



STORMWATER POLLUTION PREVENTION PLAN

**CITY OF PATERSON,
PASSAIC COUNTY, NEW JERSEY**

Prepared - May 2005

Revised – May 2019

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1. Introduction

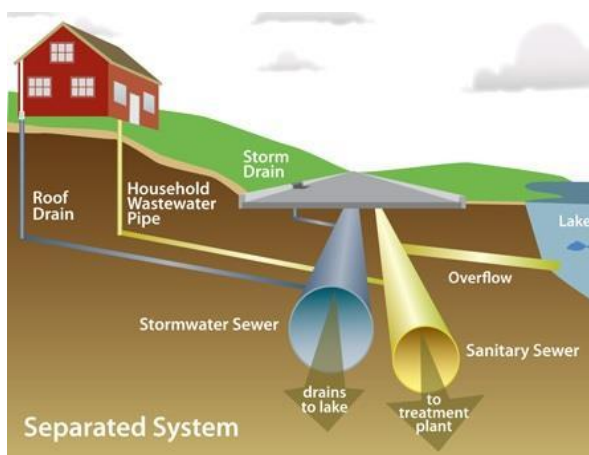
In 2004, the New Jersey Department of Environmental Protection (NJDEP) issued the New Jersey Pollution Discharge Elimination System (NJPDES) Master General Permit (Permit) to address potential pollutants entering local receiving waters through municipal separate storm sewer systems. (MS4). The City of Paterson (Paterson) is designated a Tier A Municipality, due to its historical infrastructure, urban landscape, and population density. The goal of the permit is to not only reduce and/or eliminate non-point source pollution, which is a product of our daily activities as residents and employees; but also eliminate illicit connections and increase public educations and awareness of non-point source pollution.

Part 1.E.2 of the Permit requires that Tier A Municipalities prepare and implement a written Stormwater Pollution Prevention Plan (SPPP) that describes the municipality's stormwater program and how the municipality is implementing the Statewide Basic Requirements (SBRs) of the Permit. The SPPP focuses on eight SBR's that address water quality issues associated with new development, redevelopment and existing development.

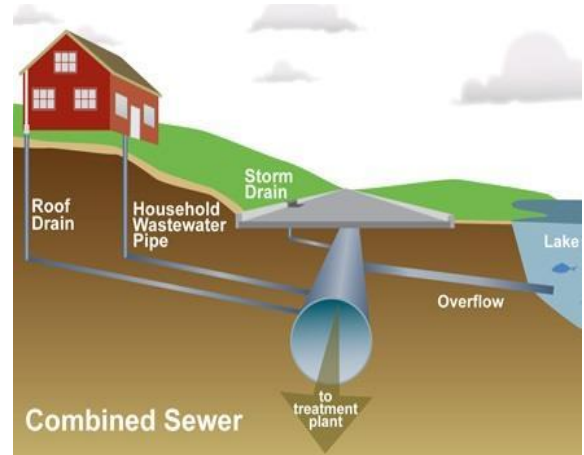
1.1 MS4 Areas vs. CSO Areas

Stormwater runoff is generated when precipitation from rain and snowmelt events flow over land or impervious surfaces and does not percolate into the ground. As the runoff flows over the land or impervious surfaces (paved streets, parking lots, and building rooftops), it accumulates debris, chemicals, sediment or other pollutants. The primary method to control stormwater discharges is the use of Best Management Practices (BMPs).

