Annual Assessment

- \_\_\_\_\_ Does the local government annually reviewed and revised as necessary the IDDE ordinances or other regulatory mechanisms, or adopt any new ordinances or other regulatory mechanisms that provide the local government with adequate legal authority to prohibit illicit connections and discharges and enforce the approved IDDE Program?
- \_\_\_\_\_ Does the local government annually assess and update as necessary a map identifying major outfalls and stormwater drainage system components?
- \_\_\_\_\_ Does the local government annually assess and update as necessary written procedures?

### Documents and/or Records (check all that apply)

- IDDE Ordinance
- Written procedures for implementing and enforcing the IDDE Program
- Documented enforcement procedures (e.g., Enforcement Response Plan (ERP))
- Written spill/dumping response procedure, and a flow chart or phone tree, or similar list
- Written dry weather field screening procedures
- Storm Sewer System Map
- Inspection records
- Training Plan and training records
- Educational Materials
- Enforcement Records

## **Erosion and Sediment Control Program**

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### **Federal Regulations 40 CFR Sections 122.34 (b)(4) and 122.35**

#### 40 CFR 122.34

- (4) Construction site storm water runoff control.
- (i) You must develop, implement, and enforce a program to reduce pollutants in any storm water runoff to your small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of storm water discharges from construction activity disturbing less than one acre must be included in your program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more. If the NPDES permitting authority waives requirements for storm water discharges associated with small construction activity in accordance with Sec. 122.26(b)(15)(i), you are not required to develop, implement, and/or enforce a program to reduce pollutant discharges from such sites.
- (ii) Your program must include the development and implementation of, at a minimum:
  - (A) An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State, Tribal, or local law;
  - (B) Requirements for construction site operators to implement appropriate erosion and sediment control best management practices;
  - (C) Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality;
  - (D) Procedures for site plan review which incorporate consideration of potential water quality impacts;
  - (E) Procedures for receipt and consideration of information submitted by the public, and
  - (F) Procedures for site inspection and enforcement of control measures.
- (iii) Guidance: Examples of sanctions to ensure compliance include non-monetary penalties, fines, bonding requirements and/or permit denials for non-compliance. EPA recommends that procedures for site plan review include the review of individual pre-construction site plans to ensure consistency with local sediment and erosion control requirements. Procedures for site inspections and enforcement of control measures could include steps to identify priority sites for inspection and enforcement based on the nature of the construction activity, topography, and the characteristics of soils and receiving water quality. You are encouraged to provide appropriate educational and training measures for construction site operators. You may wish to require a storm water pollution prevention plan for construction sites within your jurisdiction that discharge into your system. See Sec. 122.44(s) (NPDES permitting authorities' option to incorporate qualifying State, Tribal and local erosion and sediment control programs into NPDES permits for storm water discharges from construction sites). Also see Sec. 122.35(b) (The NPDES permitting authority may recognize that another government entity, including the permitting authority, may be responsible for implementing one or more of the minimum measures on your behalf.)

#### 40 CFR 122.35

Pursuant to 40 CFR 122.35, an operator of a regulated small MS4 may share the responsibility to implement the minimum control measures with other entities provided:

- (1) The other entity, in fact, implements the control measure;
- (2) The particular control measure, or component thereof, is at least as stringent as the corresponding NPDES permit requirement; and
- (3) The other entity agrees implements the control measure on behalf of the MS.

## **Erosion and Sediment Control Program**

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### **State Requirements Session Law 2006-246 Section 7**

Permit Standards. – To obtain a Phase II National Pollutant Discharge Elimination System (NPDES) permit for stormwater management, an applicant shall, to the extent authorized by law, develop, implement, and enforce a stormwater management plan approved by the Commission that satisfies the six minimum control measures required by 40 Code of Federal Regulations § 122.34(b) (1 July 2003 Edition). Regulated entities may propose using any existing State or local program that relates to the minimum measures to meet, either in whole or in part, the requirements of the minimum measures.

### **The NCDENR Division of Land Resources Erosion and Sediment Control Program**

The NCDENR Division of Land Resources Erosion and Sediment Control Program whether implemented by the state or a state delegated program effectively meets the requirements of the Construction Site Runoff Controls by permitting and controlling development activities disturbing one or more acres of land surface and those activities less than one acre that are part of a larger common plan of development. This program is authorized under the Sediment pollution Control Act of 1973 and Chapter 4 of Title 15A of the North Carolina Administrative Code. This program includes procedures for public input, sanctions to ensure compliance, requirements for construction site operators to implement appropriate erosion and sediment control practices, review of site plans which incorporates consideration of potential water quality impacts, and procedures for site inspection and enforcement of control measures. The NCG010000 permit establishes requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality.

### **Evaluation of Program Effectiveness**

- \_\_\_\_\_ Has the local government specified that they rely on delegated local program or the NCDENR Division of Land Resources to satisfy the Erosion and Sediment Control Program?
- \_\_\_\_\_ Does the local government provide and promote the NCDENR, Division of Land Resources “Stop Mud” hotline to notify the appropriate authorities of observed erosion and sedimentation problems?
- \_\_\_\_\_ If not, does the local government provide and promote a means for the public to notify the appropriate authorities of observed erosion and sedimentation problems?
- \_\_\_\_\_ In addition to the State and/or a delegated state program, has the local government developed a local Erosion and Sediment Control Program for construction site stormwater runoff control?

## Post-Construction Stormwater Controls

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### Federal Regulations 40 CFR Section 122.34 (b)

- (5) Post-construction storm water management in new development and redevelopment.
- (i) You must develop, implement, and enforce a program to address storm water runoff from new development and redevelopment projects that disturb 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, that discharge into your small MS4. Your program must ensure that controls are in place that would prevent or minimize water quality impacts.
- (ii) You must:
- (A) Develop and implement strategies which include a combination of structural and/or non-structural best management practices (BMPs) appropriate for your community;
- (B) Use an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects to the extent allowable under State, Tribal or local law; and
- (C) Ensure adequate long-term operation and maintenance of BMPs.
- (iii) Guidance: If water quality impacts are considered from the beginning stages of a project, new development and potentially redevelopment provide more opportunities for water quality protection. EPA recommends that the BMPs chosen: be appropriate for the local community; minimize water quality impacts; and attempt to maintain pre-development runoff conditions. In choosing appropriate BMPs, EPA encourages you to participate in locally-based watershed planning efforts which attempt to involve a diverse group of stakeholders including interested citizens. 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. In developing your program, you should consider assessing existing ordinances, policies, programs and studies that address storm water runoff quality. In addition to assessing these existing documents and programs, you should provide opportunities to the public to participate in the development of the program. Non-structural BMPs are preventative actions that involve management and source controls such as: policies and ordinances that provide requirements and standards to direct growth to identified areas, protect sensitive areas such as wetlands and riparian areas, maintain and/or increase open space (including a dedicated funding source for open space acquisition), provide buffers along sensitive water bodies, minimize impervious surfaces, and minimize disturbance of soils and vegetation; policies or ordinances that encourage infill development in higher density urban areas, and areas with existing infrastructure; education programs for developers and the public about project designs that minimize water quality impacts; and measures such as minimization of percent impervious area after development and minimization of directly connected impervious areas. Structural BMPs include: storage practices such as wet ponds and extended-detention outlet structures; filtration practices such as grassed swales, sand filters and filter strips; and infiltration practices such as infiltration basins and infiltration trenches. EPA recommends that you ensure the appropriate implementation of the structural BMPs by considering some or all of the following: pre-construction review of BMP designs; inspections during construction to verify BMPs are built as designed; post-construction inspection and maintenance of BMPs; and penalty provisions for the noncompliance with design, construction or operation and maintenance. Storm water technologies are constantly being improved, and EPA recommends that your requirements be responsive to these changes, developments or improvements in control technologies.

## **Post-Construction Stormwater Controls**

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### **State Requirements**

#### Post-construction Stormwater Runoff Controls for Development in the Jordan Watershed

Compliance with the stormwater management and water quality protection promulgated in Rule 15A NCAC 02B .0265 Stormwater Management for New Development, and Rule 15A NCAC 02B.0266 Stormwater Management for Existing Development effectively meets the Post-construction Stormwater Runoff control requirements within the Jordan Lake Water Supply.

#### Post-Construction Stormwater Runoff Controls for new development within the Goose Creek Watershed

Compliance with the stormwater management and water quality protection promulgated in Rules 15A NCAC 02B .0601, .0602, .0605, .0605, .0607 and .0609 effectively meets the Post-construction Stormwater Runoff control requirements within the Goose Creek Watershed.

#### Post-Construction Stormwater Runoff Controls for new development within the Coastal Counties

Compliance with the stormwater management and water quality protection the stormwater management and water quality protection required by Session Law 2008-211, Sections 2.(a), 2.(b), 2.(c), 2.(d), 2.(e) and 2.(f) effectively meets the Post-construction Stormwater Runoff control requirements within the 20 Coastal Counties.

#### Post-Construction Stormwater Runoff Controls for new development within the Non Coastal Counties outside Jordan Lake

Compliance with the stormwater management and water quality protection the stormwater management and water quality protection required by Session Law 2006-246, effectively meets the Post-construction Stormwater Runoff control requirements within the non Coastal Counties.

#### Universal Stormwater Management Program (USMP)

Adoption of the Universal Stormwater Management Program (USMP) meets the requirement to develop and implement a Post-Construction Program by the local government adopting an ordinance that complies with the requirements of 15A NCAC 02H .1020 and the requirements of 15A NCAC 02B .0104(f). Adoption of the USMP may not satisfy water quality requirements associated with the protection of threatened or endangered species or those requirements associated with a Total Maximum Daily Load (TMDL). The requirements of the USMP shall supercede and replace all other existing post-construction stormwater requirements within that jurisdiction, as specified

### **Evaluation of Program Effectiveness**

The local government must develop and implement site design strategies, control measures, and other practices that are clear, specific, measurable, and enforceable to prevent or minimize water quality impacts of storm water runoff from new development and redevelopment projects that disturb 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, that discharge into their MS4.

## Post-Construction Stormwater Controls

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### Applicable State Post Construction Requirements

Does the local government have a copy of the minimum State Post Construction Requirements (check all that apply)?

- Session Law 2006-246
- Session Law 2008-211
- Water Supply Watershed I (WS-I) – 15A NCAC 2B.0212.
- Water Supply Watershed II (WS-II) – 15A NCAC 2B.0214.
- Water Supply Watershed III (WS-III) – 15A NCAC 2B.0215.
- Water Supply Watershed IV (WS-IV) – 15A NCAC 2B.0216.
- Freshwater High Quality Waters (HQW) – 15A NCAC 2H.1006.
- Freshwater Outstanding Resource Waters (ORW) – 15A NCAC 2H.1007.
- The Neuse River Basin Nutrient Sensitive Waters (NSW) Management Strategy – 15A NCAC 2B.0235.
- The Tar-Pamlico River Basin Nutrient Sensitive (NSW) Management Strategy – 15A NCAC 2B.0258.
- The Randleman Lake Water Supply Watershed Nutrient Management Strategy – 15A NCAC 2B.0251.
- Jordan Lake 15A NCAC 02B .0265
- Goose Creek Watershed 15A NCAC 2B .0600 -.0609
- USMP

### BMP Manual

\_\_\_\_\_ Does the local government use an approved BMP Manual (either State BMP Manual or approved local BMP Manual)?

### Does the local government have adequate legal authority?

- \_\_\_\_\_ Has the local government developed by ordinance (or similar regulatory mechanism) a program to address stormwater runoff from new development and redevelopment?
- \_\_\_\_\_ Does the local government annually review and revise its ordinances or other legal authorities, or adopt any new ordinances or other legal authorities to meet the objectives of the Post-Construction Stormwater Management Program?
- \_\_\_\_\_ Does the local government have the authority to review designs and proposals for new development and redevelopment to determine whether adequate stormwater control measures will be installed, implemented, and maintained?
- \_\_\_\_\_ Does the local government have the authority to request information such as stormwater plans, inspection reports, and monitoring results, and other information deemed necessary to assess compliance with the Post-Construction Stormwater Management Program?
- \_\_\_\_\_ Does the local government have the authority to enter private property for the purpose of inspecting at reasonable times any facilities, equipment, practices, or operations related to stormwater discharges to determine whether there is compliance the Post-Construction Stormwater Management Program?
- \_\_\_\_\_ Does the local government have the authority to impose or require recorded deed restrictions and protective covenants that ensure development activities will maintain the project consistent with approved plans?

