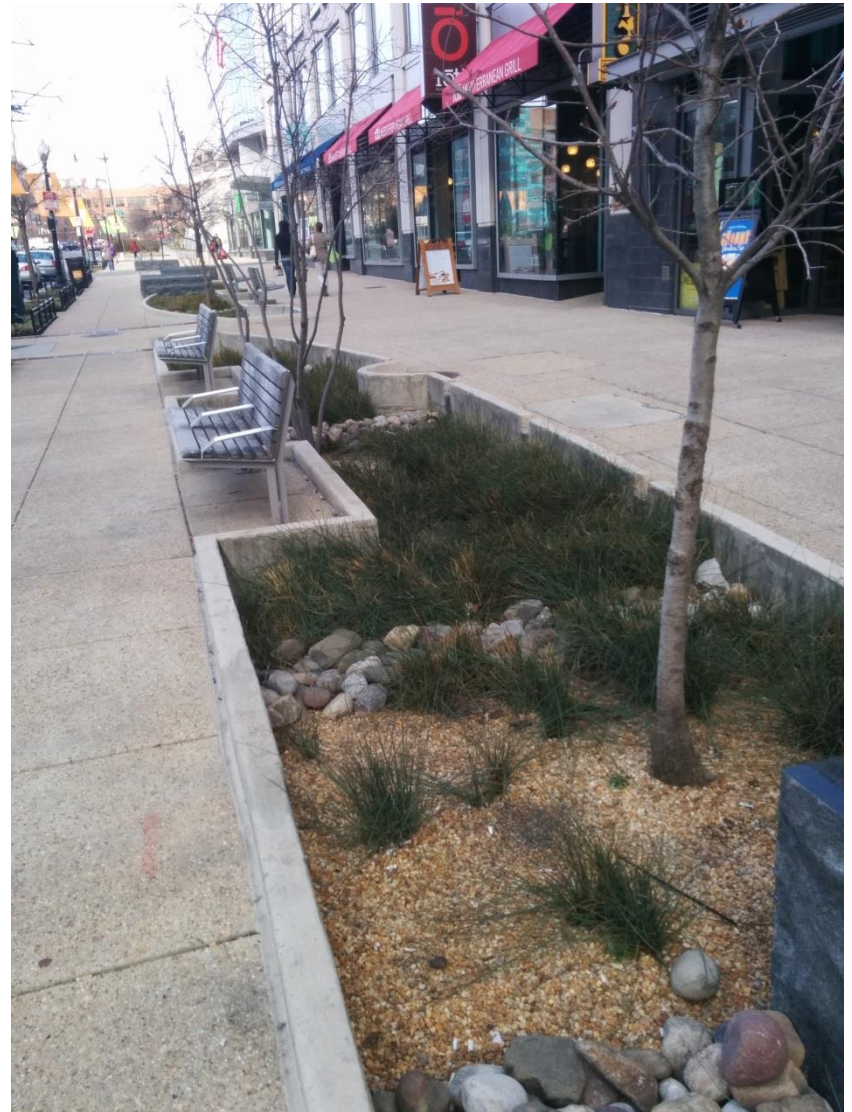


Update on the Tier A and Tier B MS4 NJPDES Permits

Corey Anen
NJDEP Division of Water Quality
September 22, 2017

OUTLINE

- MS4 Permit Overview
- Renewal Process
- Tier A Permit Changes
- Tools and Guidance
- Tier B Permit Changes



Six Minimum Measures – Federal Phase II Rules

- Public Education and Outreach
- Public Participation/Involvement
- Illicit Discharge Detection and Elimination
- Construction Site Runoff Control
- Post-Construction Runoff Control
- Pollution Prevention/Good Housekeeping

Statewide Basic Requirements – N.J.A.C. 7:14A-25

- Public Involvement/Participation
- Local Public Education and Outreach
- Construction Site Stormwater Runoff
- Post-Construction Stormwater Management in New Development and Redevelopment
- Pollution Prevention/Good Housekeeping
- Outfall Pipe Mapping
- Illicit Discharge and Scouring Detection and Control

