

# Stormwater Pollution Prevention Plan



Township of North Bergen

Hudson County

NJPDES Permit No. NJG0149756

May 21, 2020

NJDEP Program Interest I.D. No. 202067



**BOSWELL ENGINEERING**

ENGINEERS - SURVEYORS - PLANNERS - SCIENTISTS  
330 PHILLIPS AVENUE, SOUTH HACKENSACK, N.J. 07606  
TEL: (201) 641-0770 • FAX: (201) 641-1831

Job No. NB-1355

To Whom it May Concern:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for purposely, knowingly, recklessly, or negligently submitting false information.

Sincerely,

---

Thomas Stampe  
Stormwater Coordinator  
Borough of North Bergen

**RESOLUTION APPOINTING MUNICIPAL  
STORMWATER COORDINATOR**

**WHEREAS**, there is a need to appoint a Municipal Stormwater Coordinator for the Township of North Bergen; and

**WHEREAS**, the Municipal Stormwater Management Plan (MSWMP) documents the strategy for the Township of North Bergen to address stormwater-related impacts; and

**WHEREAS**, the creation of this plan is required by N.J.A.C. 7:14A-25 Municipal Stormwater Regulations; and

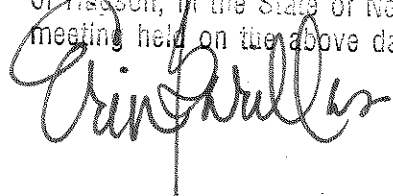
**WHEREAS**, Thomas Stampe, a current employee of the North Bergen Municipal Utilities Authority will be assuming the responsibilities as the Township of North Bergen's Municipal Stormwater Coordinator for the Township beginning March 1, 2020.

**NOW, THEREFORE, BE IT RESOLVED** by the Mayor and Board of Commissioners of the Township of North Bergen that Thomas Stampe serve as Municipal Stormwater Coordinator for the Township of North Bergen.

Date: March 11, 2020

	YES	NO	NOT VOTING
Cabrera	✓		
Marenco	✓		
Gargiulo	✓		
Pascual	✓		
Sacco	✓		
(President)			

I HEREDY CERTIFY the foregoing to be a True and Correct copy of Resolution passed and adopted by the Board of Commissioners of the Township of North Bergen in the County of Hudson, in the State of New Jersey, at a meeting held on the above date.

 Township Clerk



**Bureau of Nonpoint Pollution Control**  
**Division of Water Quality**  
401-02B  
Post Office Box 420  
Trenton, New Jersey 08625-420  
609-633-7021 Fax: 609-777-0432  
[http://www.state.nj.us/dep/dwq/bnpc\\_home.htm](http://www.state.nj.us/dep/dwq/bnpc_home.htm)

**Municipal Stormwater Regulation Program**  
**Stormwater Program Coordinator Information Update Sheet**

<b><u>MUNICIPALITY:</u></b> <i>Township of North Bergen</i>	<b><u>COUNTY:</u></b> Hudson
<b><u>NJPDES #:</u></b> <i>NJ0141852</i> <input type="checkbox"/>	<b><u>PI ID #:</u></b> <i>202067</i>

**Stormwater Program Coordinator**  
**Contact Information:**

<b>Name:</b> <u>Thomas Stampe</u>
<b>Title:</b> <u>Stormwater Coordinator</u>
<b>Address:</b> <u>6200 Tonnelle Ave</u> <u>North Bergen, NJ, 07047</u>
<b>Phone #:</b> <u>201-422-0100 ext. 224</u>
<b>Fax #:</b> <u>201-422-0940</u>
<b>Email Address:</b> <u>TStampe@nbmua.com</u>

**Municipal Building Address:**

<b>Address:</b> <u>4233 Kennedy Blvd</u> <u>North Bergen, NJ 07047</u>
<b>Phone #:</b> <u>201-422-0100</u>
<b>Fax #:</b> _____

**Signature**

*Thomas Stampe*

*3/2/2020*

## **SPPP Table of Contents**

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- Form 6 – Ordinances (permit cite IV B 5)
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- Form 11 – Employee Training (permit cite IV B 5 d, e, f)
- Form 12 – Outfall Pipes (permit cite IV B 6 a, b, c)
- Form 13 – Stormwater Facilities Maintenance (permit cite IV C 1)
- Form 14 – Total Maximum Daily Load Information (permit cite IV C 2)
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## SPPP Form 1 – SPPP Team Members

<b>Stormwater Program Coordinator (SPC)</b>	
Print/Type Name and Title	Thomas Stampe Recycling Coordinator/Clean Communities Coordinator
Office Phone # and eMail	(201)422-0100 ext. 224, TStampe@NBMUA.com
Signature/Date	
<b>Individual(s) Responsible for Major Development Project Stormwater Management Review</b>	
Print/Type Name and Title	Bernard Mirandi, P.E., Boswell Engineering Borough Engineer Representative
Print/Type Name and Title	Selwyn Joy, P.E., Boswell Engineering Hydraulic Engineer
Print/Type Name and Title	John Mayo, P.E., Boswell Engineering Hydraulic Engineer
Print/Type Name and Title	
Print/Type Name and Title	
<b>Other SPPP Team Members</b>	
Print/Type Name and Title	Christopher Pianese Township Administrator
Print/Type Name and Title	Jonathan Shaw, Department of Public Works Superintendent
Print/Type Name and Title	Marco Hernandez Department of Public Works/Sewer Crew Supervisor
Print/Type Name and Title	
Print/Type Name and Title	

## SPPP Form 2 – Revision History

Please record changes to the signature page and updates to the approach taken to comply with the permit, e.g., new street sweeping frequency, change to shared services, etc.

	<b>Revision Date</b>	<b>SPC Initials</b>	<b>SPPP Form Changed</b>	<b>Reason for Revision</b>
1.	5/21/2020	TS	1-15	2019 Annual Update
2.				
3.				
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20.				

## SPPP Form 3 – Public Involvement and Participation Including Public Notice

All records must be available upon request by NJDEP.

1. Website URL where the Stormwater Pollution Prevention Plan (SPPP) is posted online:	<a href="http://www.northbergen.org/Pages/stormwater-management">http://www.northbergen.org/Pages/stormwater-management</a>
2. Date of most current SPPP:	May 21, 2020
3. Website URL where the Municipal Stormwater Management Plan (MSWMP) is posted online:	<a href="http://www.northbergen.org/Pages/stormwater-management">http://www.northbergen.org/Pages/stormwater-management</a>
4. Date of most current MSWMP:	February 2007
5. Physical location and/or website URL where associated municipal records of public notices, meeting dates, minutes, etc. are kept:	6200 Tonnelle Avenue, North Bergen, NJ 07047
6. Describe how the permittee complies with applicable state and local public notice requirements when providing for public participation in the development and implementation of a MS4 stormwater program:	
<p>The Township of North Bergen provides adequate public notice for public participation in the development and implementation of the MS4 stormwater program as per the Open Public Meetings Act (“Sunshine Law,” N.J.S.A. 10:4-6 et seq.); statutory procedures for the enactment of ordinances (N.J.S.A. 40:49-2), including the municipal stormwater control ordinance; and the Municipal Land Use Law concerning the adoption or amendment of the MSWMP (N.J.S.A. 40:55D-13, 28 and 94) and the review of applications for development (N.J.S.A. 40:55D-12).</p> <p>The Township of North Bergen also makes elements of its MS4 stormwater program available to the public by providing the current SPPP upon request as required by Part IV.F.1.g (SPPP) and posting the current SPPP on its website to the extent required by Part IV.F.1.f (SPPP); and posting the current MSWMP and all ordinances required by this permit on its website or otherwise comply with the notification requirements of N.J.A.C. 7:8-4.4(e) (<a href="http://www.northbergen.org/Pages/stormwater-management">http://www.northbergen.org/Pages/stormwater-management</a>).</p> <p>The Township of North Bergen maintain records of compliance with public participation requirements at the North Bergen Municipal Utilities Authority located at: 6200 Tonnelle Avenue, North Bergen, NJ 07047 and the North Bergen Township Office at: 4233 John F. Kennedy Boulevard #1, North Bergen, NJ 07047.</p>	

## SPPP Form 4 – Public Education and Outreach

All records must be available upon request by NJDEP.

1. Describe how public education and outreach events are advertised. Include specific websites and/or physical locations where materials are available.

The Township of North Bergen conducts a diverse range of public education and outreach events that total 12 points annually from a minimum of three of the five categories based on Attachment B. These events are advertised on the Township website (<http://www.northbergen.org/>) and within the Township calendar which is distributed in January with extra copies available at the Township library, Township office and DPW building. Additionally, the Township will coordinate with local watershed groups and the AmeriCorps NJ Watershed Ambassador Program to organize volunteer events.

2. Describe how businesses and the general public within the municipality are educated about the hazards associated with illicit connections and improper disposal of waste.

The Township of North Bergen mails a brochure to our residents and businesses outlining the hazards of illicit connections and improper waste disposal. The brochure is distributed in May with our Township newsletter "Pipeline". Extra copies are available at our Township library, Township office, DPW building, and at the annual Green Fair held on June 6th.

3. Indicate where public education and outreach records are maintained.

Records of all public education and outreach are kept at the North Bergen Municipal Utilities Authority located at: 6200 Tonnelle Avenue, North Bergen, NJ 07047 and the North Bergen Township Office at: 4233 John F. Kennedy Boulevard #1, North Bergen, NJ 07047.



## QUICK REFERENCE ILLCIT GUIDE

**ILLCIT DISCHARGE** - Any liquid, not composed entirely of stormwater, that is introduced into a stormwater system. Examples include solvents, vehicle fluids, fuels, paints, household products and chlorinated swimming pool water.

**ILLCIT DUMPING** - Unloading or disposal of solid, semi-solid or liquid substances near or into a stormwater system. Examples include motors, containers, grass clippings and leaves.

**ILLCIT SPILLS** - Any intentional or accidental spill of solid, semi-solid or liquid substances into or adjacent to a stormwater system. Examples include fluids from vehicles, chemicals from drums or storage tanks, used oil, paint containers and fertilizer.

**ILLCIT CONNECTIONS** - Any constructed conveyance that connects non-stormwater discharges directly to a stormwater system. These illicit conveyances are located either above or below the ground and may include drains, pipes or ditches.

**Stormwater system refers to storm drains, pipes, ditches, channels and ponds that convey, store, release or treat stormwater runoff.**



## WAYS TO REDUCE ILLCIT ACTIVITIES

### HOMEOWNERS

- Dispose of household chemicals properly at designated collection sites.
- Follow label directions on pesticide and fertilizer containers and dispose of properly.
- Use yard waste as mulch or dispose of properly by bagging or composting leaves and grass clippings.
- Recycle approved containers.
- Maintain septic systems.
- De-chlorinate swimming pool water before discharging.

### BUSINESSES

- Properly store and dispose of substances used in commercial processes.
- Landscape to prevent excessive runoff and erosion.
- Maintain privately owned stormwater ponds.
- Learn and comply with local environmental ordinances.



Should you have any questions on how to implement these tips, call (201) 392-9229.

[WWW.NORTHBERGEN.ORG](http://WWW.NORTHBERGEN.ORG)



## PROTECT WATER QUALITY



## PREVENT ILLCIT ACTIVITIES



### TOWNSHIP OF NORTH BERGEN

CITIZENS - TOGETHER  
WE CAN PROTECT  
OUR WATER





**SOME CAUSES MAY SEEM INSIGNIFICANT, BUT THE EFFECTS CAN BE DRAMATIC**

The Township of North Bergen is a beautiful place to live, work and play. We have an abundance of gorgeous streams and lakes. The Township is working together with citizens and businesses to protect these valuable natural resources.

One of the greatest threats to our lakes, rivers and streams is pollutants in stormwater runoff. Simply stated, stormwater runoff is the water that flows over the land during and immediately after a rainstorm. As this water flows, it collects pollutants such as sediment, leaves, pesticides and automobile fluids. These contaminants can impact wildlife, fish, plants and surface water quality.

The Borough has a New Jersey Pollutant Discharge Elimination System (NJPDES) Tier A Municipal Stormwater General Permit. Part of the NJPDES Permit requires a Stormwater Management Program that prohibits harmful pollutants from entering our stormwater systems. You can help in this effort by eliminating illicit activities.



## ILLICIT ACTIVITIES

Illicit activities are those that intentionally or accidentally introduce pollutants into our stormwater systems. Illicit discharge, dumping, spills and connections pose a great risk to our water resources. Fortunately, most of these actions can be prevented in both residential and commercial areas.

With your help, we can protect and preserve the vital waterways of North Bergen.

**Please prevent or report any illicit activities you may see by calling (201) 392-9229.**

## WATER POLLUTION SOURCES

- 1** Illicit discharge into a stormwater system
- 2** Illicit dumping into a stormwater system or near a body of water
- 3** Illicit spills on a parking lot, road, or ground surface can flow into the nearest storm drain of a stormwater system
- 4** Illicit connections from a residence or business connected to a stormwater system that convey an illicit discharge

# SPPP Form 5 – Post-Construction Stormwater Management in New Development and Redevelopment Program

All records must be available upon request by NJDEP.

1. How does the municipality define 'major development'?

As per Ord. 1013-05 -- Stormwater Control, the Township of North Bergen defines a "major development" as: "any 'development' that provides for ultimately disturbing one or more acres of land. Disturbance for the purpose of this rule is the placement of impervious surface or exposure and/or movement of soil or bedrock or clearing, cutting, or removing of vegetation."

2. Does the municipality approach residential projects differently than it does for non-residential projects? If so, how?

As per Ord. 1013-05 -- Stormwater Control, the Township of North Bergen does not approach residential projects differently than non-residential projects. Stormwater ordinances and regulations are implemented as applicable.

3. What process is in place to ensure that municipal projects meet the Stormwater Control Ordinance?

All municipal projects are reviewed and regularly inspected by the Township Engineer and designees to ensure compliance with the Stormwater Control Ordinance. A maintenance plan for BMPs and structural stormwater management measures as described in the Stormwater Control Ordinance is established to ensure adequate long-term operation and maintenance of required BMPs and structural stormwater management measures for any Township project or development.

# SPPP Form 5 – Post-Construction Stormwater Management in New Development and Redevelopment Program

All records must be available upon request by NJDEP.

4. Describe the process for reviewing major development project applications for compliance with the Stormwater Control Ordinance (SCO) and Residential Site Improvement Standards (RSIS). Attach a flow chart if available.

The process for reviewing major development project applications for compliance is as follows:

1. Examination of the existing and proposed site conditions to verify whether the development is subject to the Stormwater Control Ordinance(s).
2. Examination of the hydraulic, hydrologic, and geographic conditions of the development site, such as land use cover, topography, flooding history, and discharge point(s).
3. Examination of proposed stormwater management measures:
  - A determination is made as to whether the proposed stormwater management measures first incorporate nonstructural strategies to meet the design and performance standards to the maximum extent practicable. The nine nonstructural strategies must be adopted in the municipality's Stormwater Control Ordinance(s). They can be also found in N.J.A.C. 7:8-5.3. The Department has prepared a Low Impact Development Checklist that provides information to assist reviewers and designers in demonstrating that nonstructural stormwater management Tier A Municipal Stormwater Guidance Document October 2018 Chapter 3.4 Post Construction Stormwater Management in New Development and Redevelopment Page 12 measures have been implemented in a project. The checklist is available online from the Department at [http://www.nj.gov/dep/stormwater/bmp\\_manual/NJ\\_SWBMP\\_A.pdf](http://www.nj.gov/dep/stormwater/bmp_manual/NJ_SWBMP_A.pdf); and
  - After incorporating the nonstructural strategies, a determination is made to ascertain whether the proposed development still requires structural measures in order to meet the design and performance standards for water quality, quantity and groundwater recharge.
4. Examination of whether the proposed structural measures follow the design and performance standards as well as the best management practices required in the Municipal Stormwater Control Ordinance(s), the Residential Site Improvement Standards and the Stormwater Management rules. The Department provides the New Jersey Stormwater BMP manual to guide the detailed designs of stormwater management measures. The municipality's review engineers must be familiar with the design guidelines in order to perform an effective review. The New Jersey Stormwater BMP Manual is available at [http://www.nj.gov/dep/stormwater/bmp\\_manual2.htm](http://www.nj.gov/dep/stormwater/bmp_manual2.htm).
5. Examination of whether a maintenance plan is proposed and meets the requirements in the Municipal Stormwater Control Ordinance(s). There are specific requirements to prepare a maintenance plan, provide the information of the party responsible for the maintenance and the legal step to record the maintenance plan on the deed.

5. Does the Municipal Stormwater Management Plan include a mitigation plan?

No.

6. What is the physical location of approved applications for major development projects, Major Development Summary Sheets (permit att. D), and mitigation plans?

Records of all approved applications for major development are kept at the North Bergen Municipal Utilities Authority located at: 6200 Tonelle Avenue, North Bergen, NJ 07047 and the North Bergen Township Office at: 4233 John F. Kennedy Boulevard #1, North Bergen, NJ 07047.

## SPPP Form 6 – Ordinances

All records must be available upon request by NJDEP.

Ordinance permit cite IV.B.1.b.iii	Date of Adoption	Website URL	Was the DEP model ordinance adopted without change?	Entity responsible for enforcement
1. Pet Waste permit cite IV.B.5.a.i	09/28/05	<a href="http://www.northbergen.org/_Content/pdf/Ordinance-No-1032-05-ESTABLISH-CONTROL-OF-PET-WASTE.pdf">http://www.northbergen.org/_Content/pdf/Ordinance-No-1032-05-ESTABLISH-CONTROL-OF-PET-WASTE.pdf</a>	YES	Police Department & Health Department of the Township of North Bergen
2. Wildlife Feeding permit cite IV.B.5.a.ii	09/28/05	<a href="http://www.northbergen.org/_Content/pdf/Ordinance-No-1031-05-PROHIBITS-WILDLIFE-FEEDING.pdf">http://www.northbergen.org/_Content/pdf/Ordinance-No-1031-05-PROHIBITS-WILDLIFE-FEEDING.pdf</a>	YES	Police Department & Health Department of the Township of North Bergen
3. Litter Control permit cite IV.B.5.a.iii	09/28/05	<a href="http://www.northbergen.org/_Content/pdf/Ordinance-No-1033-05-ESTABLISH-LITTER-CONTROL.pdf">http://www.northbergen.org/_Content/pdf/Ordinance-No-1033-05-ESTABLISH-LITTER-CONTROL.pdf</a>	YES	Police Department of the Township of North Bergen
4. Improper Disposal of Waste permit cite IV.B.5.a.iv	09/28/05	<a href="http://www.northbergen.org/_Content/pdf/Ordinance-No-1028-05-ESTABLISH-CONTROL-OF-IMPROPER-DISPOSAL-OF-WASTE.pdf">http://www.northbergen.org/_Content/pdf/Ordinance-No-1028-05-ESTABLISH-CONTROL-OF-IMPROPER-DISPOSAL-OF-WASTE.pdf</a>	YES	Police Department & Health Department of the Township of North Bergen
5. Containerized Yard Waste/ Yard Waste Collection Program permit cite IV.B.5.a.v	09/28/05	<a href="http://www.northbergen.org/_Content/pdf/Ordinance-No-1030-05-ESTABLISH-YARD-WASTE-CONTROL.pdf">http://www.northbergen.org/_Content/pdf/Ordinance-No-1030-05-ESTABLISH-YARD-WASTE-CONTROL.pdf</a>	YES	Health Department & Department of Public Works of the Township of North Bergen
6. Private Storm Drain Inlet Retrofitting permit cite IV.B.5.a.vi	10/23/19	<a href="http://www.northbergen.org/_Content/pdf/ORD-432-19-ORDINANCE-REQUIRING-RETROFITTING-STORM-DRAINS-PRIVATE-PROPERTY.pdf">http://www.northbergen.org/_Content/pdf/ORD-432-19-ORDINANCE-REQUIRING-RETROFITTING-STORM-DRAINS-PRIVATE-PROPERTY.pdf</a>	YES	Building Department of the Township of North Bergen
7. Stormwater Control Ordinance permit cite IV.B.4.g and IV.B.5.a.vii	04/27/05	<a href="http://www.northbergen.org/_Content/pdf/Ordinance-No-1013-05-STORM-WATER-CONTROL-ORDINANCE.pdf">http://www.northbergen.org/_Content/pdf/Ordinance-No-1013-05-STORM-WATER-CONTROL-ORDINANCE.pdf</a>	YES	Building Code Official & Engineer of the Township of North Bergen
8. Illicit Connection Ordinance permit cite IV.B.5.a.vii and IV.B.6.d	09/28/05	<a href="http://www.northbergen.org/_Content/pdf/Ordinance-No-1029-05-ORDINANCE-TO-PROHIBIT-ILLCIT-CONNECTIONS-TO-SEPERATE-STORM-SEWER-SYSTEM.pdf">http://www.northbergen.org/_Content/pdf/Ordinance-No-1029-05-ORDINANCE-TO-PROHIBIT-ILLCIT-CONNECTIONS-TO-SEPERATE-STORM-SEWER-SYSTEM.pdf</a>	YES	Department of Public Works & Building Department of the Township of North Bergen
9. Optional: Refuse Container/ Dumpster Ordinance permit cite IV.E.2				
Indicate the location of records associated with ordinances and related enforcement actions:				
Records of all ordinances and related enforcement actions are kept at the North Bergen Municipal Utilities Authority located at: 6200 Tonnelle Avenue, North Bergen, NJ 07047.				