### Does the local government have clear, specific, measurable performance standards?

\_\_\_\_\_ At a minimum, does the local government implement and enforce the state's performance standards and either adopt the state stormwater BMP manual or have an approved BMP manual?

## Post-Construction Stormwater Controls

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- \_\_\_ Does the local government ensure site planning, design, construction, and maintenance strategies for new development maintains or restores, to the maximum extent technically feasible, the predevelopment hydrology of the property with regard to the temperature, rate, volume, and duration of flow?

Many traditional stormwater management practices, and the permit language that drives them, fail to address the hydrologic modifications that increase the quantity of stormwater discharges, and cause excessive erosion and stream channel degradation. Frequently the volume, duration, and velocity of stormwater discharges cause degradation to aquatic systems. DWQ recommends that wherever possible the volume retention practices of infiltration, evapotranspiration and rainwater harvesting as stormwater management mechanisms to meet the State's post-construction standards. Infiltration may not be appropriate in all cases – conditions of soils, high seasonal water table, and other site constraints such as hot spot with the reasonable potential for significant pollutant loading(s) may not be appropriate for stormwater infiltration.

### Does the local government have a clear and specific site plan review process?

- \_\_\_ Does the local government have a requirement for a pre-application concept plan meeting (in addition to the requirement for the project applicant to submit a site plan for review)? During this meeting the project land owner or developer, the project design engineer, and municipal planning staff should discuss the conceptual designs that would be used to ensure that they meet the performance standards and ensure that stormwater and performance standards are addressed early in the development process. This is also an opportunity to provide training to developers and contractors.
- \_\_\_ Does the local government conduct site plan reviews of all new development and redeveloped sites which will disturb greater than or equal to one acre and discharge to the MS4 (including sites that disturb less than one acre that are part of a larger common plan of development or sale)? The site plan review must specifically address how the project applicant meets the performance standards and how the project will ensure long-term maintenance.
- \_\_\_ Does the local government have the authority to withhold approvals when standards are not met?
- \_\_\_ Does the local government exempt or exclude any development or agencies from review under the post-construction program?
- \_\_\_ Do procedures for the site plan review and approval process include inter-departmental consultations?
- \_\_\_ Do procedures for the site plan review required re-approval process when changes to an approved plan are desired?

### Are BMPs built as designed?

- \_\_\_ Does the local government conduct inspections during construction to verify BMPs are built as designed?
- \_\_\_ Is there a requirement to submit as-built certifications at the completion of a project?

### Does the local government track post-construction stormwater control measures subject to the PCP?

- \_\_\_ Does the local government maintain an inventory of projects with post-construction structural stormwater control measures installed and implemented at new development and redeveloped sites, including both public and private sector sites located within the permittee's jurisdiction area?
- \_\_\_ How many public and private BMPs in the community?
- \_\_\_ Is the inventory searchable by property location (either on paper or electronic)?

## **Post-Construction Stormwater Controls**

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\_\_\_\_\_ Does the inventory include basic information on each site, such as project name, owner's name and contact information, location, start/end date, a brief description of the stormwater control measure(s), latitude and longitude coordinates; frequency of required maintenance and inspections; and inspection information (e.g., date, findings, follow up activities, prioritization of follow-up activities, compliance status), etc.?

### Inspections: Does the local government ensure long-term maintenance of post-construction stormwater control measures?

- \_\_\_\_\_ Has the local government developed a procedure for being notified by construction operators/owners of their completion of active construction so that the post-construction inspection may be conducted?
- \_\_\_\_\_ Does the local government conduct and document inspections of the private and/or public structural stormwater control measures and if so, at what frequency? Is the frequency at least annually?
- \_\_\_\_\_ Does the local government require the owner of each structural BMP to conduct and document inspections of each structural BMP and if so, at what frequency? Is the frequency at least annually?
- \_\_\_\_\_ Does the local government document its inspection findings in an inspection report?

Does the inspection report include (check all that apply):

- The inspection date?
- Name and signature of inspector?
- Project location (street address, latitude/longitude, etc.) and inventory reference number?
- Current ownership information (for example, name, address, phone number, fax, and email)?
- A description of the condition of the structural stormwater control?
- Photographic documentation of all critical structural stormwater control measure components?
- Specific maintenance issues or violations found that need to be corrected by the property owner or operator along with deadlines and re-inspection dates?

Photographic documentation of all critical structural stormwater control measure components is recommended for future reference when conducting inspections and maintenance.

### Operation and Maintenance

\_\_\_\_\_ Does the local government require an operation and maintenance plan that ensures the adequate long-term operation of the structural BMPs required by the program?

All structural stormwater control measures installed and implemented to meet the performance standards of must be maintained in perpetuity.

- \_\_\_\_\_ Does the local government have a written description of operation and maintenance practices/procedures and schedule for structural stormwater controls?
- \_\_\_\_\_ Does the local government have a written description of the measures for monitoring, tracking, and maintenance requirements for stormwater management practices?
- \_\_\_\_\_ Does the local government perform maintenance of structural stormwater controls?
- \_\_\_\_\_ Does the owner or operator of a new development or redeveloped site perform maintenance of structural stormwater controls?

## Post-Construction Stormwater Controls

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- \_\_\_ Does the local government require a written agreement that allows the local government to conduct inspections of the structural stormwater control measures and also account for transfer of responsibility in leases and/or deeds? Does the agreement allow the local government 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?
- \_\_\_ Does the local government have the authority 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?
- \_\_\_ Does the local government require that property owners or operators of any new development or redeveloped site subject to the performance standards provide verification of maintenance for the approved structural stormwater control measures used to comply with the performance standards?

Verification may include a signed statement accepting responsibility for maintenance with a provision for transferring maintenance responsibility if the property is legally transferred to another party; and/or written conditions in the sales or lease agreement that require the recipient to assume responsibility for maintenance; and/or written conditions in project conditions, covenants and restrictions for residential properties assigning maintenance responsibilities to a home owner's association, or other appropriate group, for maintenance of structural and treatment control stormwater management practices; and/or any other legally enforceable agreement that assigns permanent responsibility for maintenance of structural or treatment control stormwater management practices.

- \_\_\_ Does the local government conduct a post-construction inspection to verify that the performance standards have been met?

### Are the requirements of the local Post Construction Program enforceable?

- \_\_\_ Does the local government document and maintain records of inspection findings and enforcement actions and make them available for review by the permitting authority?

Does the enforcement case documentation include (check all that apply):

- Name of owner/operator of facility or site of violation?
- Location of stormwater source?
- Description of violation?
- Required schedule for returning to compliance?
- Description of enforcement response?
- Accompanying documentation of enforcement response?
- Any referrals to different departments or agencies?
- Date violation was resolved?

- \_\_\_ Does the local government identify chronic violators and reduce the rate of noncompliance recidivism?
- \_\_\_ Does the local government summarize inspection results by chronic violators and include incentives, disincentives, or an increased inspection frequency at the operator's sites?
- \_\_\_ Has the local government developed and implemented an Enforcement Response Plan (ERP) or other document, which describes the action to be taken for common violations associated with the Post-Construction Stormwater Management Program?
- \_\_\_ Does the local government have the ability to promptly require that violators cease and desist discharges of stormwater in violation of any ordinance or standard and/or cleanup and abate such

## Post-Construction Stormwater Controls

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discharges, including the ability to require the discharger to abate and clean up their discharge, spill, or pollutant release; or perform the clean up and abatement work and bill the responsible party, or if a situation persists where pollutant-causing sources or activities are not abated, provide the option to order the cessation of activities until such problems are adequately addressed?

- \_\_\_\_\_ Does the local government have the ability to levy citations or administrative fines against responsible parties and require recovery and remediation costs from responsible parties?
- \_\_\_\_\_ Does the local government have the ability to impose civil or criminal sanctions and escalate corrective response, consistent with its ERP for persistent non-compliance, repeat or escalating violations, or incidents of major environmental harm?
- \_\_\_\_\_ Does the Enforcement Response Plan (ERP) describe how the local government will use verbal warnings and written notices of non-compliance and/or violation?
- \_\_\_\_\_ Are verbal warnings documented and specify the nature of the violation and required corrective action?
- \_\_\_\_\_ Do written notices of non-compliance and or violation stipulate the nature of the violation and the required corrective action, with deadlines for taking such action?
- \_\_\_\_\_ Does the local government have the legal authority to employ any combination of the enforcement actions and to escalate enforcement responses where necessary to address persistent non-compliance, repeat or escalating violations, or incidents of major environmental harm?

Does the local government provide ensure staff are qualified and developers are trained?

- \_\_\_\_\_ Does the local government rely on staff, another public entity and/or a consultant to conduct plan reviews, inspections and maintenance for the local government?
- \_\_\_\_\_ Does the local government provide training for staff and developers?
- \_\_\_\_\_ Are plan reviews performed by a qualified professional?
- \_\_\_\_\_ Are inspections and maintenance of permitted structural BMPs performed by a qualified professional?

NC State offers a program for BMP inspection and maintenance certification.

- \_\_\_\_\_ Does the local government provide educational materials and training for developers? New materials may be developed by the permittee, or the permittee may use materials adopted from other programs and adapted to the permittee's new development and redevelopment program.

Does the local government have adequate Post-Construction documentation?

Does the local government documentation include (check all that apply):

- An ordinance?
- A Stormwater Management Plan?
- BMP manual?
- Pre-application checklist?
- Pre-application minutes?
- Inventory and map of structural stormwater controls?
- Inspection and maintenance schedule for structural controls?
- Criteria for prioritizing inspection and maintenance needs?
- Structural controls inspection maintenance records?
- Standard Operating Procedures (SOPs) or description of review process?
- Documentation of plan review?
- Plan review checklist?

## Post-Construction Stormwater Controls

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- Inspection procedures/checklist?
- Inspection frequency/schedule?
- Inspection records?
- Documented enforcement procedures?
- Enforcement records?
- Staff training plan and records (i.e., Who, What, and When)?
- Training documentation for developers?
- Materials used for training?

### Annual Assessment

- \_\_\_\_\_ Does the local government annually reviewed and revised as necessary the Post-Construction Program including ordinances or other regulatory mechanisms, or adopt any new ordinances or other regulatory mechanisms that provide the local government with adequate legal authority to effectively implement a post-construction program?

**Session Law 2006-246 Section 9 (b)**

“In order to fulfill the post-construction minimum measure program requirement, a permittee, delegated program, or regulated entity ..... develop its own comprehensive watershed plan that is determined by the Department to meet the post-construction stormwater management measure required by 40 Code of Federal Regulations § 122.34(b)(5) (1 July 2003 Edition).”