Municipal Tiers

Current Effort

- **Tier A Municipalities (462)**
(mostly densely populated, along/near coast)
- **Tier B Municipalities (104)**
(rural, non-coastal)

To Follow

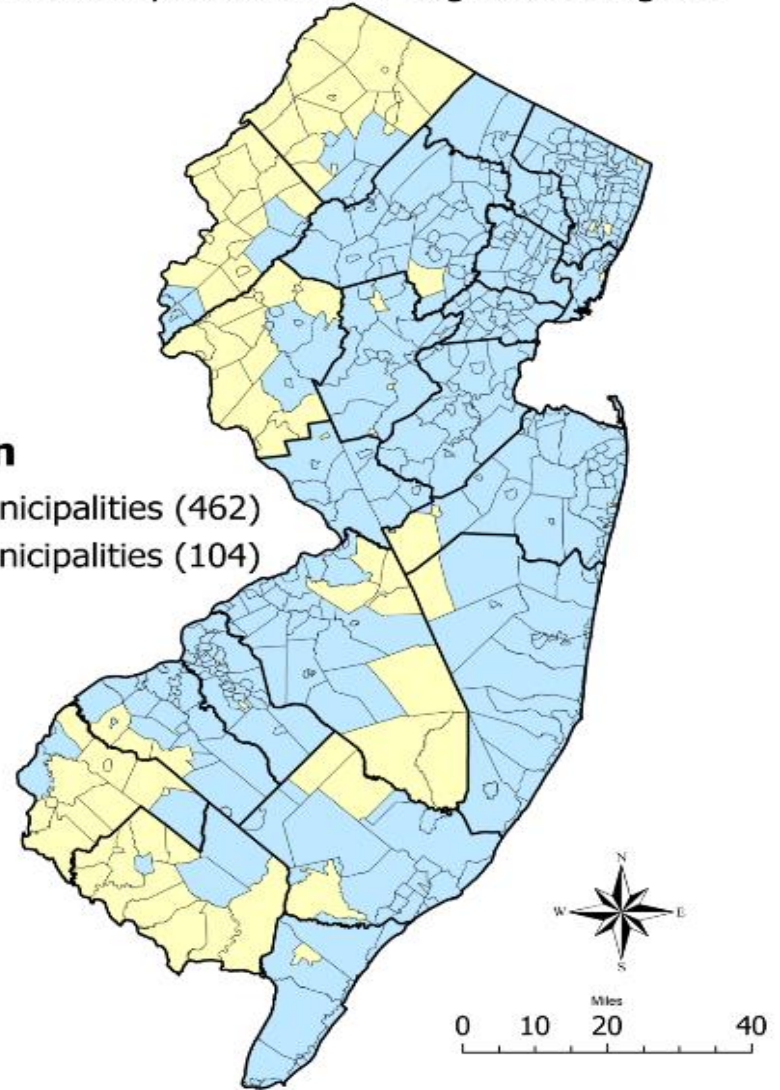
- **Public Complex (71)**
(colleges, universities, hospitals, prisons)
- **Highway Agencies (33)**
(Counties, NJDOT, Parkway and Turnpike Authorities)
- All expired 2/28/2014

Municipal Tier Assignments 2009

Under the NJPDES Municipal Stormwater Regulation Program

Explanation

- Tier A - Municipalities (462)
- Tier B - Municipalities (104)



MS4 Permit – Renewal Process

- Preliminary Draft Permits issued in February (Tier A) and March (Tier B) of 2016
- BNPC staff conducted 28 outreach meetings
 - February – June 2016
 - Invitations sent to all municipalities
 - 230 municipalities attended
- 420 total comments received on pre-draft
- Draft Renewal Permits issued February 15, 2017
- March 22, 2017: Public Hearing at DEP Main Office
- April 3, 2017: Public comment period closes
- Currently developing Response to Comments

MS4 Permit – Renewal Process (Additional Outreach)