TOWNSHIP OF NORTH BERGEN  
HUDSON COUNTY, NEW JERSEY

AN ORDINANCE TO ESTABLISH CONTROL OF  
PET WASTE FOR THE TOWNSHIP OF NORTH BERGEN

WHEREAS, the Township of North Bergen has been issued a General Stormwater Permit by the New Jersey Department of Environmental Protection Agency, which requires the establishment and adoption of pet waste ordinance for the Township; and

WHEREAS, the Ordinance shall provide the proper disposal of pet solid waste; and

WHEREAS, the Board of Commissioners wishes to adopt said Ordinance as required by the stormwater permit and applicable laws and regulations.

NOW THEREFORE BE IT ORDAINED BY THE BOARD OF COMMISSIONERS OF THE TOWNSHIP OF NORTH BERGEN that:

SECTION I. Purpose:

An ordinance to establish requirements for the proper disposal of pet solid waste in Township of North Bergen, so as to protect public health, safety and welfare, and to prescribe penalties for failure to comply.

SECTION II. Definitions:

For the purpose of this ordinance, the following terms, phrases, words and their derivations shall have the meanings stated herein unless their use in the text of this Chapter clearly demonstrates a different meaning. When not inconsistent with the context, words used in the present tense include the future, words used in the plural number include the singular number, and words used in the singular number include the plural number. The word "shall" is always mandatory and not merely directory.

- a. Immediate – shall mean that the pet solid waste is removed at once, without delay.
- b. Owner/Keeper – any person who shall possess, maintain, house or harbor any pet or otherwise have custody of any pet, whether or not the owner of such pet.
- c. Person – any individual, corporation, company, partnership, firm, association, or political subdivision of this State subject to municipal jurisdiction.

d. Pet - a domesticated animal (other than a disability assistance animal) kept for amusement or companionship.

e. Pet solid waste – waste matter expelled from the bowels of the pet; excrement

f. Proper disposal – placement in a designated waste receptacle, or other suitable container, and discarded in a refuse container which is regularly emptied by the municipality or some other refuse collector; or disposal into a system designed to convey domestic sewage for proper treatment and disposal.

### **SECTION III. Requirement for Disposal:**

All pet owners and keepers are required to immediately and properly dispose of their pet's solid waste deposited on any property, public or private, not owned or possessed by that person.

### **SECTION IV. Exemptions:**

Any owner or keeper who requires the use of a disability assistance animal shall be exempt from the provisions of this section while such animal is being used for that purpose.

### **SECTION V. Enforcement:**

The provisions of this Article shall be enforced by the Police Department and the Health Department of The Township of North Bergen.

### **SECTION VI. Violations and Penalty:**

Any person(s) who is found to be in violation of the provisions of this ordinance shall be subject to a fine not to exceed \$100.00.

### **SECTION VII. Separability :**

Each section, subsection, sentence, clause and phrase of this Ordinance is declared to be an independent section, subsection, sentence, clause and phrase, and the finding or holding of any such portion of this Ordinance to be unconstitutional, void, or ineffective for any cause, or reason, shall not affect any other portion of this Ordinance.

**SECTION VIII. Effective date:**

This Ordinance shall be in full force and effect from and after its adoption and any publication as may be required by law.

Introduced: September 14, 2005

Published: Sept. 17, 2005 & Oct. 3, 2005

Adopted: Sept. 28, 2005

Attest: Carol Ann Fontana  
Township Clerk

<u>Commissioner Cabrera</u>	<u>Absent</u>
<u>Commissioner Ferraro</u>	<u>Yes</u>
<u>Commissioner Gargiulo</u>	<u>Yes</u>
<u>Commissioner Pascual</u>	<u>Yes</u>
<u>Mayor Sacco</u>	<u>Yes</u>

TOWNSHIP OF NORTH BERGEN

HUDSON COUNTY, NEW JERSEY

AN ORDINANCE TO PROHIBIT WILDLIFE FEEDING FOR THE  
TOWNSHIP OF NORTH BERGEN

WHEREAS, the Township of North Bergen has been issued a General Stormwater Permit by the New Jersey Department of Environmental Protection Agency, which requires the establishment and adoption of wildlife feeding ordinance for the Township; and

WHEREAS, the Ordinance shall prohibit the feeding of Wildlife in Township owned parks and land; and

WHEREAS, the Board of Commissioners wishes to adopt said Ordinance as required by the stormwater permit and applicable laws and regulations.

NOW THEREFORE BE IT ORDAINED BY THE BOARD OF COMMISSIONERS OF THE TOWNSHIP OF NORTH BERGEN that:

SECTION I. Purpose:

An ordinance to prohibit the feeding of unconfined wildlife in any public park or on any other property owned or operated by Township of North Bergen, so as to protect public health, safety and welfare, and to prescribe penalties for failure to comply.

SECTION II. Definitions:

For the purpose of this ordinance, the following terms, phrases, words and their derivations shall have the meanings stated herein unless their use in the text of this Chapter clearly demonstrates a different meaning. When not inconsistent with the context, words used in the present tense include the future, words used in the plural number include the singular number, and words used in the singular number include the plural number. The word "shall" is always mandatory and not merely directory.

a. Feed – to give, place, expose, deposit, distribute or scatter any edible material with the intention of feeding, attracting or enticing wildlife. Feeding does not include baiting in the legal taking of fish and/or game.

b. Person – any individual, corporation, company, partnership, firm, association, or

political subdivision of this State subject to municipal jurisdiction.

c. Wildlife – all animals that are neither human nor domesticated.

**SECTION III. Prohibited Conduct:**

a. No person shall feed, in any public park or on any other property owned or operated by The Township of North Bergen any wildlife, excluding confined wildlife (for example, wildlife confined in zoos, parks or rehabilitation centers, or unconfined wildlife at environmental education centers).

**SECTION IV. Enforcement:**

a. This ordinance shall be enforced by the Police Department and Health Department of the Township of North Bergen.

**SECTION V. Violations and Penalties:**

Any person(s) who is found to be in violation of the provisions of this ordinance shall be subject to a fine not to exceed \$25.00.

**SECTION VI. Separability:**

Each section, subsection, sentence, clause and phrase of this Ordinance is declared to be an independent section, subsection, sentence, clause and phrase, and the finding or holding of any such portion of this Ordinance to be unconstitutional, void, or ineffective for any cause, or reason, shall not affect any other portion of this Ordinance.

**SECTION VII. Effective date:**

This Ordinance shall be in full force and effect from and after its adoption and any publication as may be required by law.

Introduced: September 14, 2005

Published: Sept. 17, 2005 & Oct. 3, 2005

Adopted: Sept. 28, 2005

Attest Carol Ann Fontana  
Township Clerk

<u>Commissioner Cabrera</u>	<u>Absent</u>
<u>Commissioner Ferraro</u>	<u>Yes</u>
<u>Commissioner Gargiulo</u>	<u>Yes</u>
<u>Commissioner Pascual</u>	<u>Yes</u>
<u>Mayor Sacco</u>	<u>Yes</u>

TOWNSHIP OF NORTH BERGEN

HUDSON COUNTY, NEW JERSEY

AN ORDINANCE TO ESTABLISH LITTER CONTROL FOR THE TOWNSHIP OF NORTH BERGEN

WHEREAS, the Township of North Bergen has been issued a General Stormwater Permit by the New Jersey Department of Environmental Protection Agency, which requires the establishment and adoption of litter control ordinance for the Township; and

WHEREAS, the Ordinance shall prohibit litter and further the public health and welfare; and

WHEREAS, the Board of Commissioners wishes to adopt said Ordinance as required by the stormwater permit and applicable laws and regulations.

NOW THEREFORE BE IT ORDAINED BY THE BOARD OF COMMISSIONERS OF THE TOWNSHIP OF NORTH BERGEN that:

SECTION I. Purpose:

An ordinance to establish requirements to control littering in Township of North Bergen, so as to protect public health, safety and welfare, and to prescribe penalties for the failure to comply.

SECTION II. Definitions:

For the purpose of this ordinance, the following terms, phrases, words and their derivations shall have the meanings stated herein unless their use in the text of this Chapter clearly demonstrates a different meaning. When not inconsistent with the context, words used in the present tense include the future, words used in the plural number include the singular number, and words used in the singular number include the plural number. The word "shall" is always mandatory and not merely directory.

- a. Litter - any used or unconsumed substance or waste material which has been discarded, whether made of aluminum, glass, plastic, rubber, paper, or other natural or

synthetic material, or any combination thereof, including, but not limited to, any bottle, jar or can, or any top, cap or detachable tab of any bottle, jar or can, any unlighted cigarette, cigar, match or any flaming or glowing material or any garbage, trash, refuse, debris, rubbish, grass clippings or other lawn or garden waste, newspapers, magazines, glass, metal, plastic or paper containers or other packaging or construction material, but does not include the waste of the primary processes of mining or other extraction processes, logging, sawmilling, farming or manufacturing.

b. Litter Receptacle – a container suitable for the depositing of litter.

c. Person – any individual, corporation, company, partnership, firm, association, or political subdivision of this State subject to municipal jurisdiction.

### **SECTION III. Prohibited acts and regulated activities:**

1. It shall be unlawful for any person to throw, drop, discard or otherwise place any litter of any nature upon public or private property other than in a litter receptacle, or having done so, to allow such litter to remain.

2. Whenever any litter is thrown or discarded or allowed to fall from a vehicle or boat in violation of this ordinance, the operator or owner, or both, of the motor vehicle or boat shall also be deemed to have violated this ordinance.

### **SECTION IV. Enforcement:**

This ordinance shall be enforced by the Police Department of the Township of North Bergen.

### **SECTION V. Penalties:**

Any person(s) who is found to be in violation of the provisions of this ordinance shall be subject to a fine not to exceed \$250.00.

### **SECTION VI. Separability:**

Each section, subsection, sentence, clause and phrase of this Ordinance is declared to be an independent section, subsection, sentence, clause and phrase, and the finding or

holding of any such portion of this Ordinance to be unconstitutional, void, or ineffective for any cause, or reason, shall not affect any other portion of this Ordinance.

**SECTION VII. Effective date:**

This Ordinance shall be in full force and effect from and after its adoption and any publication as may be required by law.

Introduced: September 14, 2005

Published: Sept. 17, 2005 & Oct. 3, 2005

Adopted: Sept. 28, 2005

Attest: Carol Ann Fontana  
Township Clerk

Commissioner Cabrera Absent

Commissioner Ferraro Yes

Commissioner Gargiulo Yes

Commissioner Pascual Yes

Mayor Sacco Yes

TOWNSHIP OF NORTH BERGEN  
HUDSON COUNTY, NEW JERSEY

AN ORDINANCE TO ESTABLISH CONTROL OF IMPROPER  
DISPOSAL OF WASTE IN THE TOWNSHIP OF NORTH BERGEN

WHEREAS, the Township of North Bergen has been issued a General Stormwater Permit by the New Jersey Department of Environmental Protection Agency, which requires the establishment and adoption of an Improper Disposal of waste; and

WHEREAS, the Ordinance shall prohibit the improper disposal of waste into the separate storm sewer systems of the Township; and

WHEREAS, the Board of Commissioners wishes to adopt said Ordinance as required by the stormwater permit and applicable laws and regulation.

NOW THEREFORE BE IT ORDAINED BY THE BOARD OF COMMISSIONERS OF THE TOWNSHIP OF NORTH BERGEN that:

SECTION I. Purpose:

An ordinance to prohibit the spilling, dumping, or disposal of materials other than stormwater to the municipal separate storm sewer system (MS4) operated by the Township of North Bergen, so as to protect public health, safety and welfare, and to prescribe penalties for the failure to comply.

SECTION II. Definitions:

For the purpose of this ordinance, the following terms, phrases, words, and their derivations shall have the meanings stated herein unless their use in the text of this Chapter clearly demonstrates a different meaning. When not inconsistent with the context, words used in the present tense include the future, words used in the plural number include the singular number, and words used in the singular number include the plural number. The word "shall" is always mandatory and not merely directory.

- a. Municipal separate storm sewer system (MS4)— a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains) that is owned or operated

by the Township of North Bergen or other public body, and is designed and used for collecting and conveying stormwater. MS4s do not include combined sewer systems, which are sewer systems that are designed to carry sanitary sewage at all times and to collect and transport stormwater from streets and other sources.

b. Person – any individual, corporation, company, partnership, firm, association, or political subdivision of this State subject to municipal jurisdiction.

c. Stormwater – water resulting from precipitation (including rain and snow) that runs off the land's surface, is transmitted to the subsurface, is captured by separate storm sewers or other sewerage or drainage facilities, or is conveyed by snow removal equipment.

### **SECTION III. Prohibited Conduct:**

The spilling, dumping, or disposal of materials other than stormwater to the municipal separate storm sewer system operated by Township of North Bergen is prohibited. The spilling, dumping, or disposal of materials other than stormwater in such a manner as to cause the discharge of pollutants to the municipal separate storm sewer system is also prohibited.

### **SECTION IV. Exceptions to Prohibition:**

- a. Water line flushing and discharges from potable water sources
- b. Uncontaminated ground water (e.g., infiltration, crawl space or basement sump pumps, foundation or footing drains, rising ground waters)
- c. Air conditioning condensate (excluding contact and non-contact cooling water)
- d. Irrigation water (including landscape and lawn watering runoff)
- e. Flows from springs, riparian habitats and wetlands, water reservoir discharges and diverted stream flows
- f. Residential car washing water, and residential swimming pool discharges
- g. Sidewalk, driveway and street wash water
- h. Flows from fire fighting activities
- i. Flows from rinsing of the following equipment with clean water:

- Equipment used in the application of salt and de-icing materials immediately following salt and de-icing material applications. Prior to rinsing with clean water, all residual salt

and de-icing materials must be removed from equipment and vehicles to the maximum extent practicable using dry cleaning methods (e.g., shoveling and sweeping). Recovered materials are to be returned to storage for reuse or properly discarded.

Rinsing of equipment, as noted in the above situation is limited to exterior, undercarriage, and exposed parts and does not apply to engines or other enclosed machinery.

**SECTION V. Enforcement:**

This ordinance shall be enforced by the Police Department and Health Department of Township of North Bergen

**SECTION VI. Penalties:**

Any person(s) who continues to be in violation of the provisions of this ordinance, after being duly notified, shall be subject to a fine not to exceed \$250.00

**SECTION VII. Separability:**

Each section, subsection, sentence, clause and phrase of this Ordinance is declared to be an independent section, subsection, sentence, clause and phrase, and the finding or holding of any such portion of this Ordinance to be unconstitutional, void, or ineffective for any cause, or reason, shall not affect any other portion of this Ordinance.

**SECTION VIII. Effective date:**

This Ordinance shall be in full force and effect from and after its adoption and any publication as may be required by law.

Introduced: September 14, 2005

Published: Sept. 17, 2005 & Oct. 3, 2005

Adopted: Sept. 28, 2005

Attest: Carol Ann Fontana  
Township Clerk

<u>Commissioner Cabrera</u>	<u>Absent</u>
<u>Commissioner Ferraro</u>	<u>Yes</u>
<u>Commissioner Gargiulo</u>	<u>Yes</u>
<u>Commissioner Pascual</u>	<u>Yes</u>
<u>Mayor Sacco</u>	<u>Yes</u>

TOWNSHIP OF NORTH BERGEN  
HUDSON COUNTY, NEW JERSEY

AN ORDINANCE TO ESTABLISH YARD WASTE CONTROL FOR THE  
TOWNSHIP OF NORTH BERGEN

WHEREAS, the Township of North Bergen has been issued a General Stormwater Permit by the New Jersey Department of Environmental Protection Agency, which requires the establishment and adoption of a Yard Waste control ordinance for the Township; and

WHEREAS, the Ordinance shall require the use of containers for yard waste; and

WHEREAS, the Board of Commissioners wishes to adopt said Ordinance as required by the stormwater permit and applicable laws and regulations.

NOW THEREFORE BE IT ORDAINED BY THE BOARD OF COMMISSIONERS OF THE TOWNSHIP OF NORTH BERGEN that:

**SECTION I. Purpose:**

An ordinance to establish a yard waste collection and disposal program in, so as to protect public health, safety and welfare, and to prescribe penalties for the failure to comply.

**SECTION II Definitions:**

For the purpose of this ordinance, the following terms, phrases, words and their derivations shall have the meanings stated herein unless their use in the text of this Chapter clearly demonstrates a different meaning. When not inconsistent with the context, words used in the present tense include the future, words used in the plural number include the singular number, and words used in the singular number include the plural number. The word "shall" is always mandatory and not merely directory.

- a. Containerized – means the placement of yard waste in a trash can, bucket, bag or other vessel, such as to prevent the yard waste from spilling or blowing out into the street and coming into contact with stormwater.

b. Person – any individual, corporation, company, partnership, firm, association, or political subdivision of this State subject to municipal jurisdiction.

c. Street – means any street, avenue, boulevard, road, parkway, viaduct, drive, or other way, which is an existing State, county, or municipal roadway, and includes the land between the street lines, whether improved or unimproved, and may comprise pavement, shoulders, gutters, curbs, sidewalks, parking areas, and other areas within the street lines.

d. Yard Waste – means leaves and grass clippings.

### **SECTION III. Yard Waste Collection**

Sweeping, raking, blowing or otherwise placing leaves that are not containerized at the curb or along the street is only allowed from September 15th through December 15th and shall not be placed closer than 10 feet from any storm drain inlet. Placement of such yard waste at the curb or along the street at any other time or in any other manner is a violation of this ordinance. If such placement of yard waste occurs, the party responsible for placement of the yard waste must remove the yard waste from the street or said party shall be deemed in violation of this ordinance.

### **SECTION IV. Enforcement:**

The provisions of this ordinance shall be enforced by Health Department and Department of Public Works.

### **SECTION V. Violations and Penalties:**

Any person(s) who is found to be in violation of the provisions of this ordinance shall be subject to a fine not to exceed \$250.00

### **SECTION VI. Separability:**

Each section, subsection, sentence, clause and phrase of this Ordinance is declared to be independent section, subsection, sentence, clause and phrase, and the finding or holding of any such portion of this Ordinance to be unconstitutional, void, or ineffective for any cause, or reason, shall not affect any other portion of this Ordinance.

**SECTION VII. Effective date:**

This Ordinance shall be in full force and effect from and after its adoption and any publication as may be required by law.