**Evaluation of Program Effectiveness**

- \_\_\_ Has the local government developed and implemented a Watershed Protection Plan?
- \_\_\_ Does the Watershed Protection Plan 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?
- \_\_\_ Does the Watershed Protection Plan 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?
- \_\_\_ Does the Watershed Protection Plan require 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?
- \_\_\_ Does the Watershed Protection Plan prevent disturbances of natural waterbodies and natural drainage systems caused by development, including roads, highways, and bridges?
- \_\_\_ Does the Watershed Protection Plan avoid development in areas that are particularly susceptible to erosion and sediment loss?
- \_\_\_ Does the Watershed Protection Plan require standards to protect trees, and other vegetation?
- \_\_\_ Does the Watershed Protection Plan require policies to protect native soils, prevent topsoil stripping, and prevent compaction of soils?
- \_\_\_ Does the Watershed Protection Plan require water conservation policies that will reduce both stormwater and non- stormwater discharges via storm sewer systems?
- \_\_\_ Does the Watershed Protection Plan require policies that encourage stormwater practices close to the source of the runoff rather than downstream and lower in the watershed?
- \_\_\_ Does the Watershed Protection Plan identify the pollutant sources along with existing loads that need to be controlled?
- \_\_\_ Does the Watershed Protection Plan estimate the load reductions expected from management measures?
- \_\_\_ Does the Watershed Protection Plan describe the nonpoint source management measures that will need to be implemented to achieve the load reductions in the critical areas
- \_\_\_ Does the Watershed Protection Plan estimate the amount of technical and financial assistance needed, associated costs, and/or the sources and authorities that will be relied upon?
- \_\_\_ Does the Watershed Protection Plan include an information and educational component to enhance public understanding and encourage their early and continued participation in selecting, designing, and implementing the nonpoint source management measure that will be implemented?
- \_\_\_ Does the Watershed Protection Plan provide a schedule for implementing the nonpoint source management measures?
- \_\_\_ Does the Watershed Protection Plan describe the interim milestones for determining whether nonpoint source management measures or other control actions are being implemented?
- \_\_\_ Does the Watershed Protection Plan provide criteria that can be used to determine whether loading reductions are being achieved over time and
- \_\_\_ Does the Watershed Protection Plan monitor to evaluate the effectiveness of the Watershed Protection Plan efforts over time?

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## Pollution Prevention and Good Housekeeping

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### Federal Regulations 40 CFR Section 122.34 (b)

- (6) Pollution prevention/good housekeeping for municipal operations.
- (i) You must develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations. Using training materials that are available from EPA, your State, Tribe, or other organizations, your program must include employee training to prevent and reduce storm water pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and storm water system maintenance.
- (ii) Guidance: EPA recommends that, at a minimum, you consider the following in developing your program: maintenance activities, maintenance schedules, and long-term inspection procedures for structural and non-structural storm water controls to reduce floatables and other pollutants discharged from your separate storm sewers; controls for reducing or eliminating the discharge of pollutants from streets, roads, highways, municipal parking lots, maintenance and storage yards, fleet or maintenance shops with outdoor storage areas, salt/sand storage locations and snow disposal areas operated by you, and waste transfer stations; procedures for properly disposing of waste removed from the separate storm sewers and areas listed above (such as dredge spoil, accumulated sediments, floatables, and other debris); and ways to ensure that new flood management projects assess the impacts on water quality and examine existing projects for incorporating additional water quality protection devices or practices. Operation and maintenance should be an integral component of all storm water management programs. This measure is intended to improve the efficiency of these programs and require new programs where necessary. Properly developed and implemented operation and maintenance programs reduce the risk of water quality problems.

### State Requirements Session Law 2006-246 Section 7

Permit Standards. – To obtain a Phase II National Pollutant Discharge Elimination System (NPDES) permit for stormwater management, an applicant shall, to the extent authorized by law, develop, implement, and enforce a stormwater management plan approved by the Commission that satisfies the six minimum control measures required by 40 Code of Federal Regulations § 122.34(b) (1 July 2003 Edition). Regulated entities may propose using any existing State or local program that relates to the minimum measures to meet, either in whole or in part, the requirements of the minimum measures.

### Evaluation of Program Effectiveness

#### Local government owned and/or operated facilities

\_\_\_\_\_ Has the local government identified local government owned and/or operated facilities and/or activities?

Local government owned and/or operated facilities may include (check all that apply):

- Animal Shelters
- Composting facilities
- Easements, public right of ways, and other open spaces
- Emergency Services (Emergency Response, Police and Fire Departments)
- Equipment storage and maintenance facilities
- Fleet Maintenance
- Forestry Horticulture and Farms
- Fuel farms
- Golf Courses

## Pollution Prevention and Good Housekeeping

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- Hazardous waste treatment, storage and disposal facilities
- Hospitals
- Incinerators
- Industrial Parks
- Landfills
- Landscape maintenance on municipal property
- Local government Buildings
- Materials storage yards
- Parking Lots
- Parks and Recreation Areas
- Pesticide storage facilities
- Public buildings and parking lots
- Public golf courses
- Public Owned Open Spaces
- Public swimming pools
- Public works facilities
- Recycling and household hazardous waste facilities
- Oil collection centers
- Salt storage facilities
- Solid waste handling and transfer facilities
- Street repair and maintenance sites
- Structural stormwater controls
- Vacant Properties
- Vehicle Washing Facilities
- Wastewater treatment facilities
- Waste Transfer Stations

- \_\_\_\_\_ Does the local government have an inventory and/or map of facilities and operations owned and operated by the local government?
- \_\_\_\_\_ Does the inventory and/or map identify the stormwater outfalls corresponding to each of the facilities as well as the receiving waters to which these facilities discharge?
- \_\_\_\_\_ Does the inventory and/or map identify the manager of each facility and their contact information?
- \_\_\_\_\_ For each local government owned or operated facility, can the local government provide 1) a brief description of the operation 2) the location, 3) information on the receiving streams, including receiving stream name, stream segment, water quality classification, use support rating and if known, any water quality issues including threatened and endangered species and 4) brief description of the activities and/or operations?
- \_\_\_\_\_ Has the local government developed an O&M program for municipally-owned or operated facilities that includes inspection checklist and schedule?
- \_\_\_\_\_ Does the local government inspect local government owned and/or operated facilities to ensure materials and equipment are clean and orderly and to minimize the potential for pollutant discharge?
- \_\_\_\_\_ Does local government look for evidence of spills and immediately clean them up to prevent contact with precipitation or runoff.
- \_\_\_\_\_ Are inspections tracked for every facility?
- \_\_\_\_\_ Do inspection reports include identified deficiencies and the corrective actions taken to fix the deficiencies?

## **Pollution Prevention and Good Housekeeping**

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- \_\_\_\_\_ Has the local government determined potential sources of polluted runoff and the stormwater controls required for each local government owned and/or operated facilities? Stormwater controls might include both structural and non-structural controls. Structural controls might include structural stormwater BMPs, secondary containment, and oil/water separators. Non structural controls include inspections, SOPs that prevent or reducing pollutant runoff, training and spill response procedures.

By examining your facilities' propensity for polluted runoff, you can help identify and correct shortcomings. Sources of polluted runoff and stormwater BMPs should be evaluated and problems should be noted and corrected. When you inspect your facilities, bring a camera! When you see examples of good stormwater management or areas that need improvement, document them on your camera. Then, you can show photos of your own facilities during the pollution prevention/good housekeeping training you present to your staff.

### Municipally owned or operated structural stormwater controls (e.g., wet ponds, rain gardens, infiltration systems)

- \_\_\_\_\_ Has the local government identified and mapped municipally-owned or operated structural stormwater controls (e.g., wet ponds, rain gardens, infiltration systems)?
- \_\_\_\_\_ Does the map and/or inventory identify the stormwater outfalls corresponding to each BMP, the receiving waters to which the BMP discharges?
- \_\_\_\_\_ For each local government owned or operated BMP can the local government provide 1) a brief description of the BMP, 2) the location, 3) information on the receiving streams, including receiving stream name, stream segment, water quality classification, use support rating and if known, any water quality issues including threatened and endangered species and 4) brief description of the activities and/or operations that discharge to the BMP?
- \_\_\_\_\_ Has the local government developed and implement, assess annually and update as necessary an Operation and Maintenance (O&M) program for municipal owned and operated stormwater controls?
- \_\_\_\_\_ Does the O&M program specify the frequency of inspections and routine maintenance requirements?

### Streets, roads, stormwater system, and public parking lots

- \_\_\_\_\_ Does the local government have a description of stormwater sewer system maintenance activities (i.e., parking lot maintenance, street sweeping, culverts, cleaning curbs and catch basins, storm lines and ditches) schedules, and inspection procedures for controls to reduce floatables and other pollutants to the local government's MS4?
- \_\_\_\_\_ Has the local government developed a street sweeping program that describes the street sweeping methods and frequency, the types of sweepers used, use of additional resources in sweeping seasonal leaves or pick-up of other material, and a description of the methods for addressing areas considered infeasible for street sweeping?
- \_\_\_\_\_ Does the local government maintain documentation of sweeping events, miles swept and characterize the quantity and composition of pollutants removed from roadways?
- \_\_\_\_\_ Has the local government developed an inspection and maintenance program for catch basins, open channels, conveyance systems and other drainage structures?
- \_\_\_\_\_ Are catch basin marked with a stormwater message (e.g., a label, stencil, marker, or pre-cast message such as "drains to stream.")?
- \_\_\_\_\_ Does the local government visually monitor open channels and other drainage structures for debris at least annually and identify problem areas for additional monitoring.

## **Pollution Prevention and Good Housekeeping**

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- \_\_\_\_\_ Does the local government remove trash and debris from open channels and other drainage structures as needed?
- \_\_\_\_\_ Does the local government have a written procedure to dewater and dispose of materials extracted from inlets/catch basins, open channels and other drainage structures?

### Public Vehicle and Equipment Cleaning

- \_\_\_\_\_ Has the local government developed and implemented measures that prevent or minimize contamination of the stormwater runoff from all areas used for vehicle and equipment cleaning?

Cleaning operations should be performed indoors, covered, wash water shall drain to the sanitary sewer system or you may collect stormwater runoff from the cleaning area and providing treatment or recycling, or other equivalent measures. If sanitary sewer is not available to the facility and cleaning operations take place outdoors, the cleaning operations shall take place on grassed or graveled areas to prevent point source discharges of the washwater into the storm drains or surface waters.

Where cleaning operations cannot be performed as described above and when operations are performed in the vicinity of a storm drainage collection system, the drain is to be covered with a portable drain cover during clean activities. Any excess ponded water shall be removed and properly handled prior to removing the drain cover.

The point source discharge of vehicle and equipment wash waters, including tank cleaning operations, are not authorized and must be covered under a separate NPDES permit or discharged to a sanitary sewer in accordance with applicable industrial pretreatment requirements.

### Pesticide, Herbicide and Fertilizer Application Management

Mowing and landscape services including requirements to mow, trim edge, blow off, remove leaves, mulch and provide weed control.

- \_\_\_\_\_ Does the local government evaluated the materials used and activities performed on public spaces, easements, public right of ways, and other open spaces?
- \_\_\_\_\_ Does the local government ensure municipal employees and contractors are properly trained and all permits, certifications, and other measures for applicators are followed?
- \_\_\_\_\_ Does the local government have a description of pesticide, herbicides, and fertilizers (PHFs) programs? (i.e., standard operating procedures, use restrictions, frequency, training programs)
- \_\_\_\_\_ Does the local government maintain an inventory of PHFs used by the local government and/or any contract service?
- \_\_\_\_\_ Does the local government minimize the use and to ensure the proper use and storage of PHFs?

### Yard Waste, Used Oil, Household Waste

Has the local government implemented programs for the following (check all that apply)

- Management and Disposal of Litter
- Illegal Sit-Outs
- Household Waste
- Yard Waste
- Used Oil

## Pollution Prevention and Good Housekeeping

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### Yard Waste

- \_\_\_ Are there regular pickups?
- \_\_\_ Does the local government regulate where the residents are allowed to put the yard waste?
- \_\_\_ Does the local government keep records of how much waste is picked up?

### Training

- \_\_\_ Has the local government developed and implemented an employee training program for employees involved in implementing pollution prevention and good housekeeping practices?
- \_\_\_ Do employees must receive annual training?

Does training include the following (check all that apply):

- General stormwater
- New technologies
- Inspections
- Operation and maintenance responsibilities
- Spill Response

- \_\_\_ Does the local government maintain a description of the training program, copies of the materials used, and topics covered?
- \_\_\_ Does the local government ensure contractors hired by the permittee to perform municipal maintenance activities are contractually required to comply with all of the stormwater control measures, good housekeeping practices, and facility-specific stormwater management SOPs.
- \_\_\_ Does the local government provide oversight of contractor activities to ensure that contractors are using appropriate stormwater control measures and SOPs?

### Annual Assessment

- \_\_\_ Does the local government annually assess and update as necessary an inventory of facilities and operations owned and operated by the permittee with the potential for generating polluted stormwater runoff, including the MS4 system and associated structural BMPs?
- \_\_\_ Does the local government annually assess all municipally-owned or operated facilities?
- \_\_\_ Does the assessment include the results of the permittee's initial assessment, any identified deficiencies and corrective actions taken?