Organization	Meeting Dates
League of Municipalities	2/8/16, 4/5/16 (webinar)
Clean Water Council	2/9/16, 4/12/16 (hearing)
US EPA Region 2	3/3/16, 7/27/16
Stonybrook Millstone Watershed Association	3/24/16
Environmental Groups	4/1/16
NJ Society of Municipal Engineers	4/6/16
NJ Association of Counties	5/19/16
Bergen County Mayor's breakfast	4/12/2016
Whippany River Watershed Action Committee	5/4/16

Tier A Draft Permit Renewal – Major Changes

- Inventory and Mapping
- Employee Education Requirements
- Total Maximum Daily Load (TMDL)
- Transparency of Permit Conditions
- Reduced Duplication of Effort

- Existing Requirement:
 - Ensure proper operation and maintenance of stormwater facilities
 - Applies to public and private facilities
- Proposed Changes:
 - Clarified language regarding operation and maintenance
 - Maintain a log to demonstrate compliance
 - Collect location information whenever maintenance is performed
 - Ensure maintenance of older stormwater facilities

Tier A Draft Permit Renewal – Guidance and Tools

Field Manual Basic Design Information/ Visual Aid for BMP Inspection

Basic Design Information
(This section shall be filled out by the design engineer.)

Hydrology Design Targets

- This basin is designed with a subsoil permeability rate of _____ inches hour (pre-construction) and _____ inches hour (post-construction - tested on _____).
- The design basin size is _____ down.
- The elevation of the seasonal high water table of this basin was observed on _____, and it was _____ feet below the basin bottom surface, at EL _____ feet.

Hydraulic Design Targets

- This basin is designed to infiltrate the runoff from the (Water Quality Design Storm / Stormwater storage volume), which generates _____ cubic feet of runoff.
- The invert elevation of the outlet for the design storm is at EL _____ feet (if applicable). The water surface elevation is at EL _____ feet.
- The emergency spillway is at EL _____ feet (if applicable).

Basin Configuration Targets

- Pre-treatment is provided by a (barbly with a depth of _____ feet; BMP Type: _____). A perforated riser (is/is not) used.
- This basin bottom (is/is not) covered by a sand layer. If a sand layer is used:
 - The depth of sand layer shall be _____ inches, which requires a volume of _____ cubic feet of sand.
 - The invert elevation of the sand layer is EL _____ feet.
 - The sand layer is designed to be replaced every _____ months.
- Vegetation
 - The top of basin bed (or sand bed) is designed to (have/have no) vegetation (if the basin is vegetated, a Landscaping Plan should be included in the Reference Documents section).

January 2011 Surface Submittal Basin Page 4-20

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Visual Aid for Dry Type Stormwater Basin Inspection

Close. Basins should have visible "visual type of dry basin, not located in the canopy of trees in the field around."



Courtesy of MS007

Note: The inlet is not properly drained, assuming it has not rained within 72 hours.
Corrective Action: Clear and remove sediment. Check whether the water table is at or above the bottom of the basin. Also check the permeability of the underlying soil, if necessary.

Preventative Action: Routine inspection and removal of sediment from the fordray.



Courtesy of MS007

Note: The outlet pipe is clogged by sediment and vegetation.
Corrective Action: Clear and remove sediment and unwanted vegetation.
Preventative Action: Routine inspection and removal of sediment and unwanted vegetation.

January 2011 Surface Submittal Basin Page 4-20

Inspection Checklist / Maintenance Actions

Inspection Checklist / Maintenance Actions

Surface Submittal Basin

Checklist - Quarterly / Annual / Monthly / Special Event Inspections (check and)

Checklist No. _____ Inspection Date: _____

Date of most recent rain event: _____ (indicate)

Rain Condition: (Wet / Storm / Drought / Other _____)

Ground Condition: (Dry / Water / Pudding / Submerged / Storm accumulation (indicate))

(Site inspection letter and permittee/corrective action/responsible party shall adjust for laws and activities later upon the conditions of the site, specific design targets, and the requirements of regulatory authorities.)