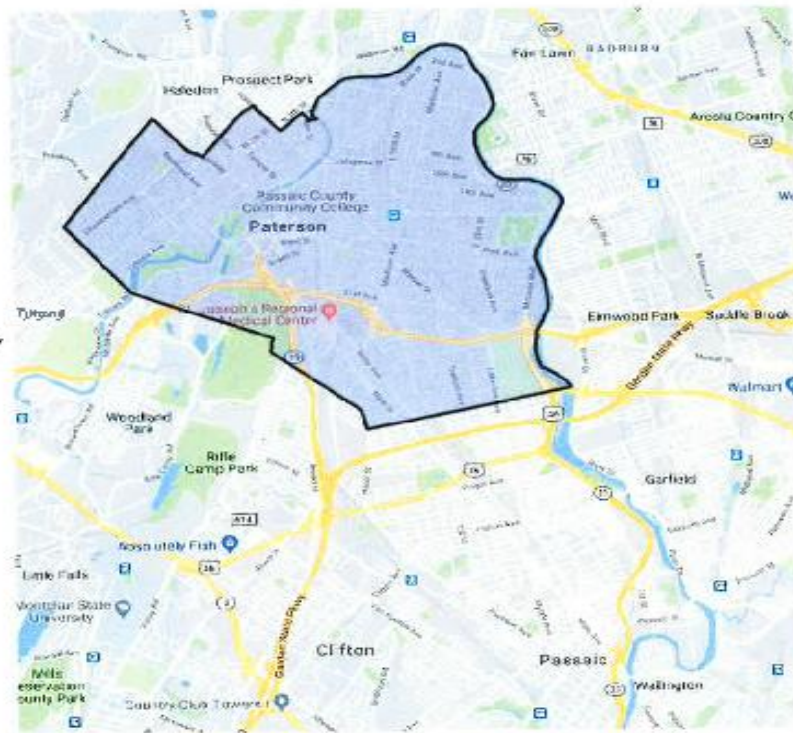
The City of Paterson's sewer system is divided between separately sewered (MS4) and combined (CSO) sewer systems. In a separate system, the sanitary sewer lines (wastewater from residences and businesses) are separate from the stormwater sewer lines that collect rainfall runoff from paved and over land areas. The sanitary waste is sent to the local wastewater treatment plant and the stormwater runoff drains to a local waterway. In a combined system, sanitary and stormwater flows are combined, a portion of the stormwater flow is sent to the treatment plant and excess combined flow is discharged to local waterways. Paterson's CSO discharges are covered under a different permit.



Separated System



Combined System



2. Statewide Basic Requirements (SBR)

Listed below are the eight SBR's and a brief description of each. More details about Paterson's stormwater programs are provided in the SPPP forms, provided by the NJDEP Tier A Municipal Stormwater Guidance Document (Attachment A) and Paterson's specific plans, SOP's and Training manuals (Attachment B - D).

1. **Public Notice**
The municipality shall comply with applicable state and local public notice requirements when providing for public participation in the stormwater program.
2. **Post Construction Stormwater Management in New Development**
The municipality shall implement and enforce a program that addresses stormwater runoff from new and re-developments greater than one acre or less than one acre if the development is part of a large common development.
3. **Local Public Education**
The municipality shall implement a local public education program that focuses on the impact of stormwater discharges to receiving waters and what citizen can do to reduce pollutant sources.
4. **Improper Disposal of Waste**
Improper disposal of waste includes ordinances to be adopted and enforced by the municipality including: pet waste, litter, dumping, wildlife feeding, yard waste collection, refuse containers, fertilizers, and private storm drain inlets.
5. **Illicit Connection Elimination and MS4 Outfall Pipe Mapping**
The municipality shall implement a program that inspects stormwater outfalls for illicit connections. If connects are detected, they must be investigated and eliminated. A list of stormwater outfalls locations must be kept and maintained.
6. **Solids and Floatable Controls**
This SBR focuses on street sweeping, storm drain inlets and catch basins.
7. **Maintenance Yard Operations**
Standard Operating Procedures (SOP) shall be established for certain activities conducted at municipal maintenance yards, for example material storage, vehicle washing and maintenance and vehicle fueling.
8. **Employee Training**
The municipality shall implement a training program for all employees whose job activities involve stormwater and the SBRs.

3. References

City of Paterson Municipal Code

<https://www.ecode360.com/PA1437?needHash=true>

Paterson Zoning and Land Use Regulations, April 2016

<https://www.patersonnj.gov/departments/division.php?structureid=64>

NJDEP Tier A Municipal Storm Water Guidance Document

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

NJDEP Tier A Municipal Stormwater General Permit

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

4. Attachments

- A. NJDEP SPPP Forms
- B. Tier A Municipal Stormwater General Permit Employee Training
- C. Stormwater Pollution Prevention Maintenance Facility Operations SOPs
- D. Stormwater Facility Maintenance & Catch Basin Inspection Program

Tier A Municipal Stormwater Regulation Program

Stormwater Pollution Prevention Team Members

Number of team members may vary.

Completed by: Frederick J. Margron, P.E.