Does the assessment (check all that apply):

- Identify materials or activities that may be exposed to precipitation.
- Identify opportunities to keep precipitation and runoff from coming into contact with stored chemicals and activity areas
- Identify material storage areas
- Identify secondary containment
- Identify improperly stored materials
- Identify activities that should be performed inside
- Identify housekeeping practices.
- Identify stormwater controls to be installed, implemented, and maintained to minimize the discharge of pollutants in stormwater.
- Identify stormwater discharges
- Documents standard operating procedures

## Pollution Prevention and Good Housekeeping

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- \_\_\_\_\_ Has the local government evaluated municipally-owned streets, roads, and public parking lots within their jurisdiction sweeping frequency, timing, and effectiveness of street sweeping programs based on land use, trash and stormwater pollutant levels generated?
- \_\_\_\_\_ Has the local government annually assessed and update as necessary an inspection and O&M program for the stormwater sewer system including catch basins, open channels, conveyance systems and other drainage structures?

### Documents (check all that apply)

- Inventory of local government owned and operated facilities and/or activities
- Annually assessment of municipally-owned or operated facilities and/or activities (including Industrial Activities)
- Inspection procedures/checklist
- Inspection records
- Spill response procedures and records
- Staff Training plan (i.e., Who, What, and When)
- Materials used for training
- Staff training records
- Copies of NPDES permits, SWPPP, inspection and maintenance records, Spill response procedures and records, Training Records, for industrial activities.
- Standard operating procedures
- Roadway and stormwater sewer system improvement and maintenance records
- Criteria for prioritizing roadway and stormwater sewer system improvement and maintenance
- Roadway and stormwater sewer system improvements and maintenance schedule for street improvements, street sweeping, and street maintenance.

### Federal/State Requirements

In 1972, The National Pollutant Discharge Elimination System (NPDES) program was established under authority of the federal Clean Water Act and then delegated to the Division of Water Quality for implementation in North Carolina. Phase I of the NPDES stormwater program was established in 1990, and it focused on site and operations planning to reduce pollutant sources. **Phase I** covered industrial activities in 10 categories; construction activities that disturbed five or more acres; and municipalities with populations of 100,000 or more that owned or operated a municipal separate storm sewer system (MS4) (North Carolina had six). **Phase II** of the program expanded permit requirements to construction disturbing an acre or more and to smaller communities (< 100,000 pop.) and public entities that own or operate an MS4. Phase II also expanded the option of the No Exposure Exclusion beyond the 'Light Industry' category.

### Industrial Activities (as defined in 40 CFR 122.26 (b)(14))

Storm water discharge associated with industrial activity means the discharge from any conveyance that is used for collecting and conveying storm water and that is directly related to manufacturing, processing or raw materials storage areas at an industrial plant. The term does not include discharges from facilities or activities excluded from the NPDES program under this part 122. For the categories of industries identified in this section, the term includes, but is not limited to, storm water discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters (as defined at part 401 of this chapter); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and final products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water. For the purposes of this paragraph, material handling activities include storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product, by-product or waste product. The term excludes areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with storm water drained from the above described areas. Industrial facilities (including industrial facilities that are federally, State, or municipally owned or operated that meet the description of the facilities listed in paragraphs (b)(14)(i) through (xi) of this section) include those facilities designated under the provisions of paragraph (a)(1)(v) of this section.

The following categories of facilities are considered to be engaging in "industrial activity" for purposes of paragraph (b)(14):

- (i) Facilities subject to storm water effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards under 40 CFR subchapter N (except facilities with toxic pollutant effluent standards which are exempted under category (xi) in paragraph (b)(14) of this section);
- (ii) Facilities classified as Standard Industrial Classifications 24 (except 2434), 26 (except 265 and 267), 28 (except 283), 29, 311, 32 (except 323), 33, 3441, 373;
- (iii) Facilities classified as Standard Industrial Classifications 10 through 14 (mineral industry) including active or inactive mining operations (except for areas of coal mining operations no longer meeting the definition of a reclamation area under 40 CFR 434.11(1) because the performance bond issued to the facility by the appropriate SMCRA authority has been released, or

## Industrial Activities

except for areas of non-coal mining operations which have been released from applicable State or Federal reclamation requirements after December 17, 1990) and oil and gas exploration, production, processing, or treatment operations, or transmission facilities that discharge storm water contaminated by contact with or that has come into contact with, any overburden, raw material, intermediate products, finished products, byproducts or waste products located on the site of such operations; (inactive mining operations are mining sites that are not being actively mined, but which have an identifiable owner/operator; inactive mining sites do not include sites where mining claims are being maintained prior to disturbances associated with the extraction, beneficiation, or processing of mined materials, nor sites where minimal activities are undertaken for the sole purpose of maintaining a mining claim);

- (iv) Hazardous waste treatment, storage, or disposal facilities, including those that are operating under interim status or a permit under subtitle C of RCRA;
- (v) **Landfills**, land application sites, and open dumps that receive or have received any industrial wastes (waste that is received from any of the facilities described under this subsection) including those that are subject to regulation under subtitle D of RCRA;

Coverage under the general permit, NCG120000 is applicable to all owners or operators of stormwater point source discharges associated with activities classified as Landfills that are permitted by the North Carolina Division of Solid Waste Management under the provisions and requirements of North Carolina General Statute 130A - 294. The following are specifically excluded from coverage under this General Permit: Stormwater discharges from open dumps, hazardous waste disposal sites, or discharges of wastes (including leachate as defined in 15A NCAC 13B.0101(11)) to the waters of the state.

- (vi) Facilities involved in the recycling of materials, including metal scrapyards, battery reclaimers, salvage yards, and automobile junkyards, including but limited to those classified as Standard Industrial Classification 5015 and 5093;
- (vii) Steam electric power generating facilities, including coal handling sites;
- (viii) **Transportation facilities** classified as Standard Industrial Classifications 40, 41, 42 (except 4221-25), 43, 44, 45, and 5171 which have vehicle maintenance shops, equipment cleaning operations, or airport deicing operations. Only those portions of the facility that are either involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, airport deicing operations, or which are otherwise identified under paragraphs (b)(14) (i)-(vii) or (ix)-(xi) of this section are associated with industrial activity;

Coverage under the general permit, NCG08000, is applicable to all owners or operators of stormwater point source discharges associated with activities that have vehicle maintenance areas, including fueling. It is the local government's responsibility to ensure that any municipal operations that require an NPDES permit develop and implement a Stormwater Pollution Prevention Plan (SPPP) specific to that facility. Elements of the SPPPs are spelled out in the permit. Excluded from the requirement to seek coverage under NCG08000 are emergency vehicles, school busses, and vehicles used for construction activity. However, fleet vehicles used by staff are not excluded.

Coverage under General Permit, NCG15000 is applicable to all owners or operators of stormwater point source discharges associated with industrial activity from Air Transportation facilities identified by the SIC Codes in Major Group 45.

## Industrial Activities

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- (ix) **Treatment works** treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge that are located within the confines of the facility, with a design flow of 1.0 mgd or more, or required to have an approved pretreatment program under 40 CFR part 403. Not included are farm lands, domestic gardens or lands used for sludge management where sludge is beneficially reused and which are not physically located in the confines of the facility, or areas that are in compliance with section 405 of the CWA;

The local government will need to seek coverage under the NPDES program for their wastewater treatment plant. Coverage under the general permit, NCG11000, is applicable to all owners or operators of stormwater point source discharges associated Treatment Works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, with a design flow of 1.0 million gallons per day or more, or required to have an approved pretreatment program under Title 40 Code of Federal Regulations (CFR) Part 403, including lands dedicated to the disposal of sewage sludge that is located within the confines of the facility.

- (x) Construction activity including clearing, grading and excavation, except operations that result in the disturbance of less than five acres of total land area. Construction activity also includes the disturbance of less than five acres of total land area that is a part of a larger common plan of development or sale if the larger common plan will ultimately disturb five acres or more;

The NCDENR Division of Land Resources Erosion and Sediment Control Program whether implemented by the state or a state delegated program effectively meets the requirements of the Construction Site Runoff Controls by permitting and controlling development activities disturbing one or more acres of land surface and those activities less than one acre that are part of a larger common plan of development. This program is authorized under the Sediment pollution Control Act of 1973 and Chapter 4 of Title 15A of the North Carolina Administrative Code. This program includes procedures for public input, sanctions to ensure compliance, requirements for construction site operators to implement appropriate erosion and sediment control practices, review of site plans which incorporates consideration of potential water quality impacts, and procedures for site inspection and enforcement of control measures. The NCG010000 permit establishes requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality.

- (xi) Facilities under Standard Industrial Classifications 20, 21, 22, 23, 2434, 25, 265, 267, 27, 283, 285, 30, 31 (except 311), 323, 34 (except 3441), 35, 36, 37 (except 373), 38, 39, and 4221-25;

### **State Requirements – 15A NCAC 02h .0126 Stormwater Discharges**

Permits for stormwater discharges to surface waters shall be issued in accordance with United States Environmental Protection Agency regulations 40 CFR 122.21 and 122.26 which are hereby incorporated by reference including any subsequent amendments.

**Evaluation of Program Effectiveness**

Municipal operations that require an NPDES permit must develop and implement a Stormwater Pollution Prevention Plan (SPPP) specific to that facility. Elements of the SPPPs are spelled out in the permit.

- \_\_\_\_\_ Did the local government apply for and receive coverage under the NPDES program for their Industrial Activities (e.g., Fleet Maintenance facilities, Wastewater Treatment Plants, Airports and Landfills)?
- \_\_\_\_\_ Does the local government conduct an annual review of the industrial activities with a NPDES stormwater permit owned and operated by the local government? Pursuant to their industrial permit the facility is required to review industrial facilities for compliance with the SPPP on an annual basis.
- \_\_\_\_\_ Does the local government review the SPPP where one is required, the timeliness of any monitoring reports required and the results of inspections and subsequent follow-up actions at the facilities?

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## Impaired Water Bodies

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### **Federal/State Requirements in 40 C.F.R. § 122.44(d) (2006) and N.C.G.S. § 143-215.1(a)(6) (2006)**

NPDES Permit must comply with all applicable state water quality standards. The 303(d) list is a list of Category 5 impaired waters that require a TMDL. If water quality data exceed a surface water quality standard the water body is considered impaired and can be assigned an integrated reporting category number of 5. The reporting of these impaired waters is required under section 303(d) of the Clean Water Act of 1972. Waters are removed when either a TMDL is completed or when monitoring data shows that the waterbody is in compliance with water quality standards. Waters that are suspected to be impaired due to natural conditions may be removed with approval from the US EPA with appropriate documentation.

### **Evaluation of Overall Program Effectiveness**

Describe other short-, medium-, and long-term strategies the local government plans to implement to address discharges to impaired water bodies in the 303(d) list.

#### Identify Resources

- \_\_\_ Has the local government identified potential resources to participate in interpreting data, judging BMP effectiveness, reporting to DWQ, and coordinating water quality recovery activities and reviews?

#### Identified, described and provide a map of the watershed and known outfalls

- \_\_\_ Has the local government identified, described and provide a map or watershed and known outfalls that discharge to streams listed on the 303(d) list of impaired streams?
- \_\_\_ Has the local government developed a program to locate additional unknown major outfalls that may discharge the pollutant or pollutants of concern to the impaired stream segment?

#### Describe the potential cause(s) of the impairment and/or the pollutant or pollutants of concern.

- \_\_\_ Has the local government described the likely cause(s) of the impairment and/or the pollutant or pollutants of concern for streams listed on the 303(d) list of impaired streams?

An assessment of actual and likely sources should also be included. In addition, discuss any atate standards, water quality concerns, water quality targets, issues, or contributing factors in the watershed. Likely cause(s) of the impairment may include sediment, fertilizers, pollutants of concern, or the amount of stormwater runoff.