Component No. / Component Type	For Inspection	For Maintenance / Corrective Action
All Stormwater (Storm)	1. Inspecting an outlet to prevent or later monitor and engage upon	Repair or replace
	2. Clogged pipes to excessive sediment in the fordray	Remove sediment or debris
All Stormwater (Storm)	3. Damaged inlet structure (e.g., cracking, subsidence, spalling, erosion, or deterioration)	Repair or replace the inlet structure
	4. MCO inspection	(If a MCO is used for pretreatment, see manufacturer's maintenance manual)
All Stormwater (Storm)	5. BMP inspection	(See BMP No. _____ field manual)

Approved Work Order # _____

Inspection Period: _____ Date of Inspection: _____ Inspector / Signatures: _____

***Signatures to be submitted and inspection completion is required by field activities and reporting activities.**

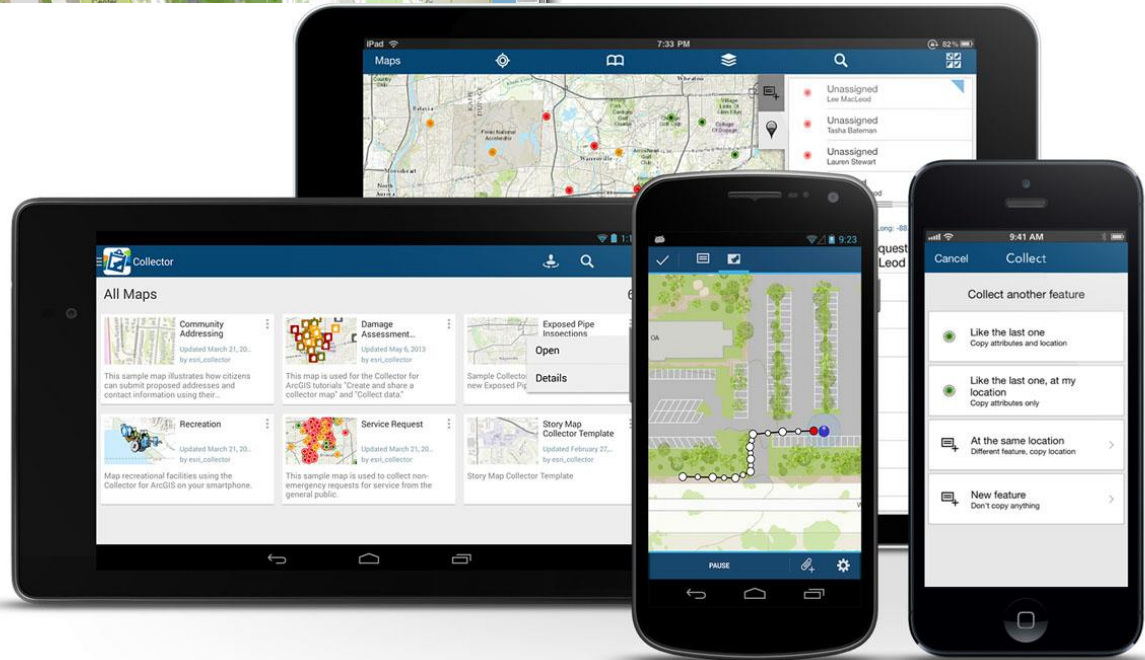
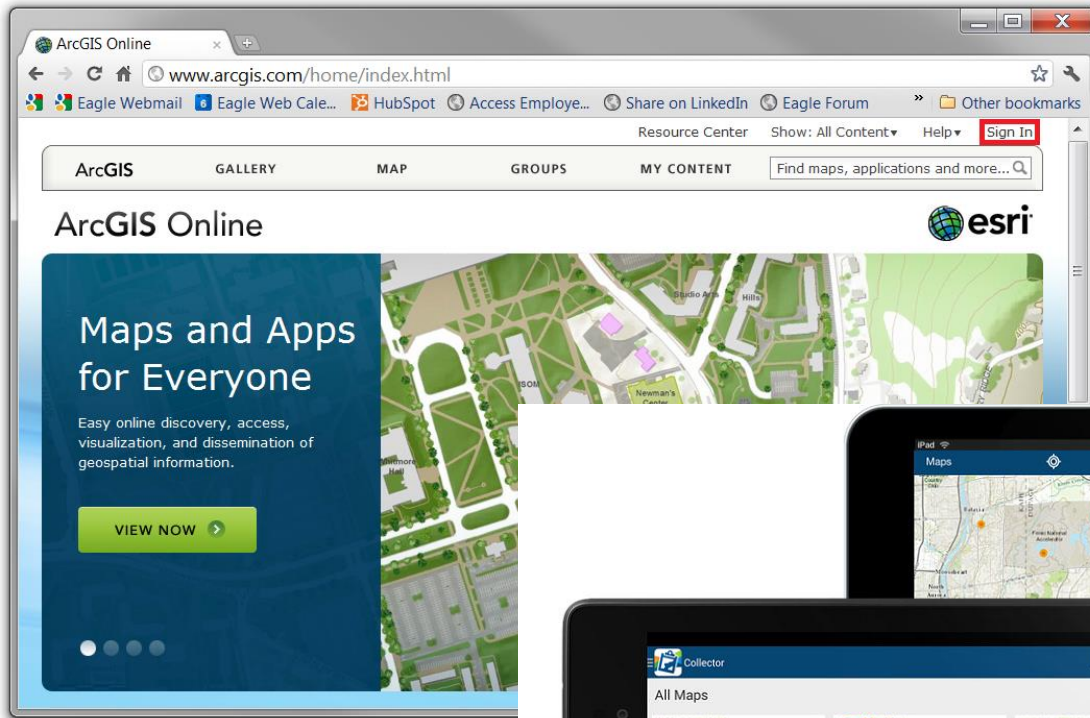
***Do not include in the document log after performing maintenance.**