Title: City Engineer

Date: March 8, 2005

Municipality: City of Paterson

County: Passaic

NJPDES #: NJG 0155608

PI ID #: 207691

Stormwater Program Coordinator: Diane Polifronio

Title: Recycling Coordinator

Office Phone #: 973-321-1393

Emergency Phone #:

Public Notice Coordinator: Diane Polifronio

Title: Recycling Coordinator

Office Phone #: 973-321-1393

Emergency Phone #:

Post-Construction Stormwater

Management Coordinator: Robert Cornish

Title: Planning Board Chairman

Office Phone #:

Emergency Phone #:

Local Public Education Coordinator: Diane Polifronio

Title: Recycling Coordinator

Office Phone #: 973-321-1393

Emergency Phone #:

Ordinance Coordinator: Diane Polifronio

Title: Recycling Coordinator

Office Phone #: 973-321-1393

Emergency Phone #:

Public Works Coordinator: Manny Ojeda

Title: Director of Public Works

Office Phone #: 973-321-1488

Emergency Phone #:

Employee Training Coordinator: Manny Ojeda

Title: Director of Public Works

Office Phone #: 973-321-1488

Emergency Phone #:

Other: Frederick J. Margron, P.E.

Title: City Engineer

Office Phone #: 973-321-1320

Emergency Phone #:

SPPP Form 2 - Public Notice

Municipality
Information

Municipality: City of Paterson

County: Passaic

NJPDES # : NJG 0155608

PI ID #: 207691

Team Member/Title: Jane E. Williams-Warren, City Clerk

Effective Date of Permit Authorization (EDPA): June 7, 2004

Date of Completion: March 8, 2005

Date of most recent update: June 7, 2005

Briefly outline the principal ways in which you comply with applicable State and local public notice requirements when providing for public participation in the development and implementation of your stormwater program.

For meetings where public notice is required under the Open Public Meetings Act ("Sunshine Law," N.J.S.A. 10:4-6 et seq.), the City of Paterson provides public notice in a manner that complies with the requirements of that Act. Also, in regard to the passage of ordinances, the City of Paterson provides public notice in a manner that complies with the requirements of N.J.S.A. 40:49-1 et seq. In addition, for municipal actions (e.g., adoption of the municipal stormwater management plan) subject to public notice requirements in the Municipal Land Use Law (N.J.S.A. 40:55D-1 et seq.), the City of Paterson complies with those requirements.

SPPP Form 3 – New Development and Redevelopment Program

| | | |
|---------------------------------|--|---|
| Municipality Information | Municipality: <u>City of Paterson</u> | County: <u>Passaic</u> |
| | NJPDES # : NJG <u>0155608</u> | PI ID #: <u>207691</u> |
| | Team Member/Title: <u>Robert Cornish, Planning Board Chairman</u> | |
| | Effective Date of Permit Authorization (EDPA): <u>June 7, 2004</u> | |
| | Date of Completion: <u>March 8, 2005</u> | Date of most recent update: <u>June 7, 2005</u> |

Describe in general terms your post-construction stormwater management in new development and redevelopment program (post-construction program), and how it complies with the Tier A Permit minimum standard. This description must address compliance with the Residential Site Improvement Standards for stormwater management; ensuring adequate long-term operation and maintenance of BMPs (including BMPs on property that you own or operate); design of storm drain inlets (including inlets that you install); and preparation, adoption, approval, and implementation of a municipal stormwater management plan and municipal stormwater control ordinance(s). Attach additional pages as necessary. Some additional specific information (mainly about that plan and ordinance(s)) will be provided in your annual reports.

To control stormwater from new development and redevelopment projects throughout the City of Paterson (including projects we operate) we will do the following:

We are already ensuring that all new residential development and redevelopment projects that are subject to the Residential Site Improvement Standards for stormwater management (including the NJDEP Stormwater Management rules, N.J.A.C. 7:8, referenced in those standards) are in compliance with those standards. Our planning and zoning boards ensure such compliance before issuing preliminary or final subdivision or site plan approvals under the Municipal Land Use Law.

Since the EDPA, the City of Paterson has not constructed any new development or redevelopment projects on City property. If we decide to construct such a project before our municipal stormwater control ordinance takes effect, we will ensure adequate long-term operation and maintenance of BMPs for that project by requiring a project maintenance plan similar to the maintenance plan described in our draft of that ordinance, and by requiring and funding the implementation of that plan. We will also require any storm drain inlets that we install to comply with the design standard in Attachment C of our permit. Once that ordinance takes effect, we will ensure such operation and maintenance for any new development or redevelopment projects on our property by complying with the maintenance requirements in that ordinance. In addition, any storm drain inlets we install for such projects will comply with that ordinance's standard for such inlets.