Introduced: September 14, 2005

Published: Sept. 17, 2005 & October 3, 2005

Adopted: Sept. 28, 2005

Attest: Carol Ann Fontana  
Township Clerk

<u>Commissioner Cabrera</u>	<u>Absent</u>
<u>Commissioner Ferraro</u>	<u>Yes</u>
<u>Commissioner Gargiulo</u>	<u>Yes</u>
<u>Commissioner Pascual</u>	<u>Yes</u>
<u>Mayor Sacco</u>	<u>Yes</u>

TOWNSHIP OF NORTH BERGEN  
HUDSON COUNTY, NEW JERSEY

AN ORDINANCE REQUIRING RETROFITTING OF STORM  
DRAINS ON PRIVATE PROPERTY TO CONTROL FOR LITTER  
ENTERING PARTS OF THE SEWER SYSTEM

BE IT ORDAINED BY THE BOARD OF COMMISSIONERS OF THE  
TOWNSHIP OF NORTH BERGEN that:

**Section 1: Background & Findings**

- A. There is a need to prevent the discharge of solids and floatables (such as plastic bottles, cans, food wrappers and other litter) to the Township of North Bergen ("Township") sewer system so as to protect public health, safety and welfare.
- B. Various storm sewer grates exist on private property and discharge into the Township sewer system. There is a need to update these storm grates to current standards.
- C. When the owner of private property is performing work or improvements in the area of a storm grate on their property, that is the most efficient and cost-effective manner in which to upgrade the storm grate(s) to current standards.
- D. This Ordinance will require the retrofitting of existing storm drain inlets which are in direct contact with repaving, repairing, reconstruction, resurfacing or alterations of facilities on private property.

**Section 2: Definitions**

- A. For the purpose of this Ordinance, the following terms, phrases, words, and their derivations shall have the meanings stated herein unless their use in the text of this Ordinance clearly demonstrates a different meaning. When not inconsistent with the context, words used in the present tense include the future, words used in the plural number include the singular number, and words used in the singular number include the plural number. The word "shall" is always mandatory and not merely directory.
  - 1. "Municipal separate storm sewer system" or "MS4" means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains) that is owned or operated by the Township or MUA, and is designed and used for collecting and conveying stormwater. MS4s do not include combined sewer systems, which are sewer systems that are designed to carry sanitary sewage at all times and to collect and transport stormwater from streets and other sources.
  - 2. "Person" means any individual, corporation, company, partnership, firm, association, or political subdivision of this State subject to municipal jurisdiction.
  - 3. "Storm drain inlet" means an opening in a storm drain used to collect stormwater runoff and includes, but is not limited to, a grate inlet, curb-opening inlet, slotted inlet, and combination inlet.
  - 4. "Waters of the State" means the ocean and its estuaries, all springs, streams and bodies of surface or ground water, whether natural or artificial, within the boundaries of the State of New Jersey or subject to its jurisdiction.

**Section 3: Prohibited Conduct**

- A. No person in control of private property (except a residential lot with one single family house) shall authorize the repaving, repairing (excluding the repair of individual potholes), resurfacing (including top coating or chip sealing with asphalt emulsion or a thin base of hot bitumen), reconstructing or altering any surface that is in direct

contact with an existing storm drain inlet on that property unless the storm drain inlet either:

1. Already meets the design standard in Section 4 below to control passage of solid and floatable materials; or
2. Is retrofitted or replaced to meet the standard in Section 4 below prior to the completion of the project.

#### **Section 4: Design Standard**

A. Storm drain inlets identified in Section 3 above shall comply with the following standard to control passage of solid and floatable materials through storm drain inlets. For purposes of this Section, "solid and floatable materials" means sediment, debris, trash, and other floating, suspended, or settleable solids. For exemptions to this standard, see Section 4.A.3 below.

1. Design engineers shall use either of the following grates whenever they use a grate in pavement or another ground surface to collect stormwater from that surface into a storm drain or surface water body under that grate:
  - a. The New Jersey Department of Transportation (NJDOT) bicycle safe grate, which is described in Chapter 2.4 of the NJDOT Bicycle Compatible Roadways and Bikeways Planning and Design Guidelines (April 1996); or
  - b. A different grate, if each individual clear space in that grate has an area of no more than seven (7.0) square inches, or is no greater than 0.5 inches across the smallest dimension. Examples of grates subject to this standard include grates in grate inlets, the grate portion (non-curb-opening portion) of combination inlets, grates on storm sewer manholes, ditch grates, trench grates, and grates of spacer bars in slotted drains. Examples of ground surfaces include surfaces of roads (including bridges), driveways, parking areas, bikeways, plazas, sidewalks, lawns, fields, open channels, and stormwater basin floors.
2. Whenever design engineers use a curb-opening inlet, the clear space in that curb opening (or each individual clear space, if the curb opening has two or more clear spaces) shall have an area of no more than seven (7.0) square inches, or be no greater than two (2.0) inches across the smallest dimension
3. This standard does not apply:
  - a. Where the municipal engineer agrees that this standard would cause inadequate hydraulic performance that could not practicably be overcome by using additional or larger storm drain inlets that meet these standards;
  - b. Where flows are conveyed through any device (e.g., end of pipe netting facility, manufactured treatment device, or a catch basin hood) that is designed, at a minimum, to prevent delivery of all solid and floatable materials that could not pass through one of the following:
    - i. A rectangular space four and five-eighths inches long and one and one-half inches wide (this option does not apply for outfall netting facilities); or
    - ii. A bar screen having a bar spacing of 0.5 inches.
  - c. Where flows are conveyed through a trash rack that has parallel bars with one-inch (1") spacing between the bars; or
  - d. Where the New Jersey Department of Environmental Protection determines, pursuant to the New Jersey Register of Historic Places Rules at N.J.A.C. 7:4-7.2(c), that action to meet this standard is an undertaking that constitutes an encroachment or will damage or destroy the New Jersey Register listed historic property

#### **Section 5: Enforcement**

This Ordinance shall be enforced by the North Bergen Building Department.

**Section 6: Violations, Penalties and Fines**

Any violation of the provisions of this Ordinance shall be punishable by a fine of \$750 for each storm drain inlet that is not retrofitted to meet the design standard set forth herein.

**Section 7: Severability**

If any part or parts of this Ordinance are for any reason held to be invalid, such holding shall not affect the validity of the remaining portions of this Ordinance.

**Section 8: Repealer**

All ordinances or parts of ordinances inconsistent with this Ordinance are hereby repealed as to the inconsistency thereof.

**Section 9: Effective Date:**

This Ordinance shall take effect 20 days from the time of its final passage.

Introduced: October 9, 2019

Published: October 14 & 28, 2019

Adopted: October 23, 2019

Attest: Erin Barillas  
Township Clerk

Comm. Marengo	YES
Comm. Gargiulo	YES
Comm. Pascual	YES
President Sacco	YES

Township of North Bergen  
Hudson County, New Jersey

An Ordinance to establish Stormwater Control for the Township of North Bergen

WHEREAS, the Township of North Bergen has been issued a General Stormwater Permit by the New Jersey Department of Environmental Protection Agency, which requires the establishment and adoption of a stormwater control ordinance for the Township; and

WHEREAS, the Ordinance shall provide for design and performance standards for stormwater management measures for new major developments and is intended to minimize the impact of stormwater runoff on water quality and water quantity into receiving water bodies and maintain groundwater recharge; and

WHEREAS, the Board of Commissioners wishes to adopt said Ordinance as required by the stormwater permit and applicable laws and regulations.

NOW THEREFORE BE IT ORDAINED by the Board of Commissioners of the Township of North Bergen that:

Section 1: Scope and Purpose

A. Policy Statement

Flood control, groundwater recharge, and pollutant reduction through nonstructural or low impact techniques shall be explored before relying on structural BMPs. Structural BMPs should be integrated with nonstructural stormwater management strategies and proper maintenance plans. Nonstructural strategies include both environmentally sensitive site design and source controls that prevent pollutants from being placed on the site or from being exposed to stormwater. Source control plans should be developed based upon physical site conditions and the origin, nature, and the anticipated quantity or amount of potential pollutants. Multiple stormwater management BMPs may be necessary to achieve the established performance standards for water quality, quantity, and groundwater recharge.

B. Purpose

It is the purpose of this ordinance to establish minimum stormwater management requirements and controls for "major development," as defined in Section 2.

C. Applicability

1. This ordinance shall be applicable to all site plans and subdivisions for the following major developments that require preliminary or final site plan or subdivision review:

- a. Non-residential major developments; and
- b. Aspects of residential major developments that are not pre-empted by the Residential Site Improvement Standards at N.J.A.C. 5:21.

2. This ordinance shall also be applicable to all major developments undertaken by the Township of North Bergen.

#### D. Compatibility with Other Permit and Ordinance Requirements

Development approvals issued for subdivisions and site plans pursuant to this ordinance are to be considered an integral part of development approvals under the subdivision and site plan review process and do not relieve the applicant of the responsibility to secure required permits or approvals for activities regulated by any other applicable code, rule, act, or ordinance. In their interpretation and application, the provisions of this ordinance shall be held to be the minimum requirements for the promotion of the public health, safety, and general welfare. This ordinance is not intended to interfere with, abrogate, or annul any other ordinances, rule or regulation, statute, or other provision of law except that, where any provision of this ordinance imposes restrictions different from those imposed by any other ordinance, rule or regulation, or other provision of law, the more restrictive provisions or higher standards shall control.

#### Section 2: Definitions

Unless specifically defined below, words or phrases used in this ordinance shall be interpreted so as to give them the meaning they have in common usage and to give this ordinance its most reasonable application. The definitions below are the same as or based on the corresponding definitions in the Stormwater Management Rules at N.J.A.C. 7:8-1.2.

“CAFRA Planning Map” means the geographic depiction of the boundaries for Coastal Planning Areas, CAFRA Centers, CAFRA Cores and CAFRA Nodes pursuant to N.J.A.C. 7:7E-5B.3.

“CAFRA Centers, Cores or Nodes” means those areas within boundaries accepted by the Department pursuant to N.J.A.C. 7:8E-5B.

“Compaction” means the increase in soil bulk density.

“Core” means a pedestrian-oriented area of commercial and civic uses serving the surrounding municipality, generally including housing and access to public transportation.

“County review agency” means an agency designated by the County Board of Chosen Freeholders to review municipal stormwater management plans and implementing ordinance(s). The county review agency may either be:

A county planning agency; or

A county water resource association created under N.J.S.A 58:16A-55.5, if the ordinance or resolution delegates authority to approve, conditionally approve, or disapprove municipal stormwater management plans and implementing ordinances.

“Department” means the New Jersey Department of Environmental Protection.

“Designated Center” means a State Development and Redevelopment Plan Center as designated by the State Planning Commission such as urban, regional, town, village, or hamlet.

“Design engineer” means a person professionally qualified and duly licensed in New Jersey to perform engineering services that may include, but not necessarily be limited to, development of project requirements, creation and development of project design and preparation of drawings and specifications.

“Development” means the division of a parcel of land into two or more parcels, the construction, reconstruction, conversion, structural alteration, relocation or enlargement of any building or structure, any mining excavation or landfill, and any use or change in the use of any building or other structure, or land or extension of use of land, by any person, for which permission is required under the Municipal Land Use Law , N.J.S.A. 40:55D-1 et seq. In the case of development of agricultural lands, development means: any activity that requires a State permit; any activity reviewed by the County Agricultural Board (CAB) and the State Agricultural Development Committee (SADC), and municipal review of any activity not exempted by the Right to Farm Act , N.J.S.A 4:1C-1 et seq.

“Drainage area” means a geographic area within which stormwater, sediments, or dissolved materials drain to a particular receiving waterbody or to a particular point along a receiving waterbody.

“Environmentally critical areas” means an area or feature which is of significant environmental value, including but not limited to: stream corridors; natural heritage priority sites; habitat of endangered or threatened species; large areas of contiguous open space or upland forest; steep slopes; and well head protection and groundwater recharge areas. Habitats of endangered or threatened species are identified using the Department’s Landscape Project as approved by the Department’s Endangered and Nongame Species Program.

“Empowerment Neighborhood” means a neighborhood designated by the Urban Coordinating Council “in consultation and conjunction with” the New Jersey Redevelopment Authority pursuant to N.J.S.A 55:19-69.

“Erosion” means the detachment and movement of soil or rock fragments by water, wind, ice or gravity.

“Impervious surface” means a surface that has been covered with a layer of material so that it is highly resistant to infiltration by water.

“Infiltration” is the process by which water seeps into the soil from precipitation.

- “Major development” means any “development” that provides for ultimately disturbing one or more acres of land. Disturbance for the purpose of this rule is the placement of impervious surface or exposure and/or movement of soil or bedrock or clearing, cutting, or removing of vegetation.
- “Municipality” means any city, borough, town, township, or village.
- “Node” means an area designated by the State Planning Commission concentrating facilities and activities which are not organized in a compact form.
- “Nutrient” means a chemical element or compound, such as nitrogen or phosphorus, which is essential to and promotes the development of organisms.
- “Person” means any individual, corporation, company, partnership, firm, association, [*insert name of municipality*], or political subdivision of this State subject to municipal jurisdiction pursuant to the Municipal Land Use Law , N.J.S.A. 40:55D-1 et seq.
- “Pollutant” means any dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, refuse, oil, grease, sewage sludge, munitions, chemical wastes, biological materials, medical wastes, radioactive substance (except those regulated under the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et seq.)), thermal waste, wrecked or discarded equipment, rock, sand, cellar dirt, industrial, municipal, agricultural, and construction waste or runoff, or other residue discharged directly or indirectly to the land, ground waters or surface waters of the State, or to a domestic treatment works. “Pollutant” includes both hazardous and nonhazardous pollutants.
- “Recharge” means the amount of water from precipitation that infiltrates into the ground and is not evapotranspired.
- “Sediment” means solid material, mineral or organic, that is in suspension, is being transported, or has been moved from its site of origin by air, water or gravity as a product of erosion.
- “Site” means the lot or lots upon which a major development is to occur or has occurred.
- “Soil” means all unconsolidated mineral and organic material of any origin.
- “State Development and Redevelopment Plan Metropolitan Planning Area (PA1)” means an area delineated on the State Plan Policy Map and adopted by the State Planning Commission that is intended to be the focus for much of the state’s future redevelopment and revitalization efforts.
- “State Plan Policy Map” is defined as the geographic application of the State Development and Redevelopment Plan’s goals and statewide policies, and the official map of these goals and policies.
- “Stormwater” means water resulting from precipitation (including rain and snow) that runs off the land’s surface, is transmitted to the subsurface, or is captured by separate storm sewers or other sewage or drainage facilities, or conveyed by snow removal equipment.

“Stormwater runoff” means water flow on the surface of the ground or in storm sewers, resulting from precipitation.

“Stormwater management basin” means an excavation or embankment and related areas designed to retain stormwater runoff. A stormwater management basin may either be normally dry (that is, a detention basin or infiltration basin), retain water in a permanent pool (a retention basin), or be planted mainly with wetland vegetation (most constructed stormwater wetlands).

“Stormwater management measure” means any structural or nonstructural strategy, practice, technology, process, program, or other method intended to control or reduce stormwater runoff and associated pollutants, or to induce or control the infiltration or groundwater recharge of stormwater or to eliminate illicit or illegal non-stormwater discharges into stormwater conveyances.

“Tidal Flood Hazard Area” means a flood hazard area, which may be influenced by stormwater runoff from inland areas, but which is primarily caused by the Atlantic Ocean.

“Urban Coordinating Council Empowerment Neighborhood” means a neighborhood given priority access to State resources through the New Jersey Redevelopment Authority.

“Urban Enterprise Zones” means a zone designated by the New Jersey Enterprise Zone Authority pursuant to the New Jersey Urban Enterprise Zones Act, N.J.S.A. 52:27H-60 et. seq.

“Urban Redevelopment Area” is defined as previously developed portions of areas:

- (1) Delineated on the State Plan Policy Map (SPPM) as the Metropolitan Planning Area (PA1), Designated Centers, Cores or Nodes;
- (2) Designated as CAFRA Centers, Cores or Nodes;
- (3) Designated as Urban Enterprise Zones; and
- (4) Designated as Urban Coordinating Council Empowerment Neighborhoods.

“Waters of the State” means the ocean and its estuaries, all springs, streams, wetlands, and bodies of surface or ground water, whether natural or artificial, within the boundaries of the State of New Jersey or subject to its jurisdiction.

“Wetlands” or “wetland” means an area that is inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions, commonly known as hydrophytic vegetation.

### Section 3: General Standards

#### A. Design and Performance Standards for Stormwater Management Measures

1. Stormwater management measures for major development shall be developed to meet the erosion control, groundwater recharge, stormwater runoff quantity, and stormwater runoff quality standards in Section 4. To the maximum extent practicable, these standards shall be met by incorporating nonstructural stormwater management strategies into the design. If these strategies alone are not sufficient to meet these standards, structural stormwater management measures necessary to meet these standards shall be incorporated into the design.
2. The standards in this ordinance apply only to new major development and are intended to minimize the impact of stormwater runoff on water quality and water quantity in receiving water bodies and maintain groundwater recharge. The standards do not apply to new major development to the extent that alternative design and performance standards are applicable under a regional stormwater management plan or Water Quality Management Plan adopted in accordance with Department rules.

### Section 4: Stormwater Management Requirements for Major Development

- A. The development's developer shall incorporate a maintenance plan for the stormwater management measures incorporated into the design of a major development in accordance with Section 10 to be maintained by the property owners.
- B. Stormwater management measures shall avoid adverse impacts of concentrated flow on habitat for threatened and endangered species as documented in the Department's Landscape Project or Natural Heritage Database established under N.J.S.A. 13:1B-15.147 through 15.150, particularly *Helonias bullata* (swamp pink) and/or *Clemmys muhlenbergi* (bog turtle).
- C. The following linear development projects are exempt from the groundwater recharge, stormwater runoff quantity, and stormwater runoff quality requirements of Sections 4.F and 4.G:
  1. The construction of an underground utility line provided that the disturbed areas are revegetated upon completion;
  2. The construction of an aboveground utility line provided that the existing conditions are maintained to the maximum extent practicable; and
  3. The construction of a public pedestrian access, such as a sidewalk or trail with a maximum width of 14 feet, provided that the access is made of permeable material.

D. A waiver from strict compliance from the groundwater recharge, stormwater runoff quantity, and stormwater runoff quality requirements of Sections 4.F and 4.G may be obtained for the enlargement of an existing public roadway or railroad; or the construction or enlargement of a public pedestrian access, provided that the following conditions are met:

1. The applicant demonstrates that there is a public need for the project that cannot be accomplished by any other means;
2. The applicant demonstrates through an alternatives analysis, that through the use of nonstructural and structural stormwater management strategies and measures, the option selected complies with the requirements of Sections 4.F and 4.G to the maximum extent practicable;
3. The applicant demonstrates that, in order to meet the requirements of Sections 4.F and 4.G, existing structures currently in use, such as homes and buildings, would need to be condemned; and
4. The applicant demonstrates that it does not own or have other rights to areas, including the potential to obtain through condemnation lands not falling under D.3 above within the upstream drainage area of the receiving stream, that would provide additional opportunities to mitigate the requirements of Sections 4.F and 4.G that were not achievable on-site.

E. Nonstructural Stormwater Management Strategies

1. To the maximum extent practicable, the standards in Sections 4.F and 4.G shall be met by incorporating nonstructural stormwater management strategies set forth at Section 4.E into the design. The applicant shall identify the nonstructural measures incorporated into the design of the project. If the applicant contends that it is not feasible for engineering, environmental, or safety reasons to incorporate any nonstructural stormwater management measures identified in Paragraph 2 below into the design of a particular project, the applicant shall identify the strategy considered and provide a basis for the contention.
2. Nonstructural stormwater management strategies incorporated into site design shall:
  - a. Protect areas that provide water quality benefits or areas particularly susceptible to erosion and sediment loss;
  - b. Minimize impervious surfaces and break up or disconnect the flow of runoff over impervious surfaces;
  - c. Maximize the protection of natural drainage features and vegetation;
  - d. Minimize the decrease in the "time of concentration" from pre-construction to post construction. "Time of concentration" is defined as the time it takes for runoff to travel from the hydraulically most distant point of the watershed to the point of interest within a watershed;

- e. Minimize land disturbance including clearing and grading;
- f. Minimize soil compaction;
- g. Provide low-maintenance landscaping that encourages retention and planting of native vegetation and minimizes the use of lawns, fertilizers and pesticides;
- h. Provide vegetated open-channel conveyance systems discharging into and through stable vegetated areas;
- i. Provide other source controls to prevent or minimize the use or exposure of pollutants at the site, in order to prevent or minimize the release of those pollutants into stormwater runoff. Such source controls include, but are not limited to:
  - (1) Site design features that help to prevent accumulation of trash and debris in drainage systems, including features that satisfy Section 4.E.3. below;
  - (2) Site design features that help to prevent discharge of trash and debris from drainage systems;
  - (3) Site design features that help to prevent and/or contain spills or other harmful accumulations of pollutants at industrial or commercial developments; and
  - (4) When establishing vegetation after land disturbance, applying fertilizer in accordance with the requirements established under the Soil Erosion and Sediment Control Act, N.J.S.A. 4:24-39 et seq., and implementing rules.