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Tier A Draft Permit Renewal – Guidance and Tools

- Creation of a data dictionary or template for 6 stormwater infrastructure feature classes
- Development of multiple collection methods
- Incorporation of existing data
- Detailed guidance on collection methodologies
- In person training and assistance

Tier A Draft Permit Renewal – Guidance and Tools



Tier A Draft Permit Renewal – Guidance and Tools



Outfall Pipes



Stormwater Management Basins



Subsurface Infiltration/
Detention



Manufactured Treatment Devices



Green Infrastructure



Storm Drain Inlets

Tier A Draft Permit Renewal – Guidance and Tools

Feature Class	Attribute	Domains
Outfall Pipe	Outfall Pipe ID	DEP Generated
	Road Name	(To be completed by permittee)
	Outfall Type (choose one)	Channelized flow
		Concrete headwall
		Ditch
		Flared end section
		Grass swale
		Pipe
		Pipe in headwall
		Other
	Owner Type (choose one)	County
		Federal Government
		Municipality
		Private
		School District
		State
		Other
	Data Collection Method (choose one)	Unknown
Desktop Collection		
Mapping Grade GPS		
Mobile Device		
Mobile Device GPS Paired		
Recreational Grade GPS		
	Survey Grade GPS	

Tier A Draft Permit Renewal – Education Requirements

- New training required for stormwater management design reviewers
- Once every 5 years
- Offered twice annually for free
- Within EDP + 12 months

Tier A Draft Permit Renewal – Education Requirements

- Training required for municipal board and governing body members
- Must complete “Asking the Right Questions” tool within EDP + 6 months
- Required for anyone who reviews and approves applications for development/redevelopment
- Use other training tool once per term thereafter

- NJPDES Municipal Stormwater Regulation Program Employee Training Videos
- Stormwater Management rule training videos
- Maintenance guidance video
- Links to other training at njstormwater.org/training

Tier A Draft Permit Renewal – Guidance and Tools

Video1-SWM Rule-Applicability-July-2015



APPLICABILITY

Municipal Regulations

Municipal Stormwater General Permit

MS4 Permit- The Stormwater Control Ordinance requires compliance with the Stormwater Management rules

MS4 Permit Definition for a Major Development:

- Any development that results in the disturbance of 1 or more acres, and is subject to the New Jersey Municipal Land Use Law
- *It is very important to check the regulations of the municipality in which a development is planned, as their definition could be different*

If it is a major development, then it requires compliance with the design and performance standards in the Stormwater Management rules.