Our planning board and municipal attorney have reviewed the Sample Municipal Stormwater Management Plan and Model Stormwater Control Ordinance in the NJ Stormwater BMP Manual, and have drafted a municipal stormwater management plan and municipal stormwater control ordinance similar to that sample and model. We have also met with county planning agency staff to discuss the draft plan and ordinance. The plan and ordinance will be adopted by our planning board and City Council, respectively, by the deadlines specified in the permit, and will be submitted to the county planning agency for approval.

Once approved, the ordinance, which will be administered by our planning and zoning boards and code enforcement officer, will control stormwater from non-residential development and redevelopment projects. Where it is necessary to implement the municipal stormwater management plan, the approved ordinance will also control aspects of residential development and redevelopment projects that are not subject to the Residential Site Improvement Standards.

For any BMP that is installed in order to comply with the requirements of our post-construction program, the City of Paterson will ensure adequate long-term operation as well as preventative and corrective maintenance (including replacement) of BMPs. For BMPs on private property that we do not own or operate, the City of Paterson intends to do this by adopting and enforcing a provision in the municipal stormwater control ordinance that requires the private entity to perform the operation and maintenance, with penalties if the private entity does not comply. If, for example, the private entity does not perform the required maintenance, the City can perform the maintenance and charge the private entity.

The City of Paterson will also enforce, through the municipal stormwater control ordinance, compliance with the design standard in Attachment C of our permit to control passage of solid and floatable materials through storm drain inlets. The City of Paterson expects that for most projects, such compliance will be achieved either by conveying flows through a trash rack as described in the "Alternative Device Exemptions," or (for flows not conveyed through such a trash rack), by installation of the NJDOT bicycle safe grate and (if needed) a curb opening with a clear space no bigger than two inches across the smallest dimension.

SPPP Form 4 - Local Public Education Program

Municipality
Information

Municipality: City of Paterson

County: Passaic

NJPDES # : NJG 0155608

PI ID #: 207691

Team Member/Title: Diane Polifronio, Recycling Coordinator

Effective Date of Permit Authorization (EDPA): June 7, 2004

Date of Completion: March 8, 2005

Date of most recent update: June 7, 2005

Local Public Education Program

Describe your Local Public Education Program. Be specific on how you will distribute your educational information, and how you will conduct your annual event. Attach additional pages with the date(s) of your annual mailing and the date and location of your annual event.

For our annual distribution, we will mail the DEP brochure to our residents and businesses. The brochure will be distributed in January with our township newsletter. Extra copies will be available at our county library and at our municipal building.

Our annual event will be held each year in coordination with our county Earth Day Celebration. We will make the DEP brochure and other educational materials available at our table. We will also distribute pencils, magnets, and keychains with environmental messages related to the required BMP topics.

In addition, we will invite our high school environmental club, local watershed group, and other environmental groups to set up their own booths during this event.

SPPP Form 5 – Storm Drain Inlet Labeling

Municipality
Information

Municipality: City of Paterson

County: Passaic

NJPDES # : NJG 0155608

PI ID #: 207691

Team Member/Title: Diane Polifronio, Recycling Coordinator

Effective Date of Permit Authorization (EDPA): June 7, 2004

Date of Completion: March 8, 2005

Date of most recent update: June 7, 2005

Storm Drain Inlet Labeling

Describe your storm drain inlet labeling program, including your labeling schedule, the details of your long-term maintenance plan, and plans on coordinating with watershed groups or other volunteer organizations.

For our storm drain inlet labeling program we plan on coordinating with our local girl scout and boy scout groups and the high school environmental club.

Where it is practical, they will do the labeling for us. In areas where it is not safe for the volunteer groups, our Public Works department will be doing the labeling. We will label all storm drain inlets that are along municipal streets with sidewalks, and all storm drain inlets within plazas, parking areas, or maintenance yards that are operated by the City of Paterson.

Where the labeling is done by volunteer groups we will use stencils that will read "No dumping - Drains to Waterway" with a picture of a fish next to it. Where labeling is done by the Public Works Department we will use metal labels that will be applied using adhesive. We will be using these two different techniques because we feel that the volunteers who are doing the labeling will benefit the most from this program. The more opportunities they have to perform the storm drain labeling, the greater the benefit. However, we feel that having our Public Works Department constantly labeling and re-labeling the same areas will be more of a nuisance, so they will use the metal labels that will only need to be applied once.