3. Site design features identified under Section 4.E.2.i.(2) above shall comply with the following standards to control passage of solid and floatable materials through storm drain inlets. For purposes of this paragraph, "solid and floatable materials" means sediment, debris, trash, and other floating, suspended, or settleable solids. For exemptions to this standard see Section 4.E.3.c below.

- a. Design engineers shall use either of the following grates whenever they use a grate in pavement or another ground surface to collect stormwater from that surface into a storm drain or surface water body under that grate:
  - (1) The New Jersey Department of Transportation (NJDOT) bicycle safe grate, which is described in Chapter 2.4 of the NJDOT Bicycle Compatible Roadways and Bikeways Planning and Design Guidelines (April 1996); or
  - (2) A different grate, if each individual clear space in that grate has an area of no more than seven (7.0) square inches, or is no greater than 0.5 inches across the smallest dimension.

Examples of grates subject to this standard include grates in grate inlets, the grate portion (non-curb-opening portion) of combination inlets, grates on storm sewer manholes, ditch grates, trench grates, and grates of spacer bars in slotted drains. Examples of ground surfaces include surfaces of roads

(including bridges), driveways, parking areas, bikeways, plazas, sidewalks, lawns, fields, open channels, and stormwater basin floors.

b. Whenever design engineers use a curb-opening inlet, the clear space in that curb opening (or each individual clear space, if the curb opening has two or more clear spaces) shall have an area of no more than seven (7.0) square inches, or be no greater than two (2.0) inches across the smallest dimension.

c. This standard does not apply:

- (1) Where the review agency determines that this standard would cause inadequate hydraulic performance that could not practicably be overcome by using additional or larger storm drain inlets that meet these standards;
- (2) Where flows from the water quality design storm as specified in Section 4.G.1 are conveyed through any device (e.g., end of pipe netting facility, manufactured treatment device, or a catch basin hood) that is designed, at a minimum, to prevent delivery of all solid and floatable materials that could not pass through one of the following:
  - (a) A rectangular space four and five-eighths inches long and one and one-half inches wide (this option does not apply for outfall netting facilities); or
  - (b) A bar screen having a bar spacing of 0.5 inches.
- (3) Where flows are conveyed through a trash rack that has parallel bars with one-inch (1") spacing between the bars, to the elevation of the water quality design storm as specified in Section 4.G.1; or
- (4) Where the New Jersey Department of Environmental Protection determines, pursuant to the New Jersey Register of Historic Places Rules at N.J.A.C. 7:4-7.2(c), that action to meet this standard is an undertaking that constitutes an encroachment or will damage or destroy the New Jersey Register listed historic property.

4. Any land area used as a nonstructural stormwater management measure to meet the performance standards in Sections 4.F and 4.G subject to an approved equivalent restriction that ensures that measure or an equivalent stormwater management measure approved by the reviewing agency is maintained in perpetuity.

5. Guidance for nonstructural stormwater management strategies is available in the New Jersey Stormwater Best Management Practices Manual. The BMP Manual may be obtained from the address identified in Section 7, or found on the Department's website at [www.njstormwater.org](http://www.njstormwater.org).

#### F. Erosion Control, Groundwater Recharge and Runoff Quantity Standards

1. This subsection contains minimum design and performance standards to control erosion, encourage and control infiltration and groundwater recharge, and control stormwater runoff quantity impacts of major development.

- a. The minimum design and performance standards for erosion control are those established under the Soil Erosion and Sediment Control Act, N.J.S.A. 4:24-39 et seq. and implementing rules.
- b. The minimum design and performance standards for groundwater recharge are as follows:
  - (1) The design engineer shall, using the assumptions and factors for stormwater runoff and groundwater recharge calculations at Section 5, either:
    - (a) Demonstrate through hydrologic and hydraulic analysis that the site and its stormwater management measures maintain 100 percent of the average annual pre-construction groundwater recharge volume for the site; or
    - (b) Demonstrate through hydrologic and hydraulic analysis that the increase of stormwater runoff volume from pre-construction to post-construction for the 2-year storm is infiltrated.
  - (2) This groundwater recharge requirement does not apply to projects within the "urban redevelopment area," or to projects subject to (3) below.
  - (3) The following types of stormwater shall not be recharged:
    - (a) Stormwater from areas of high pollutant loading. High pollutant loading areas are areas in industrial and commercial developments where solvents and/or petroleum products are loaded/unloaded, stored, or applied, areas where pesticides are loaded/unloaded or stored; areas where hazardous materials are expected to be present in greater than "reportable quantities" as defined by the United States Environmental Protection Agency (EPA) at 40 CFR 302.4; areas where recharge would be inconsistent with Department approved remedial action work plan or landfill closure plan and areas with high risks for spills of toxic materials, such as gas stations and vehicle maintenance facilities; and
    - (b) Industrial stormwater exposed to "source material." "Source material" means any material(s) or machinery, located at an industrial facility, that is directly or indirectly related to process, manufacturing or other industrial activities, which could be a source of pollutants in any industrial stormwater discharge to groundwater. Source materials include, but are not limited to, raw materials; intermediate products; final products; waste materials; by-products; industrial machinery and fuels; and lubricants, solvents, and detergents that are related to process, manufacturing, or other industrial activities that are exposed to stormwater.
  - (4) The design engineer shall assess the hydraulic impact on the groundwater table and design the site so as to avoid adverse hydraulic impacts. Potential adverse hydraulic impacts include, but are not limited to,

exacerbating a naturally or seasonally high water table so as to cause surficial ponding, flooding of basements, or interference with the proper operation of subsurface sewage disposal systems and other subsurface structures in the vicinity or downgradient of the groundwater recharge area.

- c. In order to control stormwater runoff quantity impacts, the design engineer shall, using the assumptions and factors for stormwater runoff calculations at Section 5, complete one of the following:
- (1) Demonstrate through hydrologic and hydraulic analysis that for stormwater leaving the site, post-construction runoff hydrographs for the two, 10, and 100-year storm events do not exceed, at any point in time, the pre-construction runoff hydrographs for the same storm events;
  - (2) Demonstrate through hydrologic and hydraulic analysis that there is no increase, as compared to the pre-construction condition, in the peak runoff rates of stormwater leaving the site for the two, 10, and 100-year storm events and that the increased volume or change in timing of stormwater runoff will not increase flood damage at or downstream of the site. This analysis shall include the analysis of impacts of existing land uses and projected land uses assuming full development under existing zoning and land use ordinances in the drainage area;
  - (3) Design stormwater management measures so that the post-construction peak runoff rates for the 2, 10 and 100 year storm events are 50, 75 and 80 percent, respectively, of the pre-construction peak runoff rates. The percentages apply only to the post-construction stormwater runoff that is attributable to the portion of the site on which the proposed development or project is to be constructed. The percentages shall not be applied to post-construction stormwater runoff into tidal flood hazard areas if the increased volume of stormwater runoff will not increase flood damages below the point of discharge; or
  - (4) In tidal flood hazard areas, stormwater runoff quantity analysis in accordance with (1), (2) and (3) above shall only be applied if the increased volume of stormwater runoff could increase flood damages below the point of discharge.

#### G. Stormwater Runoff Quality Standards

1. Stormwater management measures shall be designed to reduce the post-construction load of total suspended solids (TSS) in stormwater runoff by 80 percent of the anticipated load from the developed site, expressed as an annual average. Stormwater management measures shall only be required for water quality control if an additional 1/4 acre of impervious surface is being proposed on a development site. The requirement to reduce TSS does not apply to any stormwater runoff in a discharge regulated under a numeric effluent limitation

for TSS imposed under the New Jersey Pollution Discharge Elimination System (NJPDES) rules, N.J.A.C. 7:14A, or in a discharge specifically exempt under a NJPDES permit from this requirement. The water quality design storm is 1.25 inches of rainfall in two hours. Water quality calculations shall take into account the distribution of rain from the water quality design storm, as reflected in Table 1. The calculation of the volume of runoff may take into account the implementation of non-structural and structural stormwater management measures.

Table 1: Water Quality Design Storm Distribution			
Time (Minutes)	Cumulative Rainfall (Inches)	Time (Minutes)	Cumulative Rainfall (Inches)
0	0.0000	65	0.8917
5	0.0083	70	0.9917
10	0.0166	75	1.0500
15	0.0250	80	1.0840
20	0.0500	85	1.1170
25	0.0750	90	1.1500
30	0.1000	95	1.1750
35	0.1330	100	1.2000
40	0.1660	105	1.2250
45	0.2000	110	1.2334
50	0.2583	115	1.2417
55	0.3583	120	1.2500
60	0.6250		

2. For purposes of TSS reduction calculations, Table 2 below presents the presumed removal rates for certain BMPs designed in accordance with the New Jersey Stormwater Best Management Practices Manual. The BMP Manual may be obtained from the address identified in Section 7, or found on the Department's website at [www.njstormwater.org](http://www.njstormwater.org). The BMP Manual and other sources of technical guidance are listed in Section 7. TSS reduction shall be calculated based on the removal rates for the BMPs in Table 2 below. Alternative removal rates and methods of calculating removal rates may be used if the design engineer provides documentation demonstrating the capability of these alternative rates and methods to the review agency. A copy of any approved alternative rate or method of calculating the removal rate shall be provided to the Department at the following address: Division of Watershed Management,

New Jersey Department of Environmental Protection, PO Box 418 Trenton, New Jersey, 08625-0418.

- 3.If more than one BMP in series is necessary to achieve the required 80 percent TSS reduction for a site, the applicant shall utilize the following formula to calculate TSS reduction:

$$R = A + B - (AXB)/100$$

Where

R = total TSS percent load removal from application of both BMPs, and

A = the TSS percent removal rate applicable to the first BMP

B = the TSS percent removal rate applicable to the second BMP

Best Management Practice	TSS Percent Removal Rate
Bioretention Systems	90
Constructed Stormwater Wetland	90
Extended Detention Basin	40-60
Infiltration Structure	80
Manufactured Treatment Device	See Section 6.C
Sand Filter	80
Vegetative Filter Strip	60-80
Wet Pond	50-90

- 4.If there is more than one onsite drainage area, the 80 percent TSS removal rate shall apply to each drainage area, unless the runoff from the subareas converge on site in which case the removal rate can be demonstrated through a calculation using a weighted average.
- 5.Stormwater management measures shall also be designed to reduce, to the maximum extent feasible, the post-construction nutrient load of the anticipated load from the developed site in stormwater runoff generated from the water quality design storm. In achieving reduction of nutrients to the maximum extent feasible, the design of the site shall include nonstructural strategies and structural measures that optimize nutrient removal while still achieving the performance standards in Sections 4.F and 4.G.

6. Additional information and examples are contained in the New Jersey Stormwater Best Management Practices Manual, which may be obtained from the address identified in Section 7.
7. In accordance with the definition of FW1 at N.J.A.C. 7:9B-1.4, stormwater management measures shall be designed to prevent any increase in stormwater runoff to waters classified as FW1.
8. Special water resource protection areas shall be established along all waters designated Category One at N.J.A.C. 7:9B, and perennial or intermittent streams that drain into or upstream of the Category One waters as shown on the USGS Quadrangle Maps or in the County Soil Surveys, within the associated HUC14 drainage area. These areas shall be established for the protection of water quality, aesthetic value, exceptional ecological significance, exceptional recreational significance, exceptional water supply significance, and exceptional fisheries significance of those established Category One waters. These areas shall be designated and protected as follows:
  - a. The applicant shall preserve and maintain a special water resource protection area in accordance with one of the following:
    - (1) A 300-foot special water resource protection area shall be provided on each side of the waterway, measured perpendicular to the waterway from the top of the bank outwards or from the centerline of the waterway where the bank is not defined, consisting of existing vegetation or vegetation allowed to follow natural succession is provided. (2) Encroachment within the designated special water resource protection area under Subsection (1) above shall only be allowed where previous development or disturbance has occurred (for example, active agricultural use, parking area or maintained lawn area). The encroachment shall only be allowed where applicant demonstrates that the functional value and overall condition of the special water resource protection area will be maintained to the maximum extent practicable. In no case shall the remaining special water resource protection area be reduced to less than 150 feet as measured perpendicular to the top of bank of the waterway or centerline of the waterway where the bank is undefined. All encroachments proposed under this subparagraph shall be subject to review and approval by the Department.
  - b. All stormwater shall be discharged outside of and flow through the special water resource protection area and shall comply with the Standard for Off-Site Stability in the "Standards For Soil Erosion and Sediment Control in New Jersey," established under the Soil Erosion and Sediment Control Act , N.J.S.A. 4:24-39 et seq.
  - c. If stormwater discharged outside of and flowing through the special water resource protection area cannot comply with the Standard For Off-Site Stability in the "Standards for Soil Erosion and Sediment Control in New Jersey," established under the Soil Erosion and Sediment Control Act , N.J.S.A. 4:24-39 et seq., then the stabilization measures in accordance with

the requirements of the above standards may be placed within the special water resource protection area, provided that:

- (1) Stabilization measures shall not be placed within 150 feet of the Category One waterway;
- (2) Stormwater associated with discharges allowed by this section shall achieve a 95 percent TSS post-construction removal rate;
- (3) Temperature shall be addressed to ensure no impact on the receiving waterway;
- (4) The encroachment shall only be allowed where the applicant demonstrates that the functional value and overall condition of the special water resource protection area will be maintained to the maximum extent practicable;
- (5) A conceptual project design meeting shall be held with the appropriate Department staff and Soil Conservation District staff to identify necessary stabilization measures; and
- (6) All encroachments proposed under this section shall be subject to review and approval by the Department.

d. A stream corridor protection plan may be developed by a regional stormwater management planning committee as an element of a regional stormwater management plan, or by a municipality through an adopted municipal stormwater management plan. If a stream corridor protection plan for a waterway subject to Section 4.G(8) has been approved by the Department of Environmental Protection, then the provisions of the plan shall be the applicable special water resource protection area requirements for that waterway. A stream corridor protection plan for a waterway subject to G.8 shall maintain or enhance the current functional value and overall condition of the special water resource protection area as defined in G.8.a.(1) above. In no case shall a stream corridor protection plan allow the reduction of the Special Water Resource Protection Area to less than 150 feet as measured perpendicular to the waterway subject to this subsection.

e. Paragraph G.8 does not apply to the construction of one individual single family dwelling that is not part of a larger development on a lot receiving preliminary or final subdivision approval on or before February 2, 2004, provided that the construction begins on or before February 2, 2009.

## Section 5: Calculation of Stormwater Runoff and Groundwater Recharge

A. Stormwater runoff shall be calculated in accordance with the following:

1. The design engineer shall calculate runoff using one of the following methods:
  - a. The USDA Natural Resources Conservation Service (NRCS) methodology, including the NRCS Runoff Equation and Dimensionless Unit Hydrograph, as

described in the NRCS National Engineering Handbook Section 4 – Hydrology and Technical Release 55 – Urban Hydrology for Small Watersheds; or

- b. The Rational Method for peak flow and the Modified Rational Method for hydrograph computations.
2. For the purpose of calculating runoff coefficients and groundwater recharge, there is a presumption that the pre-construction condition of a site or portion thereof is a wooded land use with good hydrologic condition. The term “runoff coefficient” applies to both the NRCS methodology at Section 5.A.1.a and the Rational and Modified Rational Methods at Section 5.A.1.b. A runoff coefficient or a groundwater recharge land cover for an existing condition may be used on all or a portion of the site if the design engineer verifies that the hydrologic condition has existed on the site or portion of the site for at least five years without interruption prior to the time of application. If more than one land cover have existed on the site during the five years immediately prior to the time of application, the land cover with the lowest runoff potential shall be used for the computations. In addition, there is the presumption that the site is in good hydrologic condition (if the land use type is pasture, lawn, or park), with good cover (if the land use type is woods), or with good hydrologic condition and conservation treatment (if the land use type is cultivation).
3. In computing pre-construction stormwater runoff, the design engineer shall account for all significant land features and structures, such as ponds, wetlands, depressions, hedgerows, or culverts, that may reduce pre-construction stormwater runoff rates and volumes.
4. In computing stormwater runoff from all design storms, the design engineer shall consider the relative stormwater runoff rates and/or volumes of pervious and impervious surfaces separately to accurately compute the rates and volume of stormwater runoff from the site. To calculate runoff from unconnected impervious cover, urban impervious area modifications as described in the NRCS Technical Release 55 – Urban Hydrology for Small Watersheds and other methods may be employed.
5. If the invert of the outlet structure of a stormwater management measure is below the flood hazard design flood elevation as defined at N.J.A.C. 7:13, the design engineer shall take into account the effects of tailwater in the design of structural stormwater management measures.

B. Groundwater recharge may be calculated in accordance with the following:

1. The New Jersey Geological Survey Report GSR-32 A Method for Evaluating Ground-Water Recharge Areas in New Jersey, incorporated herein by reference as amended and supplemented. Information regarding the methodology is available from the New Jersey Stormwater Best Management Practices Manual; at <http://www.state.nj.us/dep/njgs/>; or at New Jersey Geological Survey, 29 Arctic Parkway, P.O. Box 427 Trenton, New Jersey 08625-0427; (609) 984-6587.

## Section 6: Standards for Structural Stormwater Management Measures

A. Standards for structural stormwater management measures are as follows:

1. Structural stormwater management measures shall be designed to take into account the existing site conditions, including, for example, environmentally critical areas, wetlands; flood-prone areas; slopes; depth to seasonal high water table; soil type, permeability and texture; drainage area and drainage patterns; and the presence of solution-prone carbonate rocks (limestone).
2. Structural stormwater management measures shall be designed to minimize maintenance, facilitate maintenance and repairs, and ensure proper functioning. Trash racks shall be installed at the intake to the outlet structure as appropriate, and shall have parallel bars with one-inch (1") spacing between the bars to the elevation of the water quality design storm. For elevations higher than the water quality design storm, the parallel bars at the outlet structure shall be spaced no greater than one-third (1/3) the width of the diameter of the orifice or one-third (1/3) the width of the weir, with a minimum spacing between bars of one-inch and a maximum spacing between bars of six inches. In addition, the design of trash racks must comply with the requirements of Section 8.D.
3. Structural stormwater management measures shall be designed, constructed, and installed to be strong, durable, and corrosion resistant. Measures that are consistent with the relevant portions of the Residential Site Improvement Standards at N.J.A.C. 5:21-7.3, 7.4, and 7.5 shall be deemed to meet this requirement.
4. At the intake to the outlet from the stormwater management basin, the orifice size shall be a minimum of two and one-half inches in diameter.
5. Stormwater management basins shall be designed to meet the minimum safety standards for stormwater management basins at Section 8.

B. Stormwater management measure guidelines are available in the New Jersey Stormwater Best Management Practices Manual. Other stormwater management measures may be utilized provided the design engineer demonstrates that the proposed measure and its design will accomplish the required water quantity, groundwater recharge and water quality design and performance standards established by Section 4 of this ordinance.

C. Manufactured treatment devices may be used to meet the requirements of Section 4 of this ordinance, provided the pollutant removal rates are verified by the New Jersey Corporation for Advanced Technology and certified by the Department.

## Section 7: Sources for Technical Guidance

A. Technical guidance for stormwater management measures can be found in the documents listed at 1 and 2 below, which are available from Maps and Publications, New Jersey Department of Environmental Protection, 428 East State Street, P.O. Box 420, Trenton, New Jersey, 08625; telephone (609) 777-1038.

1. Guidelines for stormwater management measures are contained in the New Jersey Stormwater Best Management Practices Manual, as amended. Information is provided on stormwater management measures such as: bioretention systems, constructed stormwater wetlands, dry wells, extended detention basins, infiltration structures, manufactured treatment devices, pervious paving, sand filters, vegetative filter strips, and wet ponds.

2. The New Jersey Department of Environmental Protection Stormwater Management Facilities Maintenance Manual, as amended.