#### Existing programs, controls, partnerships, projects and strategies

- \_\_\_ Has the local government identified and assessed existing programs, controls, partnerships, projects and strategies to address discharges to impaired water bodies in the 303(d) list?
- \_\_\_ Has the local government identified projects and plans that the community is pursuing as far as retrofits, new development and re-development, mitigation, and stream restoration projects?
- \_\_\_ Has the local government developed BMP strategies aimed at addressing discharges to impaired water bodies in the 303(d) list?

## **Impaired Water Bodies**

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Do existing programs, controls, partnerships, projects and strategies implemented by the permittee to address the impaired water(s) include (check all that apply):

- Public Education efforts – pamphlets, flyers, signage, advertising, etc.
- Public participation – Adopt a Stream, Storm Drain Marking, etc.
- IDDE – stream walks, outfall inspections, monitoring, etc
- Point source and industrial and/or commercial inspections, follow up and enforcement
- Staff Training
- Street sweeping, catch basin cleaning, etc.
- Redevelopment Requirements
- Construction and Post-Construction Programs
- Green Infrastructure and Low Impact Development
- Buffer Requirements

### Annual Assessment

- \_\_\_\_\_ Has the local government assessed the effectiveness of existing programs, controls, partnerships, projects and strategies implemented by the permittee to address the impaired water(s)?
- \_\_\_\_\_ As part of the annual assessment, has the local government identified additional programs, controls, partnerships, projects and strategies that may be necessary to address the impaired water(s) and how those measures address the impaired water(s)?
- \_\_\_\_\_ Has the local government developed a schedule to implement additional programs, controls, partnerships, projects and strategies that may necessary to address the impaired water(s)?

**Green Infrastructure (GI)**

Two important factors that often contributing to impairment are urban stormwater runoff and hydrologic changes due to channelization and riparian removal. These stressors and other indicator parameters are associated with the high levels of development (impervious areas). Many traditional stormwater management practices fail to address the hydrologic modifications that increase the quantity of stormwater discharges, and cause excessive erosion and stream channel degradation. Frequently the volume, duration, and velocity of stormwater discharges cause degradation to aquatic systems. DWQ recommends that wherever possible the volume retention practices of infiltration, evapotranspiration and rainwater harvesting as stormwater management mechanisms to meet the State's post-construction standards.

- \_\_\_ Has the Local Government developed a comprehensive development plan?
- \_\_\_ Does the plan incorporate Green Infrastructure?
- \_\_\_ Does the local government encourage and incentivize redevelopment?
- \_\_\_ Has the local government developed policies, regulations and incentives to protect natural resource areas and critical habitat?
- \_\_\_ Does the local government require buffer zones and other protective tools in place around wetlands, riparian areas, lakes, rivers, estuaries and floodplains?
- \_\_\_ Does the local government require protection measures for source water protection areas?
- \_\_\_ Does the local government require dedicated open space?
- \_\_\_ Does the local government require measures taken to preserve, protect and maintain trees on public and private property, rights-of-way and plant trees to enhance the urban tree canopy?
- \_\_\_ Does the local government provide incentives in place to direct development to previously developed areas?
- \_\_\_ Does the local government require measures taken to direct growth to areas with existing infrastructure, such as sewer, water, and roads?
- \_\_\_ Does the local government allow mixed use and transit-oriented developments?
- \_\_\_ Does the local government allow for street design standards and engineering practices that encourage streets to be no wider than is necessary to effectively move traffic?
- \_\_\_ Does the local government allow for shared driveways, reduced driveway widths, two-track driveways, and rear garages and alleys and encourage alternative forms and decreased dimensions of residential driveways and parking areas?
- \_\_\_ Does the local government describe measures taken to integrate green infrastructure practices as a standard part of construction, maintenance, and improvement plans?
- \_\_\_ Does the local government permitted, allowed or encouraged pervious or permeable pavement?
- \_\_\_ Has the local government taken measures to provide for alternative parking requirements that allow flexible arrangements to meet parking standards?
- \_\_\_ Has the local government taken measures to allow alternative measures to reduce required parking in exchange for specific actions that reduce parking demands on site?
- \_\_\_ Has the local government taken measures to require landscaping to reduce runoff?
- \_\_\_ Does the local government take measures to ensure stormwater management plan reviews take place early in the development review process?

**Low Impact Development (LID)**

LID projects maintain a site's hydrology to the maximum extent practicable by creating a landscape that mimics natural hydrologic functions of infiltration, runoff and evapotranspiration through:

- The use integrated small-scale practices and controls that are distributed throughout the site that allow for infiltration, retention, storage, filtering and collection at the point of generation and reduce or eliminate the need for a centralized structural stormwater runoff control device. Design techniques may include, rain gardens and bioretention cells, rooftop retention, directing rooftop runoff to an appropriately sized and designed rain garden, and rain barrels and cisterns.
- The conservation of trees, wetlands and common areas, drainage patterns, topography and soils whenever possible. Natural flow paths and existing vegetative features are preserved and stormwater flows are directed across vegetated areas. Design preserves/protects environmentally sensitive site features such as riparian buffers, wetlands, steep slopes, valuable (mature) trees, flood plains, woodlands and highly permeable soils.
- Infiltration and more contact time with the landscape by saving natural drainage patterns, use of sheet flow, use of vegetative swales, lengthening flow paths and flattening slopes. Designs that incorporate alternative stormwater management practices such as functional landscape that act as stormwater facilities, flatter grades, depression storage and open drainage swales.
- Plans that locate higher density in upland areas and away from surface waters and drainage ways and stormwater drains to surface waters and drainageways via diffuse flow.
- The use of disconnected impervious surfaces, reducing piped and/or vegetative conveyances.
- Reduced impervious surfaces through the use of permeable pavement. Provide green roofs and locate pavement under existing (and preserved) tree canopies. Residential streets are designed for the minimum required width needed to support traffic, on-street parking and emergency service vehicles. Practices include shared driveways and parking lots, alternative pavements for overflow parking areas, center islands in cul-de-sacs, alternative street designs rather than traditional grid patterns and reduced setbacks and frontages for homes.

\_\_\_ Has the local government taken measures to remove impediments to using LID practices?

\_\_\_ Does the local government describe measures taken to encourage and allow LID practices for managing stormwater runoff?

\_\_\_ Does the local government encourage and incentivize water harvesting, rain gardens, rain barrels, cisterns, green roofs, residential and public bioretention areas?

Natural Resource Inventory and Assessment

\_\_\_ Does the local government require a natural resource inventory and assessment prepared before the conceptual site design is developed to identify and prioritize the natural resources requiring management through project planning?

Does the natural resource inventory and assessment (check all that apply):

- Include A description of all neighboring surface waters including name and classification that receive stormwater runoff from the site?
- Identify high-quality natural areas as part of the site analysis and shall be used to incorporate site sensitivity into the design?
- Include a list the names and qualifications of those persons responsible for preparing any part of the assessment?

## **Green Infrastructure (GI) and Low Impact Development (LID)**

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- ❑ Provide a concise inventory of existing environmental and natural site attributes and a full and accurate disclosure of the environmental and natural site attributes that would be altered by the project?
- ❑ Identify reasonable alternatives that would avoid or minimize adverse impacts or enhance the quality of the environment?

### Narrative of LID Techniques

\_\_\_\_\_ Does the local government require the application to provide a narrative of LID techniques used?

Does the local government require the narrative to describe (check all that apply):

- ❑ The small-scale practices and controls used that are distributed throughout the site that allow for infiltration, retention, storage, filtering and collection at the point of generation and reduce or eliminate the need for a centralized structural stormwater runoff control device?
- ❑ Where and how trees, wetlands and common areas, drainage patterns, topography and soils were conserved.
- ❑ How the design preserves natural flow paths and existing vegetative, preserves/protects environmentally sensitive site features such as riparian buffers, wetlands, steep slopes, valuable (mature) trees, flood plains, woodlands and highly permeable soils.
- ❑ How the design provides infiltration and more contact time with the landscape by saving natural drainage patterns, use of sheet flow, use of vegetative swales, lengthening flow paths and flattening slopes.
- ❑ How the design incorporates alternative stormwater management practices such as functional landscape that act as stormwater facilities, flatter grades, depression storage and open drainage swales.
- ❑ How the design disconnects as much impervious area as possible reducing piped and/or vegetative conveyances, by breaking it up with pervious surfaces (grass filter strips in parking lots, raingardens, swales, etc.) to increase opportunities for infiltration and reduce water runoff flow.
- ❑ How the design reduces impervious surfaces through the use of permeable pavement, green roofs and locates pavement under existing (and preserved) tree canopies.
- ❑ How the project will minimize disturbance and/or restricts ground disturbance.
- ❑ How the design reduces paving and compaction of highly permeable soils to preserve absorptive capacity.
- ❑ How the design minimizes the size of construction easements and material storage areas, and sites stockpiles within the development envelope during the construction phase of a project?
- ❑ How the project will minimize soil compaction on the site and restricting temporary storage of construction equipment in these areas?

### Measurable Parameters

Does the local government require application to identify (check all that apply):

- ❑ Pre and post curve number (curve numbers should be equal or near equal).
- ❑ Pre and post time of concentration (time of concentration numbers should be equal or near equal).
- ❑ Overall volume of stormwater to be treated with structural measures (minimize).
- ❑ Overall volume of stormwater treated at the point of generation, i.e., use of integrated small-scale practices and controls distributed throughout the site (maximized).
- ❑ Overall volume of stormwater harvesting and reuse (maximize).
- ❑ Percent of required treatment volume treated via infiltration / bioretention (maximize).
- ❑ Percent of total wetland/surface water area impacted (minimize).
- ❑ Percent of total stream length impacted (minimize).

## **Green Infrastructure (GI) and Low Impact Development (LID)**

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- Percent total floodplain impacted (minimize).
- Percent pavement reduction by permeable pavement and/or narrow streets (maximize)
- Percent common areas (maximize).
- Percent tree canopy coverage (maximize).
- Percent open space preserved (maximize).
- Percent disconnected impervious surfaces (maximize).
- Percent steep slopes preserved (maximize).
- Surface waters and drainage ways setback for built upon area (maximize).
- Trees conserved (maximize).
- Limits of disturbance (minimized).
- Length of piped and/or vegetative conveyances (minimized).
- Watershed boundaries maintained (maximize).

### LID Ranking

\_\_\_\_\_ Does the local government require application to rank each LID project?

Is the ranking based on (check all that apply):

- Impacts to wetland and surface waters, streams, floodplains.
- The project's location in proximity to certain surface water classifications (e.g., HQW, ORW, SA waters).
- Redevelopment vs. new development
- Steep Slope Impact
- Natural Resource Fringe Impact
- Land Disturbance Area
- Tree Protection
- Watershed Boundaries Maintained
- Time of Concentration
- Vegetated Conveyances
- Disconnected Impervious Area
- Natural Vegetation
- Decentralized Stormwater Controls
- Natural/Infiltration/Bioretenion Stormwater Management
- Nutrient Removal

### Design Criteria

\_\_\_\_\_ Has the local government taken measures to ensure LID projects comply with DWQ rules and BMP Manual?

The process that establishes Low Impact Development (LID) projects must work within the current DWQ rules. DWQ does allow the NRCS curve method to be used for LID projects.

## Measures Designed to Avoid TMDL Duplication of Effort

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### Federal/State Requirements in 40 C.F.R. § 122.44(d) (2006) and N.C.G.S. § 143-215.1(a)(6) (2006)

NPDES Permit must comply with all applicable state water quality standards. The 303(d) list is a list of Category 5 impaired waters that require a TMDL. If water quality data exceed a surface water quality standard the waterbody is considered impaired and can be assigned an integrated reporting category number of 5. The reporting of these impaired waters is required under section 303(d) of the Clean Water Act of 1972. Waters are removed when either a TMDL is completed or when monitoring data shows that the waterbody is in compliance with water quality standards. Waters that are suspected to be impaired due to natural conditions may be removed with approval from the US EPA with appropriate documentation.

### Measures Designed to Avoid TMDL Duplication of Effort

To avoid a TMDL, programs must be reasonably expected to lead to achieving Water Quality Standards (WQS), not just making improvements.