Attached is a map of the City of Paterson. During our annual catch basin cleaning program, we will be checking these labels to ensure that they are still visible, and if they are not, we will ensure that the labels are replaced immediately.

SPPP Form 6 – MS4 Outfall Pipe Mapping

Municipality
Information

Municipality: City of Paterson

County: Passaic

NJPDES # : NJG 0155608

PI ID #: 207691

Team Member/Title: Frederick J. Margron, P.E., City Engineer

Effective Date of Permit Authorization (EDPA): June 7, 2004

Date of Completion: March 8, 2005

Date of most recent update: June 7, 2005

Explain how you will prepare your map (include its type and scale, and the schedule for the mapping process). Who will prepare your map (e.g., municipal employees, a consultant, etc.)?

The City of Paterson Public Works Department will use a GPS Unit to map out the location of the end of all outfall pipes operated by the City. They will identify, GPS and map each outfall pipe that is located.

Once all outfall pipe locations are identified, a map will be developed displaying these outfall pipe locations, with an alphanumeric identifier at a scale of 1 inch = 200 feet. The Passaic River and all other waterbodies receiving outfall pipe discharges will also be identified on the map.

SPPP Form 7 – Illicit Connection Elimination Program

Municipality Information

Municipality: City of Paterson

County: Passaic

NJPDES # : NJG 0155608

PI ID #: 207691

Team Member/Title: Frederick J. Margron, P.E., City Engineer

Effective Date of Permit Authorization (EDPA): June 7, 2004

Date of Completion: March 8, 2005

Date of most recent update: June 7, 2005

Describe your Illicit Connection Elimination Program, and explain how you plan on responding to complaints and/or reports of illicit connections (e.g., hotlines, etc.). Attach additional pages as necessary.

We will conduct an initial physical inspection of all of our outfall pipes during the mapping process. We will use the DEP Illicit Connection Inspection Report Form to conduct these inspections, and each of these forms will be kept with our SPPP records. Outfall pipes that are found to have a dry weather flow or evidence of an intermittent non-stormwater flow will be rechecked again to locate the illicit connection. If we are able to locate the illicit connection (and the connection is within the City of Paterson) we will cite the responsible party for being in violation of our Illicit Connection Ordinance, and we will have the collection eliminated. If, after the appropriate amount of investigation, we are unable to locate the source of the illicit connection, we will submit the Closeout Investigation Form with our Annual Inspection and Recertification. If an illicit connection is found to originate from another public entity, the City will report the illicit connection to the Department.

SPPP Form 8 – Illicit Connection Records

| | | |
|-------------------------------------|---|---|
| Municipality Information | Municipality: <u>City of Paterson</u> | County: <u>Passaic</u> |
| | NJPDES # : NJG <u>0155608</u> | PI ID #: <u>207691</u> |
| | Team Member/Title: <u>Frederick J. Margron, P.E., City Engineer</u> | |
| | Effective Date of Permit Authorization (EDPA): <u>June 7, 2004</u> | |
| | Date of Completion: <u>March 8, 2005</u> | Date of most recent update: <u>June 7, 2005</u> |

Prior to May 2, 2006

Note: Attach a copy of each illicit connection report form for outfalls found to have a dry weather flow.

Total number of inspections performed this year? program implementation will begin by October 2005

Number of outfalls found to have a dry weather flow?

Number of outfalls found to have an illicit connection?

How many illicit connections were eliminated?

Of the illicit connections found, how many remain?

May 2, 2006 – May 1, 2007

Note: Attach a copy of each illicit connection report form for outfalls found to have a dry weather flow.

Total number of inspections performed this year?

Number of outfalls found to have a dry weather flow?

Number of outfalls found to have an illicit connection?

How many illicit connections were eliminated?

Of the illicit connections found, how many remain?

May 2, 2007 – May 1, 2008

Note: Attach a copy of each illicit connection report form for outfalls found to have a dry weather flow.

Total number of inspections performed this year?

Number of outfalls found to have a dry weather flow?

Number of outfalls found to have an illicit connection?

How many illicit connections were eliminated?

Of the illicit connections found, how many remain?

May 2, 2008 – May 1, 2009

Note: Attach a copy of each illicit connection report form for outfalls found to have a dry weather flow.

Total number of inspections performed this year?