B. Additional technical guidance for stormwater management measures can be obtained from the following:

1. The "Standards for Soil Erosion and Sediment Control in New Jersey" promulgated by the State Soil Conservation Committee and incorporated into N.J.A.C. 2:90. Copies of these standards may be obtained by contacting the State Soil Conservation Committee or any of the Soil Conservation Districts listed in N.J.A.C. 2:90-1.3(a)4. The location, address, and telephone number of each Soil Conservation District may be obtained from the State Soil Conservation Committee, P.O. Box 330, Trenton, New Jersey 08625; (609) 292-5540;

2. The Rutgers Cooperative Extension Service, 732-932-9306; and

3. The Soil Conservation Districts listed in N.J.A.C. 2:90-1.3(a)4. The location, address, and telephone number of each Soil Conservation District may be obtained from the State Soil Conservation Committee, P.O. Box 330, Trenton, New Jersey, 08625, (609) 292-5540.

#### Section 8: Safety Standards for Stormwater Management Basins

A. This section sets forth requirements to protect public safety through the proper design and operation of stormwater management basins. This section applies to any new stormwater management basin.

B. Requirements for Trash Racks, Overflow Grates and Escape Provisions

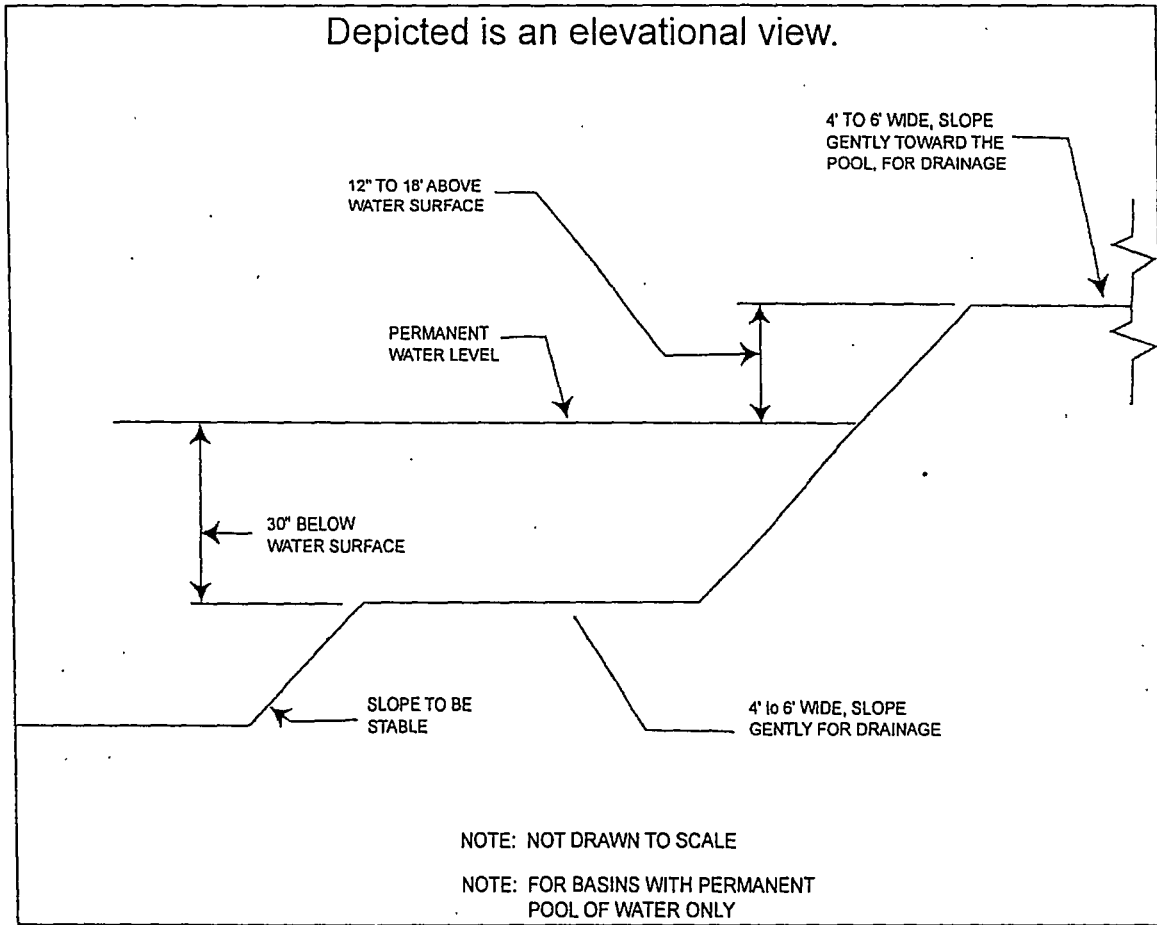
1. A trash rack is a device designed to catch trash and debris and prevent the clogging of outlet structures. Trash racks shall be installed at the intake to the outlet from the stormwater management basin to ensure proper functioning of the basin outlets in accordance with the following:

- a. The trash rack shall have parallel bars, with no greater than six inch spacing between the bars.
  - b. The trash rack shall be designed so as not to adversely affect the hydraulic performance of the outlet pipe or structure.
  - c. The average velocity of flow through a clean trash rack is not to exceed 2.5 feet per second under the full range of stage and discharge. Velocity is to be computed on the basis of the net area of opening through the rack.
  - d. The trash rack shall be constructed and installed to be rigid, durable, and corrosion resistant, and shall be designed to withstand a perpendicular live loading of 300 lbs/ft sq.
2. An overflow grate is designed to prevent obstruction of the overflow structure. If an outlet structure has an overflow grate, such grate shall meet the following requirements:
- a. The overflow grate shall be secured to the outlet structure but removable for emergencies and maintenance.
  - b. The overflow grate spacing shall be no less than two inches across the smallest dimension.
  - c. The overflow grate shall be constructed and installed to be rigid, durable, and corrosion resistant, and shall be designed to withstand a perpendicular live loading of 300 lbs./ft sq.
3. For purposes of this paragraph 3, escape provisions means the permanent installation of ladders, steps, rungs, or other features that provide easily accessible means of egress from stormwater management basins. Stormwater management basins shall include escape provisions as follows:
- a. If a stormwater management basin has an outlet structure, escape provisions shall be incorporated in or on the structure. With the prior approval of the reviewing agency identified in Section 8.C a free-standing outlet structure may be exempted from this requirement.
  - b. Safety ledges shall be constructed on the slopes of all new stormwater management basins having a permanent pool of water deeper than two and one-half feet. Such safety ledges shall be comprised of two steps. Each step shall be four to six feet in width. One step shall be located approximately two and one-half feet below the permanent water surface, and the second step shall be located one to one and one-half feet above the permanent water surface. See Section 8.D for an illustration of safety ledges in a stormwater management basin.
  - c. In new stormwater management basins, the maximum interior slope for an earthen dam, embankment, or berm shall not be steeper than 3 horizontal to 1 vertical.

### C. Variance or Exemption from Safety Standards

1. A variance or exemption from the safety standards for stormwater management basins may be granted only upon a written finding by the appropriate reviewing agency (municipality, county or Department) that the variance or exemption will not constitute a threat to public safety.

### D. Illustration of Safety Ledges in a New Stormwater Management Basin



## Section 9: Requirements for a Site Development Stormwater Plan

### A. Submission of Site Development Stormwater Plan

1. Whenever an applicant seeks municipal approval of a development subject to this ordinance, the applicant shall submit all of the required components of the Checklist for the Site Development Stormwater Plan at Section 9.C below as part of the submission of the applicant's application for subdivision or site plan approval.
2. The applicant shall demonstrate that the project meets the standards set forth in this ordinance.

3. The applicant shall submit 20 copies of the materials listed in the checklist for site development stormwater plans in accordance with Section 9.C of this ordinance.

#### B. Site Development Stormwater Plan Approval

The applicant's Site Development project shall be reviewed as a part of the subdivision or site plan review process by the municipal board or official from which municipal approval is sought. That municipal board or official shall consult the engineer retained by the Township or the Planning and/or Zoning Board (as appropriate) to determine if all of the checklist requirements have been satisfied and to determine if the project meets the standards set forth in this ordinance.

#### C. Checklist Requirements

The following information shall be required:

##### 1. Topographic Base Map

The reviewing engineer may require upstream tributary drainage system information as necessary. The topographic base map of the site submitted must extend a minimum of 200 feet beyond the limits of the proposed development, at a scale of 1"=200' or greater, showing 2-foot contour intervals. The map as appropriate may indicate the following: existing surface water drainage, shorelines, steep slopes, soils, erodible soils, perennial or intermittent streams that drain into or upstream of the Category One waters, wetlands and flood plains along with their appropriate buffer strips, marshlands and other wetlands, pervious or vegetative surfaces, existing man-made structures, roads, bearing and distances of property lines, and significant natural and manmade features not otherwise shown.

##### 2. Environmental Site Analysis

A written and graphic description of the natural and man-made features of the site and its environs. This description should include a discussion of soil conditions, slopes, wetlands, waterways and vegetation on the site. Particular attention should be given to unique, unusual, or environmentally sensitive features and to those that provide particular opportunities or constraints for development.

##### 3. Project Description and Site Plan(s)

A map (or maps) at the same scale as the topographical base map indicating the location of existing and proposed buildings, roads, parking areas, utilities, structural facilities for stormwater management and sediment control, and other permanent structures. The map(s) shall also clearly show areas where alterations occur in the natural terrain and cover, including lawns and other landscaping, and seasonal high ground water elevations. A written description of the site plan and justification of proposed changes in natural conditions may also be provided.

#### 4. Land Use Planning and Source Control Plan

This plan shall provide a demonstration of how the goals and standards of Sections 3 through 6 are being met. The focus of this plan shall be to describe how the site is being developed to meet the objective of controlling groundwater recharge, stormwater quality and stormwater quantity problems at the source by land management and source controls whenever possible.

#### 5. Stormwater Management Facilities Map

The following information, illustrated on a map of the same scale as the topographic base map, shall be included:

- a. Total area to be paved or built upon, proposed surface contours, land area to be occupied by the stormwater management facilities and the type of vegetation thereon, and details of the proposed plan to control and dispose of stormwater.
- b. Details of all stormwater management facility designs, during and after construction, including discharge provisions, discharge capacity for each outlet at different levels of detention and emergency spillway provisions with maximum discharge capacity of each spillway.

#### 6. Calculations

- a. Comprehensive hydrologic and hydraulic design calculations for the pre-development and post-development conditions for the design storms specified in Section 4 of this ordinance.
- b. When the proposed stormwater management control measures (e.g., infiltration basins) depends on the hydrologic properties of soils, then a soils report shall be submitted. The soils report shall be based on onsite boring logs or soil pit profiles. The number and location of required soil borings or soil pits shall be determined based on what is needed to determine the suitability and distribution of soils present at the location of the control measure.

#### 7. Maintenance and Repair Plan

The design and planning of the stormwater management facility shall meet the maintenance requirements of Section 10.

#### 8. Waiver from Submission Requirements

The municipal official or board reviewing an application under this ordinance may, in consultation with the municipal engineer, waive submission of any of the requirements in Sections 9.C.1 through 9.C.6 of this ordinance when it can be demonstrated that the information requested is impossible to obtain or it would create a hardship on the applicant to obtain and its absence will not materially affect the review process.

## Section 10: Maintenance and Repair

### A. Applicability

1. Projects subject to review in accordance with Section 1.C of this ordinance shall comply with the requirements of Sections 10.B and 10.C.

### B. General Maintenance

1. The design engineer shall prepare a maintenance plan for the stormwater management measures incorporated into the design of a major development.
2. The maintenance plan shall contain specific preventative maintenance tasks and schedules; cost estimates, including estimated cost of sediment, debris, or trash removal; and the name, address, and telephone number of the person or persons responsible for preventative and corrective maintenance (including replacement). Maintenance guidelines for stormwater management measures are available in the New Jersey Stormwater Best Management Practices Manual. If the maintenance plan identifies a person other than the developer (for example, a public agency or homeowners' association) as having the responsibility for maintenance, the plan shall include documentation of such person's agreement to assume this responsibility, or of the developer's obligation to dedicate a stormwater management facility to such person under an applicable ordinance or regulation.
3. Responsibility for maintenance shall not be assigned or transferred to the owner or tenant of an individual property in a residential development or project, unless such owner or tenant owns or leases the entire residential development or project.
4. If the person responsible for maintenance identified under Section 10.B.2 above is not a public agency, the maintenance plan and any future revisions based on Section 10.B.7 below shall be recorded upon the deed of record for each property on which the maintenance described in the maintenance plan must be undertaken.
5. Preventative and corrective maintenance shall be performed to maintain the function of the stormwater management measure, including repairs or replacement to the structure; removal and proper disposal of all sediment, debris, or trash; restoration of eroded areas; snow and ice removal; fence repair or replacement; restoration of vegetation; and repair or replacement of nonvegetated linings.
6. The party responsible for maintenance identified under Section 10.B.2 above shall maintain a detailed log of all preventative and corrective maintenance for the structural stormwater management measures incorporated into the design of the development, including a record of all inspections, debris disposal and copies of all maintenance-related work orders.

7. The party responsible for maintenance identified under Section 10.B.2 above shall evaluate the effectiveness of the maintenance plan at least once per year and adjust the plan and the deed as needed.
  8. The person responsible for maintenance identified under Section 10.B.2 above shall retain and make available, upon request by any public entity with administrative, health, environmental, or safety authority over the site, the maintenance plan and the documentation required by Sections 10.B.6 and 10.B.7 above.
  9. The requirements of Sections 10.B.3 and 10.B.4 do not apply to stormwater management facilities that are dedicated to and accepted by the municipality or another governmental agency.
  10. In the event that the stormwater management facility becomes a danger to public safety or public health, or if it is in need of maintenance or repair, the municipality shall so notify the responsible party in writing. Upon receipt of that notice, the responsible person shall have fourteen (14) days to effect maintenance and repair of the facility in a manner that is approved by the municipal engineer or his designee. The municipality, in its discretion, may extend the time allowed for effecting maintenance and repair for good cause. If the responsible party fails or refuses to perform such maintenance and repair, the municipality or County may immediately proceed to do so and shall bill the cost thereof to the responsible party. Such costs shall be paid within 30 days. Interest on such bills will accrue at the rate of 1.5% per month.
- B. Nothing in this section shall preclude the municipality in which the major development is located from requiring the posting of a performance or maintenance guarantee in accordance with N.J.S.A. 40:55D-53.

## Section 11: Penalties

- A. Any person who erects, constructs, alters, repairs, converts, maintains, or uses any building, structure or land in violation of this ordinance shall be subject to a penalty in an amount up to \$2,000 per week, per violation. The violation may be issued by the Building Code Official or the Department of Health Official.
1. The construction official or health official shall issue a notice of violation and order to terminate directing the discontinuance of the violation.
  2. The notice and order shall contain the following information:
    - (i) the name and address of the owner
    - (ii) the name and address of the person to whom the order is directed
    - (iii) a description of the violation or the citation to the section of ordinance or regulation violated

(iv) the amount of the penalty

3. Unless an immediate hazard to health and safety is posed, the official shall permit such time period for correction as is reasonable within the context off the situation.

Section 12: Effective Date

This ordinance shall take effect immediately upon the approval by the county review agency, or sixty (60) days from the receipt of the ordinance by the county review agency if the county review agency should fail to act.

Section 13: Severability

If the provisions of any section, subsection, paragraph, subdivision, or clause of this ordinance shall be judged invalid by a court of competent jurisdiction, such order of judgment shall not affect or invalidate the remainder of any section, subsection, paragraph, subdivision, or clause of this ordinance.

Introduced: April 13, 2005

Adopted: April 27, 2005

Published: April 16, 2005 & May 2, 2005

Attest:

Carol Ann Fontana  
Township Clerk

Hugo Cabrera Yes

Theresa Ferraro Yes

Frank Gargiulo Yes

Allen Pascual Yes

Nicholas J. Sacco Yes

TOWNSHIP OF NORTH BERGEN

HUDSON COUNTY, NEW JERSEY

AN ORDINANCE TO PROHIBIT ILLICIT CONNECTIONS TO SEPARATE STORM SEWER SYSTEM FOR THE TOWNSHIP OF NORTH BERGEN

WHEREAS, the Township of North Bergen has been issued a General Stormwater Permit by the New Jersey Department of Environmental Protection Agency, which requires the establishment and adoption of an ordinance to prohibit illicit connection to the stormwater system for the Township; and

WHEREAS, the Ordinance shall prohibit the connection of illicit connections into the Township's storm sewer lines; and

NOW THEREFORE BE IT ORDAINED BY THE BOARD OF COMMISSIONERS OF THE TOWNSHIP OF NORTH BERGEN that:

SECTION I. Purpose:

An ordinance to prohibit illicit connections to the municipal separate storm sewer system(s) operated by the Township of North Bergen, so as to protect public health, safety and welfare, and to prescribe penalties for the failure to comply.

SECTION II. Definitions:

For the purpose of this ordinance, the following terms, phrases, words, and their derivations shall have the meanings stated herein unless their use in the text of this Chapter clearly demonstrates a different meaning. When not inconsistent with the context, words used in the present tense include the future, words used in the plural number include the singular number, and words used in the singular number include the plural number. The word "shall" is always mandatory and not merely directory. The definitions below are the same as or based on corresponding definitions in the New Jersey Pollutant Discharge Elimination System (NJPDES) rules at N.J.A.C. 7:14A-1.2.

- a. Domestic sewage - waste and wastewater from humans or household operations.
- b. Illicit connection – any physical or non-physical connection that discharges domestic sewage, non-contact cooling water, process wastewater, or other industrial waste (other than stormwater) to the municipal separate storm sewer system operated

by the Township of North Bergen, unless that discharge is authorized under a NJPDES permit other than the Tier A Municipal Stormwater General Permit (NJPDES Permit Number NJ0141852). Non-physical connections may include, but are not limited to, leaks, flows, or overflows into the municipal separate storm sewer system.

c. Industrial waste - non-domestic waste, including, but not limited to, those pollutants regulated under Section 307(a), (b), or (c) of the Federal Clean Water Act (33 U.S.C. §1317(a), (b), or (c)).

d. Municipal separate storm sewer system (MS4)– a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains) that is owned or operated by the Township of North Bergen or other public body, and is designed and used for collecting and conveying stormwater. MS4s do not include combined sewer systems, which are sewer systems that are designed to carry sanitary sewage at all times and to collect and transport stormwater from streets and other sources.

e. NJPDES permit – a permit issued by the New Jersey Department of Environmental Protection to implement the New Jersey Pollutant Discharge Elimination System (NJPDES) rules at N.J.A.C. 7:14A

f. Non-contact cooling water - water used to reduce temperature for the purpose of cooling. Such waters do not come into direct contact with any raw material, intermediate product (other than heat) or finished product. Non-contact cooling water may however contain algaecides, or biocides to control fouling of equipment such as heat exchangers, and/or corrosion inhibitors.

g. Person – any individual, corporation, company, partnership, firm, association, or political subdivision of this State subject to municipal jurisdiction.

h. Process wastewater - any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product. Process wastewater includes, but is not limited to, leachate and cooling water other than non-contact cooling water.

i. Stormwater – water resulting from precipitation (including rain and snow) that runs off the land's surface, is transmitted to the subsurface, is captured by separate storm sewers or other sewerage or drainage facilities, or is conveyed by snow removal equipment.

**SECTION III. Prohibited Conduct:**

No person shall discharge or cause to be discharged through an illicit connection to the municipal separate storm sewer system operated by the Township of North Bergen any domestic sewage, non-contact cooling water, process wastewater, or other industrial waste (other than stormwater).

**SECTION IV. Enforcement:**

This ordinance shall be enforced by the Police Department and Health Department of Township of North Bergen

**SECTION V. Penalties:**

Any person(s) who is found to be in violation of the provisions of this ordinance shall be subject to a fine not to exceed \$500.00 per day.

**SECTION VI. Separability:**

Each section, subsection, sentence, clause and phrase of this Ordinance is declared to be an independent section, subsection, sentence, clause and phrase, and the finding or holding of any such portion of this Ordinance to be unconstitutional, void, or ineffective for any cause, or reason, shall not affect any other portion of this Ordinance.

**SECTION VII. Effective date:**

This Ordinance shall be in full force and effect from and after its adoption and any publication as may be required by law.