- \_\_\_ Has the local government described how existing programs, controls, partnerships, projects and strategies to address impaired waters will achieve WQS?
- \_\_\_ Has the local government described the basis upon which those measures are reasonably expected to achieve WQS?
- \_\_\_ Has the local government identified, described and assess additional programs, controls, partnerships, projects and strategies that may be reasonably expected to achieve WQS?
- \_\_\_ Has the local government described the basis upon which those measures will achieve WQS?
- \_\_\_ Has the local government developed a schedule and time frame to implement appropriate measures that are reasonably expected to lead to achieving WQS in reasonable period of time?
- \_\_\_ Has the local government provided reasonable assurances that controls will be implemented and maintained, including a description of commitments, local ordinances, dedicated funding, adequate resources, landowner commitments to implement measures, and consequences for not implementing and maintaining measures?
- \_\_\_ Has the local government developed a monitoring plan that demonstrates controls are making water quality improvements?
- \_\_\_ Has the local government developed a monitoring plan for the pollutant of concern?
- \_\_\_ Does the monitoring plan identify the significant sources of the pollutant of concern?
- \_\_\_ Does the monitoring plan evaluate the performance of BMPs?
- \_\_\_ Does the monitoring plan assess progress toward the goal of implementing strategies to address discharges to impaired water bodies in the 303(d) list?

Does the monitoring plan include the following (check all that apply):

- Written description and GIS map of sample locations
- Monitoring methods
- Sample type and frequency
- Seasonal considerations
- Sample analytical methods
- Quality assurance
- Record keeping

- \_\_\_ Is the local government committed to revise controls that may be necessary to achieve WQS?
- \_\_\_ Has the local government reported annually on whether Measures Designed to Avoid TMDL Duplication of Effort have been 1) initiated and/or 2) completed or the % completed.

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**Federal/State Requirements in 40 C.F.R. § 122.44(d) (2006) and N.C.G.S. § 143-215.1(a)(6) (2006)**

NPDES Permit must comply with all applicable state water quality standards. The 303(d) list is a list of Category 5 impaired waters that require a TMDL. If water quality data exceed a surface water quality standard the waterbody is considered impaired and can be assigned an integrated reporting category number of 5. The reporting of these impaired waters is required under section 303(d) of the Clean Water Act of 1972. Waters are removed when either a TMDL is completed or when monitoring data shows that the waterbody is in compliance with water quality standards. Waters that are suspected to be impaired due to natural conditions may be removed with approval from the US EPA with appropriate documentation.

Pursuant to 40 CFR 122.34 (e), you must comply with any more stringent effluent limitations in your permit, including permit requirements that modify, or are in addition to, the minimum control measures based on an approved total maximum daily load (TMDL) or equivalent analysis. The permitting authority may include such more stringent limitations based on a TMDL or equivalent analysis that determines such limitations are needed to protect water quality.

**Determining whether a TMDL has been Developed and Approved**

\_\_\_\_\_ Has the local government determined whether a TMDL has been developed and approved or established by EPA for the receiving water(s) of the MS4 stormwater discharge and/or downstream waters into which the receiving water directly flows?

**Evaluation of the Water Quality Recovery Program**

Water Quality Recovery Plan (WQRP)

Does the WQRP (check all that apply):

- Identify the purpose of the Water Quality Recovery Program (WQRP)?
- Identify WLA(s) for pollutant parameters associated with the permittee's MS4 discharge?
- Identify a TMDL Implementation Team? DWQ recommends identifying a team of staff representatives from affected municipal agencies that conduct activities in the TMDL watershed and other potential staff resources as necessary to serve on TMDL Implementation Team. Example municipal agencies could include stormwater (the MS4 permittee), wastewater, other public works, street maintenance, solid waste, etc. based on the pollutant of concern. The local government will be responsible for interpreting data, judging BMP effectiveness, reporting to DWQ, and coordinating activities and reviews to meet the components and goals of the WQRP.
- Identify the watershed(s) and provide brief description including details such as vegetation, topography, climate, hydrology, geology, soils, current and future land use, industrial, municipal, and other point source dischargers, stream classifications, aquatic species, and relevant history.
- Identify information about relevant TMDL (e.g., approval date, affected streams, related NPDES permit info, etc)?
- Discuss the pollutant or pollutants of concern (POC) in the TMDL watershed?
- Discuss any concerns related to the POC and MS4 regulated WLA, state standards, water quality targets, etc.?
- Discuss any other WQ concerns, issues, or contributing factors in the watershed?
- Include a map of watershed(s) showing streams & outfalls?
- Identify and map the locations of currently known MS4 outfalls within its jurisdictional area with the potential of contributing to the cause(s) of the impairment to the impaired segments, to their

## TMDL

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tributaries, and to segments and tributaries within the watershed contributing to the impaired segments?

- Include a schedule to discover and locate other MS4 outfalls within its jurisdictional area that may contribute to the cause of the impairment to the impaired stream segments, to their tributaries, and to segments and tributaries within the watershed contributing to the impaired segments?
- Describe the cause(s) of the impairment and/or the pollutant(s) of concern? (e.g., sediment, fertilizers, pollutants of concern, or the amount of stormwater runoff).
- For each pollutant of concern, does the WQRP establish a baseline that characterizes the relative pollutant levels discharged from various MS4 outfalls that discharge to TMDL waters (or tributaries to waters)?
- Include an assessment of the available monitoring data? Where long-term data is available, this assessment should include an analysis of the data to show trends.
- Describe existing programs, controls, partnerships, projects and strategies to address impaired waters and a brief explanation as to how the programs, controls, partnerships, projects and strategies will achieve WQS?
- Identify priority areas targeted for BMP implementation and underlying rationale?
- Establishing public participation and outreach activities?

### Initial and Annual Assessment

- \_\_\_\_\_ Has the local government completed an initial and annual assessment of the available data, programmatic management measures, monitoring data and of the effectiveness of BMPs employed, to determine what, if any, additional programs, controls, partnerships, projects and strategies may be necessary to address the Waste Load Allocation (WLA) identified in the TMDL and a brief explanation as to why additional programs, controls, partnerships, projects and strategies were selected?
- \_\_\_\_\_ Does the annual assessment evaluate the cost/benefit associated with existing and proposed BMP?
- \_\_\_\_\_ As a result of the initial and annual assessment of the WQRP, Monitoring Plan and Implementation Plan, has the WQRP been amended to describe additional programs, controls, partnerships, projects and strategies to address the MS4 NPDES regulated Waste Load Allocation (WLA) identified in the TMDL and a brief explanation as to why additional programs, controls, partnerships, projects and strategies were selected?
- \_\_\_\_\_ Does the local government assess progress toward the goals of the WQRP at the TMDL identified compliance point?

### Monitoring Plan

- \_\_\_\_\_ Has the local government developed, maintained, implemented, assess annually and update as necessary the Monitoring Plan as additional outfalls are identified and as accumulating data may suggest?
- \_\_\_\_\_ Has the Monitoring Plan been reviewed and approved by the Division?
- \_\_\_\_\_ Have modifications to the Monitoring Plan shall be approved by the Division?

Does the Monitoring Plan (check all that apply):

- Include monitoring methods?
- Include seasonal considerations (e.g., 1 dry weather and 3 wet weather events)?
- Include sample analytical methods?
- Record keeping?
- Identify the significant sources of the pollutant of concern related to MS4 regulated WLA?

## TMDL

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- Include a written description and GIS map of sample locations, latitude and longitude coordinates, sample type, frequency, and any seasonal considerations?
- Include a quality assurance project plan?
- Include a monitoring implementation schedule for each pollutant of concern?
- Include an explanation of why monitoring is being conducted for selected outfalls and whether the outfalls are representative of particular land uses or geographical areas that contribute to pollutant loads?
- Include requirements to monitor the pollutants of concern in receiving waters, both upstream and downstream of major MS4 discharges, on at least an annual basis for the permit term?
- Include proposed monitoring that shall be used to evaluate the effectiveness of the BMPs and facilitate the iterative revision of the BMP Implementation Plan to ultimately achieve the TMDL's WLA?
- Establish a baseline that characterizes the relative pollutant levels discharged from various MS4 outfalls that discharge to TMDL waters (or tributaries to waters)?

Where appropriate, the permittee may reduce the monitoring burden by proposing to monitor outfalls that the Division would consider substantially similar to other outfalls. The permittee may also propose in-stream monitoring where it would complement the overall monitoring plan.

Consideration should be given to the required frequency of monitoring events needed to determine statistically-significant data trends. DWQ recommends requirements to monitor the pollutants of concern on at least a quarterly basis (targeting once per season) for at least 25% of the major outfalls?

### Implementation Plan

- \_\_\_\_\_ Has the local government developed, maintained, implemented assess annually and update as necessary an Implementation Plan?
- \_\_\_\_\_ Does the Implementation Plan describe the BMP implementation activities that are expected to occur within the remainder of the permit term?
- \_\_\_\_\_ Does the Implementation Plan identify a schedule for completing BMP implementation?

### Annual Report

- \_\_\_\_\_ Has the local government submitted an annual report?

Does the annual report (check all that apply):

- Include updates to the WQRP, Monitoring Plan and Implementation Plan?
- Include a discussion on the status of the program and schedule?
- Include a discussion of activities and progress made toward meeting program elements?
- Include an assessment of the effectiveness of the BMPs employed, to determine what, if any, additional BMP measures may be necessary?
- Identify additional BMPs, if necessary?
- Describe additional programs, controls, partnerships, projects and strategies to address the MS4 NPDES regulated Waste Load Allocation (WLA) identified in the TMDL and a brief explanation as to why additional programs, controls, partnerships, projects and strategies were selected?
- Include an explanation of why monitoring is being conducted for selected outfalls and whether the outfalls are representative of particular land uses or geographical areas that contribute to pollutant loads?
- Identify in-stream and outfall sampling locations?
- Include the results of any monitoring pursuant to their approved Monitoring Plan?

- ❑ Include the annual cost (including monitoring, assessment, and implementation)?
- ❑ Describe the BMP implementation activities that are expected to occur within the remainder of the permit term?
- ❑ Identify a schedule for completing BMP implementation?

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## **Federal Requirements**

A key requirement in the stormwater Phase II rule is a report (40 CFR 122.34(g)(3)) that includes “the status of compliance with permit conditions, an assessment of the appropriateness of identified [control measures] and progress towards achieving identified measurable goals for each of the minimum control measures.” This assessment is critical to the stormwater program framework which uses the iterative approach of implementing controls, conducting assessments, and designating refocused controls leading toward attainment of water quality standards.

There are many components involved in evaluating program compliance, the appropriateness of your identified best management practices, and progress towards achieving your identified measurable goals. Without assessing the effectiveness of the stormwater management program the local government will not know which parts of the program need to be modified to protect and/or improve water quality.

### 40 CFR 122.34(g) Evaluation and Assessment

- (1) **Evaluation.** You must evaluate program compliance, the appropriateness of your identified best management practices, and progress towards achieving your identified measurable goals.
- (2) **Recordkeeping.** You must keep records required by the NPDES permit for at least 3 years. You must submit your records to the NPDES permitting authority only when specifically asked to do so. You must make your records, including a description of your storm water management program, available to the public at reasonable times during regular business hours (see Sec. 122.7 for confidentiality provision). (You may assess a reasonable charge for copying. You may require a member of the public to provide advance notice.)
- (3) **Reporting.** Unless you are relying on another entity to satisfy your NPDES permit obligations under Sec. 122.35(a), you must submit annual reports to the NPDES permitting authority for your first permit term. For subsequent permit terms, you must submit reports in year two and four unless the NPDES permitting authority requires more frequent reports. Your report must include:
  - (i) The status of compliance with permit conditions, an assessment of the appropriateness of your identified best management practices and progress towards achieving your identified measurable goals for each of the minimum control measures;
  - (ii) Results of information collected and analyzed, including monitoring data, if any, during the reporting period;
  - (iii) A summary of the storm water activities you plan to undertake during the next reporting cycle;
  - (iv) A change in any identified best management practices or measurable goals for any of the minimum control measures; and
  - (v) Notice that you are relying on another governmental entity to satisfy some of your permit obligations (if applicable).