Number of outfalls found to have a dry weather flow?

Number of outfalls found to have an illicit connection?

How many illicit connections were eliminated?

Of the illicit connections found, how many remain?

Of the illicit connections found, how many remain?

SPPP Form 11 – Storm Drain Inlet Retrofitting

Municipality
Information

Municipality: City of Paterson

County: Passaic

NJPDES # : NJG 0155608

PI ID #: 207691

Team Member/Title: Diane Polifronio, Stormwater Permit Coordinator
Frederick J. Margron, P.E., City Engineer

Effective Date of Permit Authorization (EDPA): June 7, 2004

Date of Completion: March 8, 2005

Date of most recent update: June 7, 2005

What type of storm drain inlet design will generally be used for retrofitting?

For most projects the City will use the NJDOT bicycle safe grate style and (if needed) a curb opening with a clear space no bigger than two inches across the smallest dimension.

| Repaving, repairing, reconstruction or alteration project name | Projected start date | Start date | Date of completion | # of storm drain inlets | # of storm drains w/ hydraulic exemptions |
|--|----------------------|------------|--------------------|-------------------------|---|
| 2006 State Aid Road Resurfacing Program | 06/01/2006 | - | - | 200 | 0 |
| | | | | | |
| | | | | | |
| | | | | | |

Are you claiming any alternative device exemptions or historic place exemptions for any of the above projects? Please explain:

The City of Paterson does not operate any alternative devices within the municipality. At this time we do not plan on installing any such devices for repaving, repairing, reconstruction or alteration projects.

SPPP Form 13 – Stormwater Facility Maintenance

Municipality
Information

Municipality: City of Paterson

County: Passaic

NJPDES # : NJG 0155608

PI ID #: 207691

Team Member/Title: Andrew Burroughs, Sewer System Supervisor

Effective Date of Permit Authorization (EDPA): June 7, 2004

Date of Completion: March 8, 2005

Date of most recent update: June 7, 2005

Please describe your annual catch basin cleaning program and schedule. Attach a map/diagram or additional pages as necessary.

The City of Paterson has in place a semi-annual catch basin cleaning program to maintain catch basin function and efficiency. All catch basins are inspected twice each year. If, at the time of inspection, no sediment, trash or debris is observed in the catch basin, then that catch basin will not be cleaned. All catch basins will be inspected, even if they were found to be "clean" the previous year. At the time of cleaning, the catch basins will also be inspected for proper function. Maintenance will be scheduled for those catch basins that are in disrepair. The semi-annual catch basin cleaning program has been in place in the City for several years.

Please describe your stormwater facility maintenance program for cleaning and maintenance of all stormwater facilities operated by the municipality. Attach additional pages as necessary.

(NOTE: Attach a maintenance log containing information on any repairs/maintenance performed on stormwater facilities to ensure their proper function and operation.)

The City of Paterson will implement a stormwater facility maintenance program to ensure that all stormwater facilities operated by the City function properly. The City operates the following:

- *catch basins*
- *storm drains*
- *infiltration basins*
- *buffer strips*
- *swales*

These stormwater facilities will be inspected annually to insure that they are functioning properly. In high risk areas, preventative maintenance will be performed on all stormwater facilities to ensure that they do not begin to fail.

SPPP Form 14 - Outfall Pipe Stream Scouring Remediation

Municipality
Information

Municipality: City of Paterson

County: Passaic

NJPDES # : NJG 0155608

PI ID #: 207691

Team Member/Title: Frederick J. Margron, P.E., City Engineer

Effective Date of Permit Authorization (EDPA): June 7, 2004

Date of Completion: March 8, 2005

Date of most recent update: June 7, 2005

Describe your stormwater outfall pipe scouring detection, remediation and maintenance program to detect and control active, localized stream and stream bank scouring. Attach additional pages as necessary.

(NOTE: Attach a prioritized list of sites observed to have outfall pipe stream and stream bank scouring, date of anticipated repair, method of repair and date of completion.)

When we are doing the illicit connection part of this program, we will be checking all of our outfall pipes for signs of scouring. All sites will be placed on a prioritized list and repairs will be made in accordance with the Standards for Soil Erosion and Sediment Control in New Jersey. In addition, repairs that do not need NJDEP permits for those repairs may be done first.

We will follow each repair up with an annual inspection of the site to ensure that scouring has not resumed.

Attachment B

Attachment C

Attachment D