Introduced: September 14, 2005

Published: Sept. 17, 2005 & Oct. 3, 2005

Adopted: Sept. 28, 2005

Attest: Carol Ann Fontana  
Township Clerk

<u>Commissioner Cabrera</u>	<u>Absent</u>
<u>Commissioner Ferraro</u>	<u>Yes</u>
<u>Commissioner Gargiulo</u>	<u>Yes</u>
<u>Commissioner Pascual</u>	<u>Yes</u>
<u>Mayor Sacco</u>	<u>Yes</u>

## SPPP Form 7 – Street Sweeping

All records must be available upon request by NJDEP.

1. Provide a written description or attach a map indicating which streets are swept as required by the NJPDES permit. Describe the sweeping schedule and indicate if any of the streets are swept by another entity through a shared service arrangement.

The Township of North Bergen has approximately 10.15 miles (53,596.27 LF) of required street sweeping within the municipality, as seen on the attached map. The Township sweeps seven (7) days per week and all required roads are swept a minimum of once per week. West Side Avenue, a main street within the Borough, is swept twice a week.

2. Provide a written description or attach a map indicating which streets are swept that are NOT required to be swept by the NJPDES permit. Describe the sweeping schedule and indicate if any of the streets are swept by another entity through a shared service arrangement.

The Township of North Bergen intends on maintaining its existing street sweeping program for all municipal streets, which includes the sweeping of all streets once a week. The total length of all additional street sweeping is 47.11 miles (248,730.15 LF). It should be noted that the Township of North Bergen has taken the responsibility for some County roads including:

- Kennedy Boulevard and Boulevard East which are swept twice a week; and
- Bergen Turnpike, Union Turnpike, and Patterson Plank Rd which are swept once a week

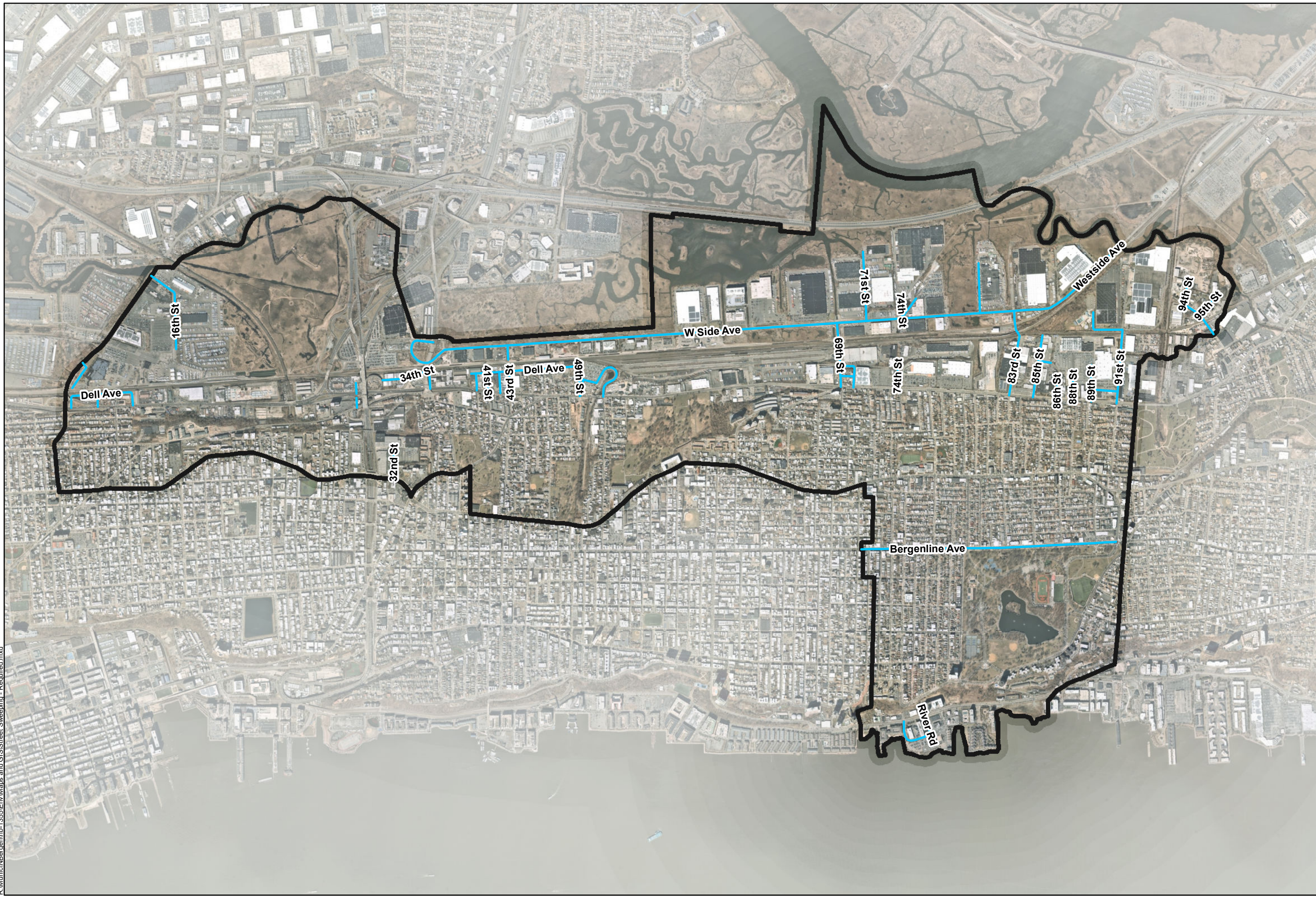
3. Does the municipality provide street sweeping services for other municipalities? If so, please describe the arrangements.

The Township of North Bergen does not provide street sweeping services for other municipalities.

4. Indicate the location of records, including sweeping dates, areas swept, number of miles swept and total amount of wet tons collected each month. Note which records correspond to sweeping activities beyond what is required by the NJPDES permit, i.e., sweepings of streets within the municipality that are not required by permit to be swept or sweepings of streets outside of the municipality.

Records of all street sweeping are kept at the North Bergen Municipal Utilities Authority located at: 6200 Tonnelle Avenue, North Bergen, NJ 07047.

R:\Municipal\Bergen\mb-1355\Env\Maps and GIS\Street Sweeping - Required.mxd



Notes:  
NearMap Image Date: March 28, 2019

Tier A Municipal Stormwater Permitting  
**Street Sweeping - Required**  
Township of North Bergen  
Hudson County  
New Jersey

**BOSWELL ENGINEERING**  
ENGINEERS - SURVEYORS - PLANNERS - SCIENTISTS  
330 Phillips Avenue South Hackensack, NJ 07606  
Tel: 201-641-0770 • Fax: 201-641-1757




Scale  
1 in = 1,800 ft

Job No. NB-1355

February 2020

Last Edit: 2/21/2020

Drawn By: JMW

Check By: FJR

Sheet 1 of 1

Required Roadways



Notes:  
NearMap Image Date: March 28, 2019

Tier A Municipal Stormwater Permitting  
**Street Sweeping - Additional**  
Township of North Bergen  
Hudson County  
New Jersey

**BOSWELL ENGINEERING**  
 ENGINEERS - SURVEYORS - PLANNERS - SCIENTISTS  
 330 Phillips Avenue South Hackensack, NJ 07606  
 Tel: 201-641-0770 • Fax: 201-641-1757




Scale  
1 in = 1,800 ft

Job No. NB-1355

February 2020

Last Edit: 2/25/2020

Drawn By: JMW

Check By: FJR

Sheet 1 of 1





## SPPP Form 8 – Catch Basins and Storm Drain Inlets

All records must be available upon request by NJDEP.

1. Describe the schedule for catch basin and storm drain inlet inspection, cleaning, and maintenance.
Visual inspections are performed once yearly. Grates are removed when necessary to remove accumulated material.
2. List the locations of catch basins and storm drain inlets with recurring problems, i.e., flooding, accumulated debris, etc.
The Township experiences reoccurring problems west of Route 1&9 from 74th Street to 91st Street and along River Road from 60th Street to 71st Street.
3. Describe what measures are taken to address issues for catch basins and storm drain inlets with recurring problems and how they are prioritized.
The Township is currently undergoing major upgrades to remedy recurring problems.
4. Describe the inspection schedule and maintenance plan for storm drain inlet labels on storm drains that do not have permanent wording cast into the design.
All inlets within the Township are being labeled as all inlets are being GPS located and mapped and labels are replaced as necessary during inspections.
5. Indicate the location of records of catch basin and storm drain inlet inspections and the wet tons of materials collected during catch basin and storm drain inlet cleanings.
Records of all catch basin and storm drain inlet inspections and wet tons of material collected during catch basin and storm drain inlet cleaning are kept at the North Bergen Municipal Utilities Authority located at: 6200 Tonnelle Avenue, North Bergen, NJ 07047.



## SPPP Form 9 – Storm Drain Inlet Retrofitting

All records must be available upon request by NJDEP.

<p>1. Describe the procedure for ensuring that municipally owned storm drain inlets are retrofitted.</p>
<p>Inlets are retrofitted as needed during paving projects.</p>
<p>2. Describe the inspection process to verify that appropriate retrofits are completed on municipally owned storm drain inlets.</p>
<p>Retrofitting inlets is included with paving projects. The municipal engineer inspectors ensure that the proper inlet head is installed.</p>
<p>3. Describe the procedure for ensuring that privately owned storm drain inlets are retrofitted.</p>
<p>All existing storm drain inlets which are in direct contact with repaving, repairing (excluding repair of individual potholes), reconstruction, resurfacing (including topcoating or chip sealing with asphalt emulsion or a thin base of hot bitumen), or alterations of facilities on property not owned or operated by the municipality (except individual single-family homes) shall be retrofitted to meet current NJDEP guidelines for the size of inlet casting and curb piece openings as required by the New Jersey Pollutant Discharge Elimination System permit (NJDES permit, rules at N.J.A.C. 7:14A). These projects shall be inspected to ensure that privately owned storm drain inlets are retrofitted. This shall be enforced by the Police Department, Foreman of the Department of Public Works, and the Code Enforcement Officer of the Township of North Bergen.</p>
<p>4. Describe the inspection process to verify that appropriate retrofits are completed on privately owned storm drain inlets.</p>
<p>Inlets will be inspected by the building inspector to verify that they are in compliance with the "Design Standards for Storm Drain Inlets" set forth in the "Tier A Municipal Stormwater General Permit -- Attachment C".</p>

# SPPP Form 10 – Municipal Maintenance Yards and Other Ancillary Operations

All records must be available upon request by NJDEP.

*Complete separate forms for each municipal yard or ancillary operation location.*

Address of municipal yard or ancillary operation:

North Bergen Municipal Complex: 6100-6200 Tonnelle Avenue North Bergen, NJ 07047

List all materials and machinery located at this location that are exposed to stormwater which could be a source of pollutant in a stormwater discharge:

Raw materials – Stone

Intermediate products – Road Grits (placed in containers and hauled offsite)

Final products –

Waste materials –

By-products –

Machinery – Complete List Attached

Fuel –

Lubricants –

Solvents –

Detergents related to municipal maintenance yard or ancillary operations –

Soap, detergents, cleaning products

Other –

# SPPP Form 10 – Municipal Maintenance Yards and Other Ancillary Operations

All records must be available upon request by NJDEP.

For each category below, describe the best management practices in place to ensure compliance with all requirements in permit Attachment E. If the activity in the category is not applicable for this location, indicate where it occurs.

Indicate the location of inspection logs and tracking forms associated with this municipal yard or ancillary operation, including documentation of conditions requiring attention and remedial actions that have been taken or have been planned.

## 1. Fueling Operations

The North Bergen DPW utilizes two (2) underground storage tanks (UST) for its fueling operations and are not exposed to stormwater. The entire fueling station (including pumps) is housed under an awning with a concrete floor. Gasoline, diesel fuel and motor oil/hydraulic oil deliveries to the DPW are by common carrier or via tank truck. All fueling operations are performed in accordance with the Best Management Practices in Attachment E. Drip pans are placed under hoses and pipe connections, inlets are blocked, and safety operations are posted during bulk fuel transfer. Equipment is immediately replaced or repaired when leaking or disrepair is discovered.

## 2. Vehicle Maintenance

All vehicle maintenance is performed in accordance with the Best Management Practices in Attachment E. Equipment is operated and maintained to prevent exposure of pollutants to stormwater. Whenever possible, all vehicle maintenance is performed inside of the garage located on-site. For projects that must be conducted outdoors, and last more than one day, portable tents or covers shall be placed over the equipment being serviced when not being worked on and drip pans shall be used at all times. Work will be performed in areas away from storm drains or inlets will be blocked when maintenance is being conducted outdoors.

## 3. On-Site Equipment and Vehicle Washing

*See permit attachment E for certification and log forms for Underground Storage Tanks.*

All equipment and vehicle washing is performed upon a paved surface on-site. The wash wastewater passes through a screened catch basin, which is cleaned out once a week and/or prior to rain events, before being processed through an oil water separator attached to the sanitary sewer. Whenever possible trucks are swept out before being washed. Therefore, equipment and vehicle washing is performed in accordance with the Best Management Practices in Attachment E.

## 4. Discharge of Stormwater from Secondary Containment

Non-applicable. No on-site AST's are within secondary containment exposed to stormwater.

# SPPP Form 10 – Municipal Maintenance Yards and Other Ancillary Operations

All records must be available upon request by NJDEP.

## 5. Salt and De-Icing Material Storage and Handling

All salt and de-icing material is stored and handled in accordance with the Best Management Practices in Attachment E. All salt and deicing material is stored inside of the salt dome and two (2) liquid calcium tanks located on-site. Inspections and maintenance of the salt shed, liquid calcium tanks, and surrounding area are performed regularly; tracking of material from loading and unloading operations is minimized; and the area is swept regularly, in the event of tracked material and after loading and unloading is complete all loose material is collected placed back into the salt shed for reuse.

## 6. Aggregate Material and Construction Debris Storage

All aggregate material and construction debris are stockpiled upon an onsite concrete pad which is elevated above the stormwater inlets and contained. The stockpile is located outside of any regulated area (including but not limited to coastal areas, wetlands, and floodplains) and is covered with tarps to prevent exposure to stormwater in accordance with the Best Management Practices in Attachment E. The material is removed and either recycled or carted off-site to a waste or recycling facility.

## 7. Street Sweepings, Catch Basin Clean Out and Other Material Storage

All storage of street sweeping, catch basin clean out and other material is performed in accordance with the Best Management Practices in Attachment E. These materials are piled on a pad and covered with a tarp and are weighed and removed for disposal within six (6) months of placement.

## 8. Yard Trimmings and Wood Waste Management Sites

All yard trimmings and wood waste is stored on a concrete pad at the North Bergen DPW yard. This material is managed in accordance with the Best Management Practices in Attachment E. The Township also maintains perimeter controls, protects inlets from siltation, removes trash and contains it within leak-proof containers, and implements preventative tracking measures. The material is then processed through a tub grinder by a subcontractor before it is hauled off site.

## 9. Roadside Vegetation Management

The Township of North Bergen maintains all roadside vegetation by trimming. All areas of uncurbed roadside vegetation are monitored for erosion problems from vehicular traffic. The Township of North Bergen does not utilize herbicides for roadside vegetation management so as to prevent it from being washed by stormwater into the waters of the State and to prevent erosion caused by devegetation.

Monthly inspections are performed to ensure that the Best Management Practices in Attachment E of the Permit are being executed for Roadside Vegetation Management. Associated records and inspection logs are kept at the North Bergen Municipal Utilities Authority located at: 6200 Tonnelle Avenue, North Bergen, NJ 07047.

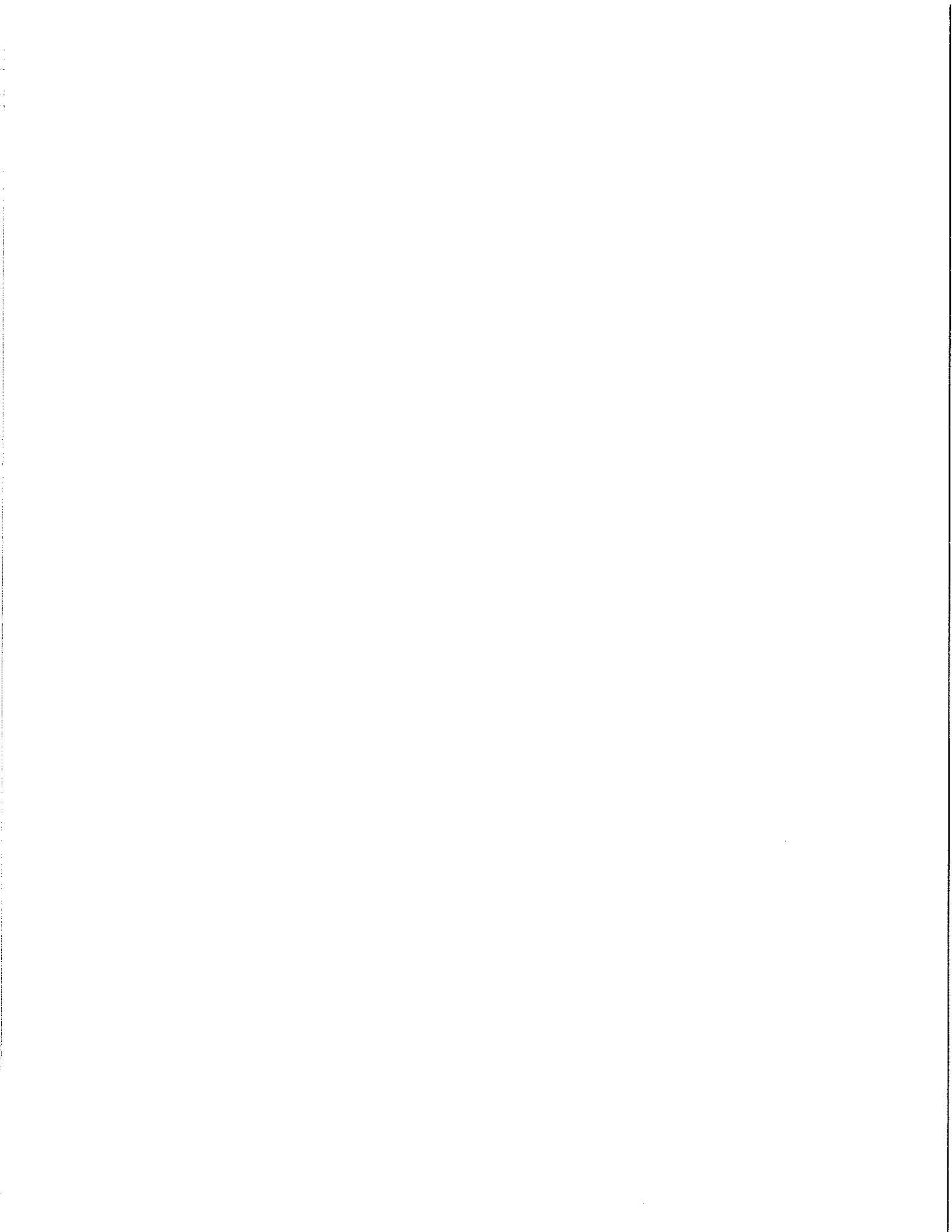


23	FORD CROWN VIC	2010	SCHOOL RESOURCES	158 87 MG	PD	2FABP7BV 8AX11124 7	Jun-22
	PACKETALK CORP	2019	EYE IN THE SKY-MOBILE SURVEILLANCE TRAILER	TV W- 70Y		1P9PT1311 KL826007	
	<u>PACKETALK</u> <u>CORP</u>	<u>2019</u>	<u>mobile surveillance trailer</u>	<u>331</u> <u>12</u> <u>MG</u>	<u>PD</u>	<u>1P9PT1313</u> <u>KL826042</u>	
26	FORD CROWN VIC	2008	PATROL BLACK & WHITE	MG 758 00	PD	2FAFP71V4 8X132934	Feb-23
31	FORD CROWN VIC	2008	PATROL BLACK & WHITE	MG 758 01	PD	2FAFP71V2 8X132933	Feb-23
32	FORD CROWN VIC	2009	PATROL BLACK & WHITE	MG 813 59	PD	2FAHP71V 39X111664	Feb-21
36	FORD	2009	PATROL BLACK AND WHITE	MG 845 19	PD	2FAHP71V X9X124539	Oct-21
	FORD	2009	CHIEF'S OFFICE	YHT 57A	PD	2FAHP71V 89X129478	Jun-22
41	FORD CROWN VIC	2011	PATROL BLACK AND WHITE	MG 904 01	PD	2FABP7BV 4BX185296	Sep-20
42	FORD CROWN VIC	2009	PATROL BLACK & WHITE (OLD T-1)	MG 813 57	PD	2FAHP71V 19X111663	Feb-21
43	FORD CROWN VIC	2011	PATROL BLACK AND WHITE	MG 904 12	PD	2FABP7BV 0BX185294	Oct-20
44	FORD CROWN VIC	2011	PATROL BLACK AND WHITE	MG 904 15	PD	2FABP7BV 1BX185319	Oct-20
45	FORD CROWN VIC	2011	PATROL BLACK AND WHITE	MG 904 00	PD	2FABP7BV XBX185318	Sep-20