03:59



Tier A Draft Permit Renewal – TMDL Requirements

- Identify and review approved and adopted TMDLs applicable to municipality
- Identify and develop strategies to address pollutant sources
- Incorporate strategies into SPPP as Optional Measures
- Use TMDL information to prioritize maintenance

Tier A Draft Permit Renewal – Guidance and Tools

Total Maximum Daily Load (TMDL) Look-Up Tool

The tool was developed to allow New Jersey's municipal stormwater program coordinators to quickly identify Total Maximum Daily Load (TMDL) information in relation to Municipal Separate Storm Sewer Systems. It should also prove useful to others with an interest in water quality issues that affect our state.

To use the TMDL Look-Up Tool, go to the dropdown feature below and locate your municipality. The tool will display a list of watersheds and established, approved or adopted TMDL information associated with the selected municipality. To view the TMDL document and find Implementation strategies, click on the associated link: "View the TMDL Document". **Once you have opened the TMDL document you can locate the Implementation section using the table of contents and use this information to identify measures you can implement in your community.**

Why use the TMDL Look-Up Tool? This tool allows the user to quickly identify Total Maximum Daily Load (TMDL) information associated with any segment of surface water wholly or partially within or bordering the Tier A Municipality. Municipalities can use this information to assess and address local water quality issues in relation to operation of their Municipal Separate Storm Sewer System (MS4) as required under the [Tier A MS4 Master General Permit No. NJ0141852](#). It is anticipated that the next iteration of this permit, expected to be issued in 2017, will require permittees to identify TMDL information for inclusion in municipal Stormwater Pollution Prevention Plans. Users may refer to the Implementation section of each TMDL report as a starting point for developing strategies to address identified pollutants at the local level.

County: Municipality:

Please click Reset for a new search.

A Guide to Abbreviations used in the TMDL Look-Up Tool

Hg = Mercury

TP = Total Phosphorus

DO = Dissolved Oxygen

TSS = Total Suspended Solids

Bureau of Nonpoint Pollution Control

[Find Forms](#) | [Contact Us](#)

Municipality and County

Trenton City
Mercer County

Total Maximum Daily Load(TMDL) Information for Selected Municipality:

Applicable Stream TMDL(s)

- Total Maximum Daily Loads for Fecal Coliform to Address 28 Streams in the Northwest Water Region

Fecal Coliform - 2003 : Assunpink Creek, Shabakunk Creek, Little Shabakunk : [View the TMDL Document](#)

Applicable Lake TMDL(s)

None

Applicable Shellfish TMDL(s)

None

Tier A Draft Permit Renewal – Guidance and Tools

Total Maximum Daily Load (TMDL) Guidance for Tier A MS4 Permittees

Phosphorus	
Potential Sources	Potential Responses
Stormwater management facilities that are improperly designed and/or maintained	Ensure proper operation and maintenance of publicly owned and privately owned stormwater management facilities
	Retrofit existing stormwater management facilities to provide enhanced water quality benefits
Unmanaged urban stormwater runoff	Implement green infrastructure and other stormwater management strategies to reduce the adverse effects of unmanaged stormwater runoff;
	Adopt a stricter stormwater control ordinance, such as reducing the threshold for major development or requiring on-site retention
	Prioritize street sweeping and stormwater inlet cleaning in TMDL areas
Illicit discharges and connections	Identify and eliminate illicit discharges and connections
	Prioritize infrastructure mapping and inspection in TMDL areas
Malfunctioning sewage conveyance facilities	Identify and eliminate illicit discharges and connections
On-site disposal systems that are inadequately designed, operated, maintained, or located	Identify and eliminate illicit discharges and connections
Pets	Enforce pet waste ordinance(s);
	Target public education materials to pet owners
Wildlife	Enforce wildlife feeding ordinance(s)
	Establish goose management BMPs
	Riparian/Lake and “No Mow” buffer restoration
Fertilizers	Ensure a mechanism is in place for enforcement of the New Jersey Fertilizer Law (see www.nj.gov/dep/healthylawshealthywater/)