## **Does the Local Government Evaluate Program Compliance**

### Legal or Regulatory Authority

\_\_\_\_\_ Has the local government established necessary Legal or Regulatory Authority?

## Program Assessment

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### Annual budget

- \_\_\_ Does the local government prepare an annual budget (excluding Capital Improvement Projects) for the NPDES stormwater management program for the reporting year.
- \_\_\_ Does the local government track the number of planned Capital Improvement Projects?
- \_\_\_ Does the local government track the number of active Capital Improvement Projects?
- \_\_\_ Does the local government track the number of Capital Improvement Projects completed?

### Does the local government to track the information required to be reported in the annual report

The Municipal Separate Storm Sewer Systems Assessment (MS4A) is an electronic approach to assessing and tracking the implementation, status, progress, compliance and enforcement of the NC NPDES Phase I and Phase II Programs for Permitted MS4s. MS4A will allow each permittee to conduct self-assessments and submit annual reports to a web-based data base. In addition to providing critical facility information, the local government also assesses and submits information on the progress of each measurable goal identified in their stormwater management plan. The local government is also prompted to respond to a series of questions relating to either compliance or program implementation. For each deficiency the permittee identifies the root cause of the deficiency and submits a brief description of their action plan to address the root cause and/or correct the deficiency. The local government can also use the MS4A to conduct self-assessments, identify program deficiencies and root causes, develop and appropriate action plans to correct deficiencies, and enhance their programs

### *Classroom Outreach*

- \_\_\_ Does the local government track the number of educational materials distributed to schools?
- \_\_\_ Does the local government track the number of schools that participate in municipal-sponsored storm water workshops or activities?
- \_\_\_ Does the local government track the number of students that participate in municipal-sponsored storm water workshops or activities?
- \_\_\_ Does the local government track the number of workshops held for teachers?
- \_\_\_ Does the local government track the number of certificates or other rewards given out to schools, classes, or students participating in storm water education?
- \_\_\_ Does the local government track the number of students receiving storm water education as a regular part of the school curriculum?

### *Displays, Signs, Presentations, Welcome Packets, and Pamphlets*

- \_\_\_ Does the local government track the number of stormwater related displays at special events or meetings?
- \_\_\_ Does the local government track the number of people at events who saw the display or took a pamphlet/booklet?
- \_\_\_ Does the local government track the number of new homeowner welcome packets containing storm-water-related information?
- \_\_\_ Does the local government track the number of signs and billboards with stormwater related messages?
- \_\_\_ Does the local government track the number of stormwater related presentations at special events or meetings?

## Program Assessment

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### *Commercial Outreach*

- Does the local government track the number of educational materials that were distributed to business owners and operators?
- Does the local government track the number of businesses trained under the stormwater program?

### *Pet Waste Management*

- Does the local government track the number of "clean up after your pet" signs posted in parks and neighborhoods?
- Does the local government track the number of dog-walking designated areas in parks?
- Does the local government track the number of posters/brochures put up in pet supply stores?
- Does the local government track the number of educational materials given out to pet owners?

### *Promotional Giveaways*

- Does the local government track the number of items given out?
- Does the local government track the number of events attended (to give out items)?
- Does the local government track the number of partnerships for promotions (radio, TV, Businesses)?

### *Proper Disposal of Household Hazardous Waste*

- Does the local government track the number of household hazardous waste curbside pickup days?
- Does the local government track the number of educational materials distributed to homeowners?
- Does the local government track the number of partnerships established with businesses?

### *Outreach Programs to Minority and Disadvantaged*

- Does the local government track the number of brochures/posters created in non-English languages?
- Does the local government track the number of educational materials distributed in non-English languages?
- Does the local government track the number of partnerships established with minority organizations?
- Does the local government track the number of educational materials distributed to low-income neighborhoods?
- Does the local government track attendance at workshops or public meetings held in low-income or minority neighborhoods?

### *Media*

- Does the local government track the number of public radio/TV service announcements made ?
- Does the local government track the number of stormwater related press releases/advertising?
- Does the local government track the number of stormwater related articles published?

### *Water Conservation*

- Does the local government track Water Conservation for Home Owners
- Does the local government track the number of partnerships established with local water utilities?

## Program Assessment

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- Does the local government track the number of water conservation or stormwater related utility inserts that are distributed with utility bills?

### *Adopt-A-Stream Program*

- Does the local government track the number of participants in Adopt-A-Stream, Adopt-a-drain, Adopt-a-highway or Adopt-a-trail programs?
- Does the local government track the quantity of trash and debris removed by Adopt-A-Stream, Adopt-a-drain, Adopt-a highway or Adopt-a-trail volunteers (in tons)?

### *Surveys*

- Does the local government track the number of citizens solicited to complete surveys?
- Does the local government track the number of completed surveys?

### *Hotlines*

- Does the local government track the number of calls received by a hotline(s)?
- Does the local government track the number of problems/incidents remedied as a result of hotline calls?

### *Reforestation Programs*

- Does the local government track the number of volunteer tree planters?
- Does the local government track the number of trees planted?
- Does the local government track the number of acres planted with trees?

### *Public Hearings, stakeholder meetings, or other meetings*

- Does the local government track the number of meetings held?
- Does the local government track the number of attendees?
- Does the local government track the number of actions taken as a result of stakeholder meetings?

### *Storm Drain Stenciling*

- Does the local government track the percent of drains stenciled?
- Does the local government track the number of stenciling volunteers?
- Does the local government track the number of drains stenciled?

### *Stream Cleanup*

- Does the local government track the number of stream cleanups?
- Does the local government track the number of cleanup participants?
- Does the local government track the quantity of waste collected?
- Does the local government track the number of stream miles cleaned?

### *Wetland Plantings*

- Does the local government track the acres of land planted?
- Does the local government track the number of volunteers that participated in planting?
- Does the local government track the number of planting events held?

*Volunteer Monitoring*

- Does the local government track the number of volunteers participating in monitoring programs?
- Does the local government track the frequency of monitoring in the watershed
- Does the local government track the number of volunteer monitoring stations established?
- Does the local government track the number of volunteer monitoring training sessions held?
- Does the local government track the number of actions that were taken as a result of the monitoring data -collected by volunteers?

*Illicit Discharge Detection and Elimination*

- Does the local government track the number of sites prioritized for inspection?
- Does the local government track the number of illicit connections reported by citizens?
- Does the local government track the number of illicit connections found?
- Does the local government track the number of illicit connections repaired/replaced?
- Does the local government track the number of illicit connection referrals?
- Detect and eliminate illicit discharges and illegal connections to the MS4?

*Illegal Dumping*

- Does the local government track the number of illegal dumps reported by citizens?
- Does the local government track the number of penalties enforced for illegal dumps?
- Does the local government track the number of illegal dump or sit-out clean-ups completed?

*Industrial or Business Connections*

- Does the local government track the number of dry weather tests/inspections completed?
- Does the local government track the number of high-risk connections?
- Does the local government track the number of reported illicit connections?
- Does the local government track the number of illicit connections found?
- Does the local government track the number of illicit connections repaired/replaced?

*Recreational Sewage*

- Does the local government track the number of pump-out stations?
- Does the local government track the number of no-discharge areas created?
- Does the local government track the number of new signs added to inform users of dumping policies and alternatives?
- Does the local government track the number of enforced cases of recreational dumping?
- Does the local government track the number of citizen complaints made reporting illegal action?

*Sanitary Sewer Overflows (SSO)*

- Does the local government track the number of overflows reported?
- Does the local government track the number of overflow causes that were identified during inspections?
- Does the local government track the number of sites repaired?

## Program Assessment

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### *Wastewater Connections to the Storm Drain System*

- Does the local government track the number of rerouted connections?
- Does the local government track the number of dry weather monitoring activities performed?
- Does the local government track the number of unwarranted connections reported?
- Does the local government track the number of unwarranted connections found?
- Does the local government track the number of unwarranted connections repaired/replaced?

### *Construction Projects*

- Does the local government track the number of construction activities that result in a land disturbance of greater than or equal to one acre?
- Does the local government track the number of plan reviews for construction activities that result in a land disturbance of greater than or equal to one acre?
- Does the local government track the number of site inspections for construction activities that result in a land disturbance of greater than or equal to one acre?
- Does the local government track the number of enforcement actions for construction activities that result in a land disturbance of greater than or equal to one acre?

### *Post Construction*

- Does the local government track the number of BMP inspections and/or maintenance activities.
- Does the local government track the number of problems that were identified and remedied.
- Does the local government track the number of development/redevelopment projects regulated for post-construction stormwater control.

### *Municipal Operations*

- Does the local government track the number of inspections and maintenance activities?
- Does the local government track the number of industrial activities inspections?
- Does the local government track the number of scheduled parking lot and/or road cleanings?
- Does the local government track the number of dog parks? Does the local government track the
- Does the local government track the number of "pooper-scooper" stations installed?
- Does the local government track the number of storage facilities included in a regular inspection and maintenance program?
- Does the local government track the number of preventative maintenance procedures performed on tanks, valves, pumps, pipes, and other equipment?
- Does the local government track the number of personnel trained in spill response?
- Does the local government track the number of regularly inspected high-risk facilities?
- Does the local government track the number of educational materials distributed to municipal employees?
- Does the local government track the number of outfalls cleaned regularly.
- Does the local government track the number of storm drains cleaned regularly?
- Does the local government track the amount of trash, sediment, and other pollutants removed during cleaning (in tons)?
- Does the local government track the number of gallons of used oil collected from municipal operations?
- Does the local government track the number of recycling facilities that collect oil from municipal operations?
- Does the local government track the number of designated municipal vehicle washing areas?

## Program Assessment

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\_\_\_ Does the local government track the number of sweeping events, miles swept and characterize the quantity and composition of the trash and debree?

### **Does the local government assess compliance with their permit**

- \_\_\_ Has the local government identified any program deficiencies?
- \_\_\_ For each program deficiency, has the local government identified the root cause?
- \_\_\_ For each program deficiency, has the local government identified a plan of action?

### **Does the Local Government Evaluate the Appropriateness of structural and non-structural BMPs**

- \_\_\_ Does the local government plan to add any new BMPs?
- \_\_\_ Does the local government plan to amend any existing BMPs?
- \_\_\_ If yes, can the local government provide a BMP description, measurable goal, and implementation schedule for each new or amended BMP?
- \_\_\_ Does the local government identify sources of specific pollutants?

### Monitroing Program

\_\_\_ Has the local government developed a water quality monitoring program?

Does the water quality monitoring program include (check all that apply):

- Ambient receiving water monitoring?
- Biological monitoring?
- Control measure performance monitoring?
- Discharge (wet weather) monitoring ?

When determining water quality monitoring components, did the local government examine and consider (check all that apply):

- Climatic conditions, including precipitation patterns, temperature, and seasonal variations?
- Land uses in the MS4?
- Waterbody type?

Does the water quality monitoring program consider and address specific sampling quality assurance/quality control protocols, including (check all that apply):

- Specific chemical constituents (pollutants), biological stream indicators, and physical stream indicators that will be monitored to best achieve the purpose of the monitoring?
- Sampling locations?
- Number and frequency of sample collection and assessments?
- Timing of sample collection?

\_\_\_ Did the local government determine if any similar monitoring is occurring within the MS4 and if it is logical to link efforts?