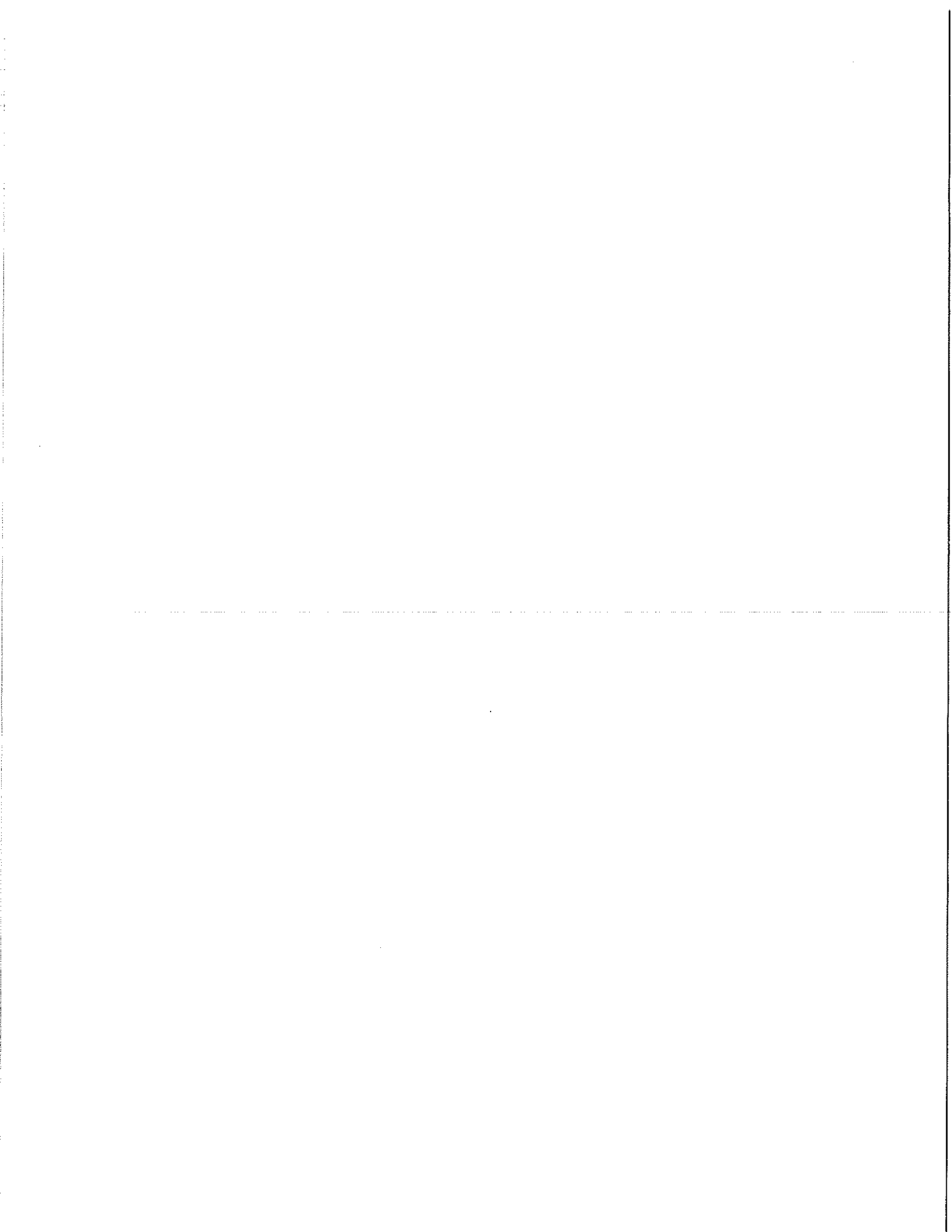
46	FORD CROWN VIC	2009	PATROL BLACK & WHITE	MG 845 20	PD	2FAHP71V 99X124502	Oct-21
47	FORD CROWN VIC	2009	PATROL BLACK & WHITE	MG 813 58	PD	2FAHP71V 09X111668	Feb-21
S-1	CHEV TAHOE	2019	SUPERVISOR	330 68 MG	PD	1GNSKDEC 3KR393463	Oct-22
S-2	CHEV TAHOE	2019	SUPERVISOR	330 86 MG	PD	1GNSKDEC 4KR389373	May-20
S-3	FORD EXPLORER	2014	SUPERVISOR	MG 988 18	PD	1FM5K8B8 6EGC26314	May-20
			ADMINISTRATIVE				
50	DODGE 4X 4	2007	Schubert	MG 716 96	PW	1D8HB38P 57F520221	Nov-21
51	FORD	2005		SNS 65F	PD	2FAHP71W 15X128417	Jun-20
60	FORD	2006	PRISONER VAN	UNX 56J	PD	1FBSS31L1 6DA23743	<u>Mar-21</u>
ESU- 1	ODDYSSEY	2007	MOBILE COMMAND UNIT	MG 744 77	PD	1FDAF57P 87EB11472	Mar-22
ESU	TRAILER	2009	HAULMARK TRAILER	TDS 11G	PR	16HPB162 49P072693	Feb-21
(LD)	WELLS FARGO	2004	LEAD TRAILER	217 33 MG	PD	1WC2OOE 114110532 9	Nov-22
			DETECTIVES				
59	FORD	2006	CHIEF'S OFFICE (OLD UMW59A)	217 90 MG	Pd	2FAHP74V 56X130689	Mar-23
62	FORD CROWN VIC - BLK	2003	DETECTIVE BUREAU JEVENILE	SVH 14V	PD	2FAHP74W X3X139098	Aug-20
63	FORD CROWN VIC - BLK	2003	DETECTIVE - JUVENILE	SVH 17V	PD	2FAHP74W 13X139099	Aug-20
64	MERCURY	2009	DETECTIVE - MARRERO/ JUVENILE	ZCR 15D	PD	2MEHM75 V39X62529 7	Sep-20

65	CHEVY	2012	TAHOE (OLD G86BPF/ 24072MG)(avella old truck)	A74 JKB	PR	1GNSK2E0 5CR155285	Nov-20
67	GMC	1999	NARCOTICS	WZ X96 Y	PD	1GKDY13 WXX25262 17	Jun-22
71	FORD 4X4	2006	NARCOTICS	UU R59 W	PD	1FMEU72E 76UB4084 6	Jun-20
72	FORD	2006	NARCOSTICS	S38 LPP	PD	1FMEU72E 96UB4084 7	Jun-20
74	FORD EXPLORER	2012	DET. BUREU (OLD J. ROT.)MG91981	S68 KSD	0	1FMHK8B8 3CGA8503 4	Jan-21
76	HONDA CIVIC	1998	DETECTIVE - PROSECUTOR	YS W9 1Z	PD	2HGEJ6674 WH628496	Jun-22
80	JEEP CHEROKEE	2010	LAREDO WHITE DETECTIVE	YPT 54H	PD	1J4PR4GK3 AC124860	Jun-22
81	JEEP CHEROKEE	2010	LAREDO WHITE DT	YNY 88A	PD	1J4PR4GK5 AC124858	INDEF.
82	JEEP CHEROKEE	2010	LAREDO WHITE DT	YSC 89X	PD	1J4PR4GK7 AC124859	Jun-22
83	JEEP CHEROKEE	2010	NARCOTICS LT. HOLSTEIN	YRC 62L	PD	1J4PR4GK4 AC124852	Jun-22
84	CHEVY	2012	JUVENILE VEHICLE	E76 AZF	PD	1GNSK2E0 1CR191684	Jun-22
85	CHEVY	2012	BLACK TAHOE DC (OLD)FASILIS	C69 AYH	PD	1GNSK2E0 8CR194971	Jun-22
86	FORD	.	DETECTIVE	VFP 47R	PW	2FAFP74V9 7X117517	Nov-20
87	CHEVY	2017	CHIEF DOWD (24026MG)	V70 GFX	PD	1GNSKFKC 3HR31877 2	Jun-22
88	CHEVY	2017	TAHOE (24025MG)	L95 GFX	PD	1GNSKFKC 8HR31531 7	Jun-22
90	CHEVY	2020	CHIEF FASILLIS		PD	1GNSKDKC 4LR256120	
42	FORD	2011	TRAFFIC CROWN VIC BLACK & WHITE	MG 903 98	PD	2FABP7BV 5BX185307	Sep-20
			DETAIL UNITS				
			TRAFFIC				

S-1	FORD UTILITY	2017	BLACK AND WHITE TRAFFIC (OLD S-1)	217 26 MG	PD	1FM5K8AR 6HGA0428 7	Oct-22
T-2	FORD	2008	INTERNAL AFFAIRS	YDN 23V	PD	2FAHP71V 28X180313	Jul-22
T-3	CHEVY SILVERADO 4WD	2016	BLACK & WHITE PICKUP	216 61 MG	PD	3GCUKNEC 2GG31661 5	Jul-22
T-5	CHEVY TAHOE	2014	BLACK TRAFFIC	MG 988 25	PD	1GNSK2EO XER187460	May-20
T-6	FORD CROWN VIC	2011	PATROL BLACK & WHITE	MG 903 99	PD	2FABP7BV 3BX185306	Sep-20
T-8	CHEVY	2012	TAHOE (Robert Farley)	L48 CLK		1GNSK2EO 9CR189228	Nov-20
			<u>MOTORCYCLES</u>				
MC-1	HARLEY	2005	PATROL	859 0U	PD	1HD1FMW 165Y60609 5	Oct-22
MC-2	HARLEY	2005	PATROL	858 8U	PD	1HD1FMW 165Y60593 4	Oct-22
MC-3	HARLEY	2005	PATROL	858 9U	PD	1HD1FMW 155Y60625 1	Oct-22
MC-4	HARLEY	2010	PATROL	1CZ M6	PD	1HD1FMM 10AB6120 99	Oct-21







## SPPP Form 11 – Employee Training

All records must be available upon request by NJDEP.

**A. Municipal Employee Training:** Stormwater Program Coordinator (SPC) must ensure appropriate staff receive training on topics in the chart below as required due to job duties assigned within three months of commencement of duties and again on the frequency below. Indicate the location of associated training sign in sheets, dates, and agendas or description for each topic.

Topic	Frequency	Title of trainer or office to conduct training
1. Maintenance Yard Operations (including Ancillary Operations)	Every year	Foreman of Department of Public Works
2. Stormwater Facility Maintenance	Every year	Foreman of Department of Public Works
3. SPPP Training & Recordkeeping	Every year	Foreman of Department of Public Works
4. Yard Waste Collection Program	Every 2 years	Foreman of Department of Public Works
5. Street Sweeping	Every 2 years	Foreman of Department of Public Works
6. Illicit Connection Elimination and Outfall Pipe Mapping	Every 2 years	Foreman of Department of Public Works
7. Outfall Pipe Stream Scouring Detection and Control	Every 2 years	Foreman of Department of Public Works
8. Waste Disposal Education	Every 2 years	Foreman of Department of Public Works
9. Municipal Ordinances	Every 2 years	Foreman of Department of Public Works
10. Construction Activity/Post-Construction Stormwater Management in New Development and Redevelopment	Every 2 years	Foreman of Department of Public Works

**B. Municipal Board and Governing Body Members Training:** Required for individuals who review and approve applications for development and redevelopment projects in the municipality. This includes members of the planning and zoning boards, town council, and anyone else who votes on such projects. Training is in the form of online videos, posted at [www.nj.gov/dep/stormwater/training.htm](http://www.nj.gov/dep/stormwater/training.htm).

Within 6 months of commencing duties, watch *Asking the Right Questions in Stormwater Review Training Tool*. Once per term thereafter, watch at least one of the online DEP videos in the series available under Post-Construction Stormwater Management. Indicate the location of records documenting the names, video titles, and dates completed for each board and governing body member.

**C. Stormwater Management Design Reviewer Training:** All design engineers, municipal engineers, and others who review the stormwater management design for development and redevelopment projects on behalf of the municipality must attend the first available class upon assignment as a reviewer and every five years thereafter. The course is a free, two-day training conducted by DEP staff. Training dates and locations are posted at [www.nj.gov/dep/stormwater/training.htm](http://www.nj.gov/dep/stormwater/training.htm). Indicate the location of the DEP certificate of completion for each reviewer.

## Tier A Stormwater Training

Trainer:

Location:

Class Name:

Trainer:

**Name**

**Date Completed**

**Signature**

Additional Notes/Topics Covered:

## SPPP Form 12 – Outfall Pipes

All records must be available upon request by NJDEP.

1. **Mapping:** Attach an image or provide a link to the most current outfall pipe map. Maps shall be updated at the end of each calendar year.

*Note that ALL maps must be electronic by 21 Dec 2020 via the DEP's designated electronic submission service. For details, see [http://www.nj.gov/dep/dwq/msrp\\_map\\_aid.htm](http://www.nj.gov/dep/dwq/msrp_map_aid.htm).*

2. **Inspections:** Describe the outfall pipe inspection schedule and indicate the location of records of dates, locations, and findings.

The Township conducted an initial physical inspection of all outfall pipes during the mapping process. All outfalls are inspected at least once a year during dry weather conditions as defined within "Chapter 3.6: MS4 Outfall Pipe Mapping and Illicit Discharge and Scour Detection and Control" of the "Tier A Municipal Stormwater Guidance Document". 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 require NJDEP permits will be performed first.

Records of inspections including dates, locations, and findings are kept at the North Bergen Municipal Utilities Authority located at: 6200 Tonnelle Avenue, North Bergen, NJ 07047.

3. **Stream Scouring:** Describe the program in place to detect, investigate and control localized stream scouring from stormwater outfall pipes. Indicate the location of records related to cases of localized stream scouring. Such records must include the contributing source(s) of stormwater, recommended corrective action, and a prioritized list and schedule to remediate scouring cases.

When the Township is performing the outfall condition assessment all outfall pipes are inspected 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 require NJDEP permits will be performed first.

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

Records of localized stream scour including contributing source(s) of stormwater, recommended corrective action, and prioritized list and schedule to remediate scouring cases are kept at the North Bergen Municipal Utilities Authority located at: 6200 Tonnelle Avenue, North Bergen, NJ 07047.

## SPPP Form 12 – Outfall Pipes

All records must be available upon request by NJDEP.

4. **Illicit Discharges:** Describe the program in place for conducting visual dry weather inspections of municipally owned or operated outfall pipes. Record cases of illicit discharges using the DEP’s Illicit Connection Inspection Report Form ([www.nj.gov/dep/dwq/tier\\_a\\_forms.htm](http://www.nj.gov/dep/dwq/tier_a_forms.htm)) and indicate the location of these forms and related illicit discharge records.

*Note that Illicit Connection Inspection Report Forms shall be included in the SPPP and submitted to DEP with the annual report.*

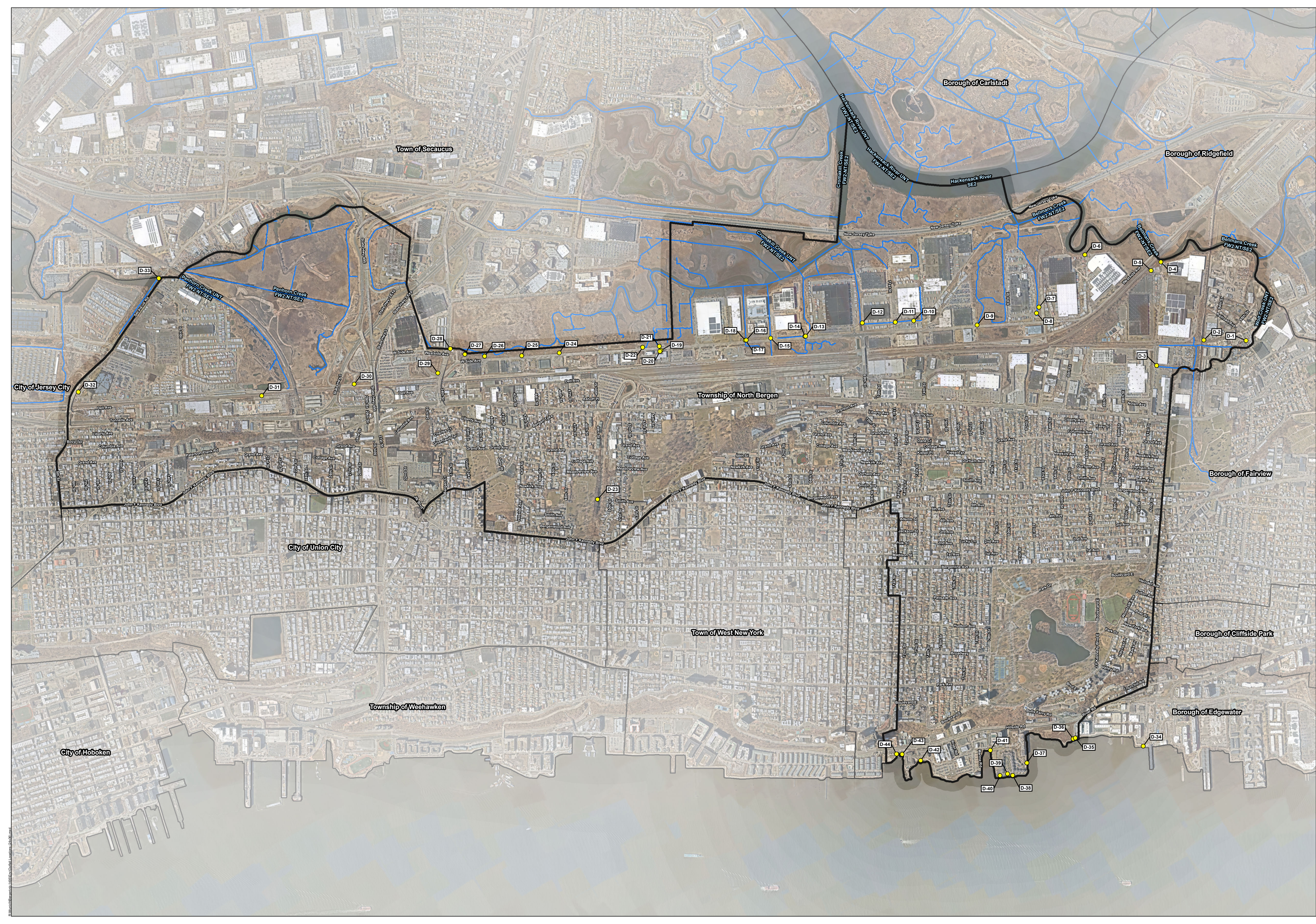
The Township conducted an initial physical inspection of all outfall pipes during the mapping process. During this process and as a part of the continued inspection of outfalls the Borough implemented and enforces an ongoing Illicit Discharge Detection and Elimination Program as follows:

- Conducting visual dry weather inspection of all outfall pipes owned and operated by the municipality;
- Investigating the source if evidence of illicit discharge is found;
- Eliminating non-stormwater discharges that are traced to their source and found to result from illicit connections;
- Documenting investigations and actions taken;
- Inspecting any newly identified outfall pipes for illicit discharges;
- Investigating dry weather flows discovered during routine inspection and maintenance; and
- Investigating all complaints and reports of illicit discharges within three months of receipt.

Outfall pipes that are found to have a dry weather flow or evidence of an intermittent non-stormwater flow will be rechecked to locate the illicit connection. If the Township is able to locate the illicit connection and the connection is within the Township of North Bergen, we will cite the responsible party for being in violation of our Illicit Connection Ordinance and we will have the connection eliminated immediately. If, after the appropriate amount of investigation, the Township is 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 Township of North Bergen will report the illicit connection to the Department.