- Post information on website:
 - SPPP
 - Municipal Stormwater Management Plan
 - Ordinances
- Ensure public notice of opportunities to participate in plan development

Tier A Draft Permit Renewal – Eliminated Duplicative Permits

- Increased coverage of municipal maintenance yard activities
- Implement BMPs for underground vehicle washwater tanks
- Implement BMPs for yard waste/composting activities

Tier A Draft Permit Renewal – Other Changes

- Reorganized permit and clarified language
- Reduced frequency for most employee training from annual to biennial
- Expanded local public education requirement to 12 points and added new opportunities
- Outfall pipe map: restored requirement to ID the receiving water body
- Major Development Stormwater Summary Form

Tier A Draft Permit Renewal – Other Changes

Attachment D – Major Development Stormwater Summary

General Information			
1. Project Name:			Lot & Block Info:
2. Municipality:	County:		
3. Site Location (State Plane Coordinates – NAD83)	E: _____	N: _____	
4. Date of Final Approval for Construction by Municipality (MM/DD/YYYY): _____ Date of Certificate of Occupancy (MM/DD/YYYY): _____			
5. Project Type (place an "x" after all that apply) Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Other (please specify) _____			
6. Soil Conservation District Project #: _____			
7. Did the project require a NJDEP Land Use Permit? Yes <input checked="" type="radio"/> No <input type="radio"/>		Land Use Permit #: _____	
8. Did the project require any mitigation measures? Yes <input type="radio"/> No <input checked="" type="radio"/>			
If yes, which standard was mitigated? _____			

- Completed for all new major developments
- Administrative and hydrologic information essential to stormwater management reviews

Tier B Draft Permit Renewal – Changes

- Expanded local public education requirement to 12 points and added new opportunities
- Major Development Stormwater Summary Form
- Reorganized permit and clarified language
- Revised existing attachments and added three new ones

Tier A & B Draft Permit Renewal – Attachment A

Measurable Goals for Statewide Basic Requirements and Other Conditions of this Permit

Summary of Minimum Standard (See Part IV for specific permit requirements)	Permit Cite	Measurable Goal (See Part IV for specific permit requirements)	Implementation Schedule	New Requirement?
Public Involvement and Participation Including Public Notice				
Provide for public notice under the Open Public Meetings Act, statutory procedures for enactment of ordinances, and Municipal Land Use Law when providing for public participation in the development and implementation of a stormwater program, and maintain records necessary to demonstrate compliance.	IV.B.1.a & d	Certify in each annual report that all public notice requirements have been met and relevant records kept.	EDPA	No
Provide the current SPPP to the public upon request.	IV.B.1.b.i	Certify in each annual report that the SPPP was made available to the public.	EDPA	No
Post the current SPPP on the municipality's website.	IV.B.1.b.ii	Certify in each annual report that the SPPP has been posted on the municipality's website (excluding inspection logs and other recordkeeping required by this permit) and that the posted SPPP is current.	EDPA + 90 days	Yes
Post the current Municipal Stormwater Management Plan (MSWMP) and related ordinances on the municipality's website.	IV.B.1.b.iii	Certify in each annual report that the MSWMP and related ordinances have been posted on the municipality's website and that the posted documents are current.	EDPA + 90 days	Yes
Local Public Education and Outreach				
Implementation of a Public Education and Outreach Program by conducting activities that total a minimum of 12 points on an annual basis.	IV.B.2.a	Certify in each annual report that the minimum point value has been met and report point totals in the Annual Report. Maintain records of materials and activities from Attachment B, including dates of activities and any other relevant documentation (e.g. brochures, pictures, sign-in sheets, press clippings).	EDPA	Modified

More Information

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Main Stormwater Page:

<http://www.nj.gov/dep/dwq/fd.htm>

Links to MS4 Permits:

http://www.nj.gov/dep/dwq/msrp_home.htm

Post-construction Stormwater:

www.njstormwater.org