Overall Health and Long-term Trends in Receiving Water Quality

Does the local government identify and track any of the following **physical and hydrological indicators** (check all that apply):

- Stream widening/ downcutting
- Physical habitat quality
- Impacted dry weather flows
- Increased flooding frequency
- Stream temperature monitoring

Does the local government identify and track any of the following **biological indicators** (check all that apply):

- Fish assemblage analysis
- Macro-invertebrate assemblage
- Single species indicator
- Composite indicators
- Other biological indicators

Does the local government identify and track any of the following **water quality indicators** (check all that apply):

- Water quality pollutant constituent monitoring
- Toxicity testing
- Non-point source loadings
- Exceedance frequencies of water quality standards
- Sediment contamination
- Human health criteria

Administrative Indicators

Does the local government identify and track any of the following **social indicators** (check all that apply):

- Public attitude surveys
- Industrial/commercial pollution prevention programs
- Public involvement and monitoring

Does the local government identify and track any of the following **programmatic indicators** (check all that apply):

- Number of illicit connections identified and corrected
- Number of control measures installed, inspected, and maintained
- Growth and development

Does the local government identify and track any of the following **site indicators** (check all that apply):

- Control measure performance monitoring
- Industrial site compliance monitoring

## Program Assessment

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### Assessment of effectiveness of Stormwater Management Programs

- \_\_\_ Does the local government assess the effectiveness of each significant activity/control measures or type of activity/control measure implemented?
- \_\_\_ Based on the results of the effectiveness assessment, does the local government annually review its activities or control measures to identify modifications and improvements needed to maximize SWMP effectiveness?
- \_\_\_ Does the local government develop and implement a plan and schedule to address the identified modifications and improvements?
- \_\_\_ Does the local government annual review and updates as necessary the Stormwater Plan?
- \_\_\_ Does the local government document any changes in the cost of, or funding for, the Stormwater Program?

### **Does the Local Government Evaluate Progress towards achieving Identified Measurable Goals**

#### Public Education and Outreach

- \_\_\_ Does the Stormwater Management Program identify the target audiences likely to have significant storm water impacts (including commercial, industrial and institutional entities)?
- \_\_\_ Does the Stormwater Management Program identify what target pollutant sources the permittee's public education program is designed to address and why those sources are an issue?
- \_\_\_ Does the Stormwater Management Program describe the permittee's outreach program (i.e., how the permittee plans to inform individuals and households about the steps they can take to reduce storm water pollution and how the permittee plans to inform individuals and groups on how to become involved in the storm water program)?
- \_\_\_ Has the permittee developed general stormwater educational material to appropriate target groups?

Does general stormwater educational material include information on the following topics (check all that apply):

- Household Hazardous Waste?
- Pet Waste?
- Septic Systems?
- Lawn and Gardening?
- Vehicle Washing?
- Erosion?
- Stream Buffers?
- Flooding?
- Litter?
- Other topics?

Does the permittee's outreach program include (check all that apply):

- Distributing printed educational material to general public through utility mail outs?
- Distributing printed educational material to general public through special events (i.e., Information booth at festivals and fairs)?
- Distributing printed educational material to business / industry?
- Presentations to local community groups?
- Stormwater programs/presentations for elementary or middle schools?
- Local TV or radio spots?

## Program Assessment

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- Print Media - Ads / Articles / Newsletters?
- Posters?
- Storm drain stenciling?
- Other environmental education programs (i.e., Designate a "Keep SW Clean" month)?
- Workshops?
- Stream basin signage?

\_\_\_\_\_ Does the permittee maintain an internet web site for newsletter articles on stormwater, information on water quality, stormwater projects and activities, and ways to contact stormwater management program staff?

### Public Involvement and Participation

\_\_\_\_\_ Does the Stormwater Management Program identify the target audiences, including a description of the types of ethnic and economic groups engaged?

\_\_\_\_\_ Does the Stormwater Management Program describe how the permittee will involve the public in the development and implementation of the permittee's storm water management program and the types of public involvement activities included in the permittee's program that the permittee plans to use to educate local community groups?

Has the permittee provided for the means to involve the public in the development and implementation of the permittee's storm water management program through (check all that apply):

- Public Hearings, stakeholder meetings, or other meetings?
- A Stormwater Steering Committee (or similar advisory group)?
- Stream clean-up events?
- Adopt-a-stream, Adopt-a-drain, Adopt-a-highway or Adopt-a-trail program?
- Reforestation programs or wetland planting programs?
- A stormwater hotline?
- Volunteer monitoring programs?
- Storm drain stenciling?
- Encourage neighborhood coordinators to become active in the program?
- Regional workshops?
- Telephone/Web/Mall surveys?
- Working with citizen volunteers willing to educate others about the program?

### Illicit Discharge

\_\_\_\_\_ Does the local government annually review and revise as necessary the IDDE ordinances or other regulatory mechanisms?

\_\_\_\_\_ Does the local government maintain, assess annually and update as necessary a map identifying major outfalls and stormwater drainage system components?

\_\_\_\_\_ Has the local government developed and implemented a plan to detect and address non-storm water discharges, including illegal dumping?

\_\_\_\_\_ Has the local government implemented a training program for appropriate municipal staff?

\_\_\_\_\_ Has the local government informed public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste?

\_\_\_\_\_ Does the local government must promote, publicize, and facilitate a reporting mechanism for the public and staff to report illicit discharges and establish and implement citizen request response procedures?

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- \_\_\_\_\_ Does the local government conduct reactive inspections in response to complaints and follow-up inspections as needed to ensure that corrective measures have been implemented by the responsible party to achieve and maintain compliance?
- \_\_\_\_\_ Has the local government developed and implemented procedures to identify and eliminate failed septic system?
- \_\_\_\_\_ Has the local government developed and implemented procedures to identify and report to the County health department failed septic systems located within the permittee's planning jurisdiction?
- \_\_\_\_\_ Has the local government developed and implemented procedures to identify and report sanitary sewer overflows and sewer leaks to the system operator.
- \_\_\_\_\_ Does the local government track and document instances of non-compliance?
- \_\_\_\_\_ Has the local government developed and implemented a written spill/dumping response procedures?

### Construction

Has the local government developed and implemented (check all that apply):

- A program to reduce pollutants in any storm water runoff to your small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre?
- An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance?
- Requirements for construction site operators to implement appropriate erosion and sediment control best management practices?
- Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality?
- Procedures for site plan review which incorporate consideration of potential water quality impacts?
- Procedures for receipt and consideration of information submitted by the public?
- Procedures for site inspection and enforcement of control measures?

### Post Construction

- \_\_\_\_\_ Has the local government developed an ordinance or other regulatory mechanism to implement and enforce a program to address post construction runoff from new development and redevelopment projects?
- \_\_\_\_\_ Does the Stormwater Management Program describe how the permittee will ensure the long-term operation and maintenance (O&M) of BMPs?
- \_\_\_\_\_ Has the local government adopted the DWQ BMP Design Manual or certified that the local BMP Design Manual meets or exceeds the requirements in the DWQ BMP Design Manual.
- \_\_\_\_\_ Does the Stormwater Management Program provide training for staff and developers?
- \_\_\_\_\_ Are annual inspection reports required of permitted structural BMPs performed by a qualified professional?
- \_\_\_\_\_ Does the local government conduct site plan reviews of all new development and redeveloped sites that disturb greater than or equal to one acre?
- \_\_\_\_\_ Does the local government maintain an inventory of projects with post-construction structural stormwater control measures installed and implemented at new development and redeveloped sites, including both public and private sector sites located within the permittee's jurisdiction area?
- \_\_\_\_\_ Does the local government ensure that all stormwater control measures are operating correctly and are being maintained as required consistent with its applicable maintenance agreement?

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- \_\_\_ Does the local government make available through paper or electronic means, ordinances, post-construction requirements, design standards checklist, and other materials appropriate for developers?
- \_\_\_ Are deed restrictions and/or protective covenants required by the locally issued permit and incorporated by the development to ensure that subsequent development activities maintain the development (or redevelopment) consistent with the approved plans?
- \_\_\_ Does the local government track instances of non-compliance?

### Pollution Prevention/Good Housekeeping for Municipal Operations

- \_\_\_ Does the local government maintain, assess annually and update as necessary an inventory of facilities owned and operated by the permittee with the potential for generating polluted stormwater?
- \_\_\_ Has the local government identified and map municipally-owned or operated facilities?
- \_\_\_ Does the local government maintain and implement, assess annually and update as necessary an Operation and Maintenance (O&M) program for municipal owned and operated facilities?
- \_\_\_ Does the O&M program specify the frequency of inspections and routine maintenance requirements?
- \_\_\_ Does the local government have written spill response procedures for municipal operations owned and operated by the permittee with the potential to generate polluted stormwater runoff?
- \_\_\_ Has the local government developed a street sweeping program that includes route maps and describes the street sweeping methods and frequency, the types of sweepers used, identifies additional resources in sweeping seasonal leaves or pick-up of other material, and a description of the methods for addressing areas considered infeasible for street sweeping?
- \_\_\_ Does the local government evaluate the effectiveness of street sweeping programs based on cost, land use, trash and stormwater pollutant levels generated?
- \_\_\_ Does the local government maintain and implement, assess annually and update as necessary an O&M program for the stormwater sewer system including catch basins and conveyance systems?
- \_\_\_ Does the O&M program include route maps and specify the frequency of inspections and routine maintenance requirements?
- \_\_\_ Has the local government identified and mapped municipally-owned or operated Structural stormwater BMPs?
- \_\_\_ Does the map must identify the stormwater outfalls corresponding to each BMP as well as the receiving waters to which these facilities discharge?
- \_\_\_ Is the map maintained and updated regularly and be available for review by the permitting authority?
- \_\_\_ Does the local government maintain and implement, assess annually and update as necessary an O&M program for all municipally-owned or maintained structural stormwater controls?
- \_\_\_ Does the O&M program specify the frequency of inspections and routine maintenance requirements?
- \_\_\_ Does the local government inspect and maintain if necessary, all municipally-owned or maintained structural stormwater controls in accordance with the schedule developed by permittee?
- \_\_\_ Does the local government document inspections and maintenance of all municipally-owned or maintained structural stormwater controls?
- \_\_\_ Does the local government evaluate the materials used and activities performed on public spaces, easements, public right of ways, and other open spaces?
- \_\_\_ Does the local government implement practices to minimize landscaping-related pollutant generation, including, educational activities, permits, certifications, and other measures for municipal applicators and distributors, integrated pest management measures that rely on non-chemical solutions, schedules for chemical application that minimize the discharge of such constituents due to irrigation and expected precipitation and the collection and proper disposal of

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unused pesticides, herbicides, and fertilizers, and selection of native vegetation that is naturally adapted to local conditions?

- \_\_\_ Does the local government ensure municipal employees and contractors are properly trained and all permits, certifications, and other measures for applicators are followed?
- \_\_\_ Has the local government developed and implemented an employee training program for employees involved in implementing pollution prevention and good housekeeping practices?
- \_\_\_ Does the local government conduct annual review of the industrial activities with a Phase I NPDES stormwater permit owned and operated by the permittee?
- \_\_\_ Does the local government review the Stormwater Pollution Prevention Plan where one is required, the timeliness of any monitoring reports required by the Industrial permit, and the results of inspections and subsequent follow-up actions at the facilities?
- \_\_\_ Does the local government describe measures that prevent or minimize contamination of the stormwater runoff from all areas used for vehicle and equipment cleaning?

### Record Keeping

- \_\_\_ Does the local government keep records required by the NPDES permit for at least 3 years?
- \_\_\_ Does the local government submit records to the State upon request?
- \_\_\_ Does the local government make records, including a description of their storm water management program, available to the public at reasonable times during regular business hours (see Sec. 122.7 for confidentiality provision)? The local government may assess a reasonable charge for copying and may require a member of the public to provide advance notice.

### Reporting

- \_\_\_ Does the local government submit annual reports to the State?

Does the annual report include (check all that apply):

- The status of compliance with permit conditions?
- An assessment of the appropriateness and effectiveness of best management practices?
- Progress towards achieving measurable goals for each of the minimum control measures?
- Results of information collected and analyzed, including monitoring data, if any, during the reporting period?
- A summary of the storm water activities planned during the next reporting cycle?

The summary should include information on the establishment of appropriate legal authorities, project assessments, inspections, enforcement actions, continued inventory and review of the storm sewer system, education, training and results of the illicit discharge detection and elimination program.

- Changes in best management practices or measurable goals for any of the minimum control measures?
- Notice that the local government is relying on another governmental entity to satisfy some of your permit obligations (if applicable)?
- Information on the annual expenditures and budget anticipated for the year following each report along with an assessment of the continued financial support for the overall Stormwater Plan?