Illicit connections can be reported to the Township of North Bergen Police Department.



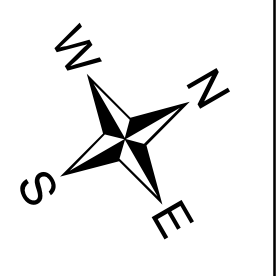


Notes:  
 NearMap Image Date: March 5, 2020  
 Municipal Owned Outfall  
 County Owned Outfall  
 Private Owned Outfall

### Stormwater Outfall Locations

Township of North Bergen  
 Hudson County  
 New Jersey

**BOSWELL ENGINEERING**  
 ENGINEERS - SURVEYORS - PLANNERS - SCIENTISTS  
 330 Park Ave. 5th Floor, Hoboken, NJ 07030  
 Tel: 201-941-0770 Fax: 201-941-1757



Scale  
 1 in = 800 ft

Job No. NB-1495

March 2020

Last Edit: 3/31/2020

Drawn By: JMW

Check By: FJR

Sheet 1 of 1



CLIENT NAME:  
Township of North Bergen

SITE LOCATION:  
North Bergen, New Jersey

PROJECT NAME:  
Stormwater Outfall Survey

PROJECT No.:  
NB-1495

**Photo No. 1.**

**Description:**

Discharge ID:  
D-1

Location:  
Railroad Ave

Watercourse:  
Wolf Creek Tributary

Size:  
Unknown

Condition:  
Unknown

Scour:  
Unknown

Illicit Connection:  
Unknown

Repair:  
Locate Discharge Point  
and Reevaluate

Owner: *Municipal*



**Photo No. 2.**

**Description:**

Discharge ID:  
D-2

Location:  
9300 Railroad Ave

Watercourse:  
Wolf Creek Tributary

Size:  
24" PVC

Condition:  
Excellent

Scour:  
No

Illicit Connection:  
No

Repair:  
No

Owner: *Private*





CLIENT NAME:  
Township of North Bergen

SITE LOCATION:  
North Bergen, New Jersey

PROJECT NAME:  
Stormwater Outfall Survey

PROJECT No.:  
NB-1495

**Photo No. 3.**

**Description:**

Discharge ID:  
D-3

Location:  
2100 91<sup>st</sup> St

Watercourse:  
Wolf Creek Tributary

Size:  
24" RCP

Condition:  
Unknown

Scour:  
No

Illicit Connection:  
No

Repair:  
Locate Discharge Point  
and Reevaluate  
**NJDEP Permit Required**

Owner: *Municipal*



**Photo No. 4.**

**Description:**

Discharge ID:  
D-4

Location:  
2220 91<sup>st</sup> St

Watercourse:  
Bellmans Creek

Size:  
24" RCP

Condition:  
Fair

Scour:  
No

Illicit Connection:  
No

Repair:  
Install Headwall and  
Conduit Outlet Protection  
**NJDEP Permit Required**

Owner: *Private*





**CLIENT NAME:**  
Township of North Bergen

**SITE LOCATION:**  
North Bergen, New Jersey

**PROJECT NAME:**  
Stormwater Outfall Survey

**PROJECT No.:**  
NB-1495

**Photo No. 5.**

**Description:**

Discharge ID:  
D-5

Location:  
2101 91<sup>st</sup> St

Watercourse:  
Bellmans Creek

Size:  
24" RCP

Condition:  
Unknown

Scour:  
Unknown

Illicit Connection:  
Unknown

Repair:  
Clear Vegetation, Locate  
Discharge Point and  
Reevaluate

Owner: *Municipal*



**Photo No. 6.**

**Description:**

Discharge ID:  
D-6

Location:  
8501 West Side Ave

Watercourse:  
Bellmans Creek

Size:  
36" RCP

Condition:  
Unknown

Scour:  
Unknown

Illicit Connection:  
Unknown

Repair:  
Locate Discharge Point  
and Reevaluate

Owner: *Municipal*





CLIENT NAME:  
Township of North Bergen

SITE LOCATION:  
North Bergen, New Jersey

PROJECT NAME:  
Stormwater Outfall Survey

PROJECT No.:  
NB-1495

**Photo No. 7.**

**Description:**

Discharge ID:  
D-7

Location:  
2500 83<sup>rd</sup> St

Watercourse:  
Bellmans Creek Tributary

Size:  
Twin 36" RCP

Condition:  
Excellent

Scour:  
No

Illicit Connection:  
No

Repair:  
No

Owner: *Municipal*



**Photo No. 8.**

**Description:**

Discharge ID:  
D-8

Location:  
2500 83<sup>rd</sup> St

Watercourse:  
Bellmans Creek Tributary

Size:  
Two 6" PVC

Condition:  
Good

Scour:  
Yes

Illicit Connection:  
No

Repair:  
Install Headwall and  
Conduit Outlet Protection  
**NJDEP Permit Required**

Owner: *Private*





CLIENT NAME:  
Township of North Bergen

SITE LOCATION:  
North Bergen, New Jersey

PROJECT NAME:  
Stormwater Outfall Survey

PROJECT No.:  
NB-1495

**Photo No. 9.**

**Description:**  
Discharge ID:  
D-9  
Location:  
8001 West Side Ave  
Watercourse:  
Bellmans Creek  
Size:  
36" CMP  
Condition:  
Unknown  
Scour:  
Unknown  
Illicit Connection:  
Unknown  
Repair:  
Clear Vegetation, Locate Discharge Point and Reevaluate  
Owner: *Municipal*



**Photo No. 10.**

**Description:**  
Discharge ID:  
D-10  
Location:  
7311 West Side Ave  
Watercourse:  
Cromakill Creek Tributary  
Size:  
72" CMP  
Condition:  
Unknown  
Scour:  
Unknown  
Illicit Connection:  
No  
Repair:  
Locate Discharge Point and Reevaluate, Currently Being Cleaned  
Owner: *Municipal*





**CLIENT NAME:**  
Township of North Bergen

**SITE LOCATION:**  
North Bergen, New Jersey

**PROJECT NAME:**  
Stormwater Outfall Survey

**PROJECT No.:**  
NB-1495

**Photo No. 11.**

**Description:**

Discharge ID:  
D-11

Location:  
7311 West Side Ave

Watercourse:  
Cromakill Creek Tributary

Size:  
24" RCP

Condition:  
Unknown

Scour:  
Unknown

Illicit Connection:  
No

Repair:  
Locate Discharge Point  
and Reevaluate

Owner: *Municipal*



**Photo No. 12.**

**Description:**

Discharge ID:  
D-12

Location:  
2400 69th St

Watercourse:  
Cromakill Creek Tributary

Size:  
24" RCP

Condition:  
Good

Scour:  
No

Illicit Connection:  
No

Repair:  
No

Owner: *Municipal*





CLIENT NAME:  
Township of North Bergen

SITE LOCATION:  
North Bergen, New Jersey

PROJECT NAME:  
Stormwater Outfall Survey

PROJECT No.:  
NB-1495

**Photo No. 13.**

**Description:**

Discharge ID:

D-13

Location:

5903 West Side Ave

Watercourse:

Cromakill Creek Tributary

Size:

42" RCP

Condition:

Unknown

Scour:

Unknown

Illicit Connection:

Unknown

Repair:

Clear Vegetation, Locate Discharge Point and Reevaluate

Owner: *Municipal*



**Photo No. 14.**

**Description:**

Discharge ID:

D-14

Location:

5903 West Side Ave

Watercourse:

Cromakill Creek Tributary

Size:

42" RCP

Condition:

Unknown

Scour:

Unknown

Illicit Connection:

Unknown

Repair:

Clear Vegetation, Locate Discharge Point and Reevaluate

Owner: *Municipal*





CLIENT NAME:  
Township of North Bergen

SITE LOCATION:  
North Bergen, New Jersey

PROJECT NAME:  
Stormwater Outfall Survey

PROJECT No.:  
NB-1495

**Photo No. 15.**

**Description:**  
Discharge ID:  
D-15  
Location:  
5851 West Side Ave  
Watercourse:  
Cromakill Creek Tributary  
Size:  
42" CMP  
Condition:  
Unknown  
Scour:  
Unknown  
Illicit Connection:  
Unknown  
Repair:  
Clear Vegetation, Locate Discharge Point and Reevaluate  
Owner: *Municipal*



**Photo No. 16.**

**Description:**  
Discharge ID:  
D-16  
Location:  
5801 West Side Ave  
Watercourse:  
Cromakill Creek Tributary  
Size:  
42" CMP  
Condition:  
Unknown  
Scour:  
Unknown  
Illicit Connection:  
No  
Repair:  
Clear Vegetation, Locate Discharge Point and Reevaluate  
Owner: *Municipal*





CLIENT NAME:  
Township of North Bergen

SITE LOCATION:  
North Bergen, New Jersey

PROJECT NAME:  
Stormwater Outfall Survey

PROJECT No.:  
NB-1495

**Photo No. 17.**

**Description:**

Discharge ID:  
D-17

Location:  
5801 West Side Ave

Watercourse:  
Cromakill Creek Tributary

Size:  
54" CMP

Condition:  
Good

Scour:  
No

Illicit Connection:  
No

Repair:  
No

Owner: *Municipal*



**Photo No. 18.**

**Description:**

Discharge ID:  
D-18

Location:  
5801 West Side Ave

Watercourse:  
Cromakill Creek Tributary

Size:  
42" CMP

Condition:  
Unknown

Scour:  
Unknown

Illicit Connection:  
Unknown

Repair:  
Clear Vegetation, Locate  
Discharge Point and  
Reevaluate

Owner: *Municipal*





CLIENT NAME:  
Township of North Bergen

SITE LOCATION:  
North Bergen, New Jersey

PROJECT NAME:  
Stormwater Outfall Survey

PROJECT No.:  
NB-1495

**Photo No. 19.**

**Description:**

Discharge ID:  
D-19

Location:  
5000 West Side Ave

Watercourse:  
Cromakill Creek Tributary

Size:  
24" CMP

Condition:  
Fair

Scour:  
No

Illicit Connection:  
No

Repair:  
Install Headwall  
**NJDEP Permit Required**

Owner: *Municipal*



**Photo No. 20.**

**Description:**

Discharge ID:  
D-20

Location:  
5000 West Side Ave

Watercourse:  
Cromakill Creek Tributary

Size:  
Unknown

Condition:  
Unknown

Scour:  
Yes

Illicit Connection:  
Unknown

Repair:  
Locate Pipe Opening and  
Reevaluate

Owner: *Municipal*





**CLIENT NAME:**  
Township of North Bergen

**SITE LOCATION:**  
North Bergen, New Jersey

**PROJECT NAME:**  
Stormwater Outfall Survey

**PROJECT No.:**  
NB-1495

**Photo No. 21.**

**Description:**

Discharge ID:  
D-21

Location:  
West Side Ave

Watercourse:  
Cromakill Creek Tributary

Size:  
36" CMP

Condition:  
Good

Scour:  
No

Illicit Connection:  
No

Repair:  
Clear Vegetation to Expose  
Pipe Opening

Owner: *Municipal*



**Photo No. 22.**

**Description:**

Discharge ID:  
D-22

Location:  
West Side Ave

Watercourse:  
Cromakill Creek Tributary

Size:  
42" CMP

Condition:  
Unknown

Scour:  
Unknown

Illicit Connection:  
Unknown

Repair:  
Clear Vegetation, Locate  
Discharge Point and  
Reevaluate

Owner: *Municipal*





CLIENT NAME:  
Township of North Bergen

SITE LOCATION:  
North Bergen, New Jersey

PROJECT NAME:  
Stormwater Outfall Survey

PROJECT No.:  
NB-1495

**Photo No. 23.**

**Description:**

Discharge ID:  
D-23

Location:  
5013 Tonnelle Ave

Watercourse:  
Cromakill Creek Tributary

Size:  
Unknown

Condition:  
Unknown

Scour:  
Unknown

Illicit Connection:  
Unknown

Repair:  
Locate Pipe Opening and  
Reevaluate

Owner: *Municipal*



**Photo No. 24.**

**Description:**

Discharge ID:  
D-24

Location:  
4400 West Side Ave

Watercourse:  
Cromakill Creek Tributary

Size:  
42" RCP

Condition:  
Unknown

Scour:  
Unknown

Illicit Connection:  
No

Repair:  
Remove Sediment and  
Drain Water then  
Reevaluate

**NJDEP Permit Required**  
Owner: *Municipal*





CLIENT NAME:  
Township of North Bergen

SITE LOCATION:  
North Bergen, New Jersey

PROJECT NAME:  
Stormwater Outfall Survey

PROJECT No.:  
NB-1495

**Photo No. 25.**

**Description:**  
Discharge ID:  
D-25  
Location:  
43<sup>rd</sup> and West Side Ave  
Watercourse:  
Cromakill Creek  
Size:  
32" CMP  
Condition:  
Unknown  
Scour:  
Unknown  
Illicit Connection:  
Unknown  
Repair:  
Locate Pipe Opening and  
Reevaluate  
Owner: *Municipal*



**Photo No. 26.**

**Description:**  
Discharge ID:  
D-26  
Location:  
4000 West Side Ave  
Watercourse:  
Cromakill Creek  
Size:  
42" RCP  
Condition:  
Unknown  
Scour:  
Unknown  
Illicit Connection:  
No  
Repair:  
Remove Sediment and  
Drain Water then  
Reevaluate  
**NJDEP Permit Required**  
Owner: *Municipal*





CLIENT NAME:  
Township of North Bergen

SITE LOCATION:  
North Bergen, New Jersey

PROJECT NAME:  
Stormwater Outfall Survey

PROJECT No.:  
NB-1495

**Photo No. 27.**

**Description:**  
Discharge ID:  
D-27  
Location:  
3701 West Side Ave  
Watercourse:  
Cromakill Creek  
Size:  
54" RCP  
Condition:  
Unknown  
Scour:  
Unknown  
Illicit Connection:  
Unknown  
Repair:  
Clear Vegetation, Locate Discharge Point and Reevaluate  
Owner: *Municipal*



**Photo No. 28.**

**Description:**  
Discharge ID:  
D-28  
Location:  
3701 West Side Ave  
Watercourse:  
Cromakill Creek  
Size:  
42" RCP  
Condition:  
Good  
Scour:  
No  
Illicit Connection:  
No  
Repair:  
No  
Owner: *County*





**CLIENT NAME:**  
Township of North Bergen

**SITE LOCATION:**  
North Bergen, New Jersey

**PROJECT NAME:**  
Stormwater Outfall Survey

**PROJECT No.:**  
NB-1495

**Photo No. 29.**

**Description:**

Discharge ID:  
D-29

Location:  
West Side Ave

Watercourse:  
Cromakill Creek

Size:  
24" RCP

Condition:  
Unknown

Scour:  
Unknown

Illicit Connection:  
Unknown

Repair:  
Clear Vegetation, Locate  
Pipe Opening and  
Reevaluate

Owner: *Municipal*



**Photo No. 30.**

**Description:**

Discharge ID:  
D-30

Location:  
Rt. 3 Service Road

Watercourse:  
Penhorn Creek Tributary

Size:  
36" RCP

Condition:  
Good

Scour:  
No

Illicit Connection:  
No

Repair:  
Expose Pipe Opening and  
Reevaluate

Owner: *State*





CLIENT NAME:  
Township of North Bergen

SITE LOCATION:  
North Bergen, New Jersey

PROJECT NAME:  
Stormwater Outfall Survey

PROJECT No.:  
NB-1495

**Photo No. 31.**

**Description:**

Discharge ID:  
D-31

Location:  
1801 Tonnelle Ave

Watercourse:  
Penhorn Creek Tributary

Size:  
36" RCP

Condition:  
Good

Scour:  
No

Illicit Connection:  
No

Repair:  
No

Owner: *State*



**Photo No. 32.**

**Description:**

Discharge ID:  
D-32

Location:  
2200 Secaucus Rd

Watercourse:  
Penhorn Creek Tributary

Size:  
42" RCP

Condition:  
Excellent

Scour:  
No

Illicit Connection:  
No

Repair:  
No

Owner: *Municipal*





CLIENT NAME:  
Township of North Bergen

SITE LOCATION:  
North Bergen, New Jersey

PROJECT NAME:  
Stormwater Outfall Survey

PROJECT No.:  
NB-1495

**Photo No. 33.**

**Description:**  
Discharge ID:  
D-33  
Location:  
2806 Secaucus Rd  
Watercourse:  
Penhorn Creek  
Size:  
24" RCP  
Condition:  
Excellent  
Scour:  
No  
Illicit Connection:  
No  
Repair:  
No

Owner: *Municipal*



**Photo No. 34.**

**Description:**  
Discharge ID:  
D-34  
Location:  
115 River Rd  
Watercourse:  
Hudson River  
Size:  
48" Iron  
Condition:  
Good  
Scour:  
No  
Illicit Connection:  
No  
Repair:  
No

Owner: *County*





CLIENT NAME:  
Township of North Bergen

SITE LOCATION:  
North Bergen, New Jersey

PROJECT NAME:  
Stormwater Outfall Survey

PROJECT No.:  
NB-1495

**Photo No. 35.**

**Description:**

Discharge ID:  
D-35

Location:  
8200 River Rd

Watercourse:  
Hudson River

Size:  
15" HDPE

Condition:  
Good

Scour:  
No

Illicit Connection:  
No

Repair:  
Remove Debris to Expose  
Pipe Opening and Flared  
End Section

Owner: *Private*



**Photo No. 36.**

**Description:**

Discharge ID:  
D-36

Location:  
8200 River Rd

Watercourse:  
Hudson River

Size:  
30" RCP

Condition:  
Excellent

Scour:  
No

Illicit Connection:  
No

Repair:  
Remove Sediment to  
Expose Pipe Opening  
**NJDEP Permit Required**

Owner: *Private*





CLIENT NAME:  
Township of North Bergen

SITE LOCATION:  
North Bergen, New Jersey

PROJECT NAME:  
Stormwater Outfall Survey

PROJECT No.:  
NB-1495

**Photo No. 37.**

**Description:**

Discharge ID:  
D-37

Location:  
8100 River Rd

Watercourse:  
Hudson River

Size:  
18" RCP

Condition:  
Excellent

Scour:  
No

Illicit Connection:  
No

Repair:  
No

Owner: *Private*



**Photo No. 38.**

**Description:**

Discharge ID:  
D-38

Location:  
River View Circle

Watercourse:  
Hudson River

Size:  
Unknown

Condition:  
Unknown

Scour:  
Unknown

Illicit Connection:  
Unknown

Repair:  
Locate Pipe and Reevaluate

Owner: *Private*





CLIENT NAME:  
Township of North Bergen

SITE LOCATION:  
North Bergen, New Jersey

PROJECT NAME:  
Stormwater Outfall Survey

PROJECT No.:  
NB-1495

**Photo No. 39.**

**Description:**

Discharge ID:  
D-39

Location:  
River View Circle

Watercourse:  
Hudson River

Size:  
Unknown

Condition:  
Unknown

Scour:  
Unknown

Illicit Connection:  
Unknown

Repair:  
Remove Sediment to  
Expose Pipe Opening  
**NJDEP Permit Required**

Owner: *Private*



**Photo No. 40.**

**Description:**

Discharge ID:  
D-40

Location:  
River View Circle

Watercourse:  
Hudson River

Size:  
36" RCP

Condition:  
Unknown

Scour:  
Unknown

Illicit Connection:  
Unknown

Repair:  
Locate Pipe and  
Reevaluate

Owner: *Municipal*





CLIENT NAME:  
Township of North Bergen

SITE LOCATION:  
North Bergen, New Jersey

PROJECT NAME:  
Stormwater Outfall Survey

PROJECT No.:  
NB-1495

**Photo No. 41.**

**Description:**

Discharge ID:  
D-41

Location:  
7912 River Rd

Watercourse:  
Hudson River

Size:  
36" RCP

Condition:  
Excellent

Scour:  
No

Illicit Connection:  
No

Repair:  
No

Owner: *County*



**Photo No. 42.**

**Description:**

Discharge ID:  
D-42

Location:  
7400 River Rd

Watercourse:  
Hudson River

Size:  
36" HDPE

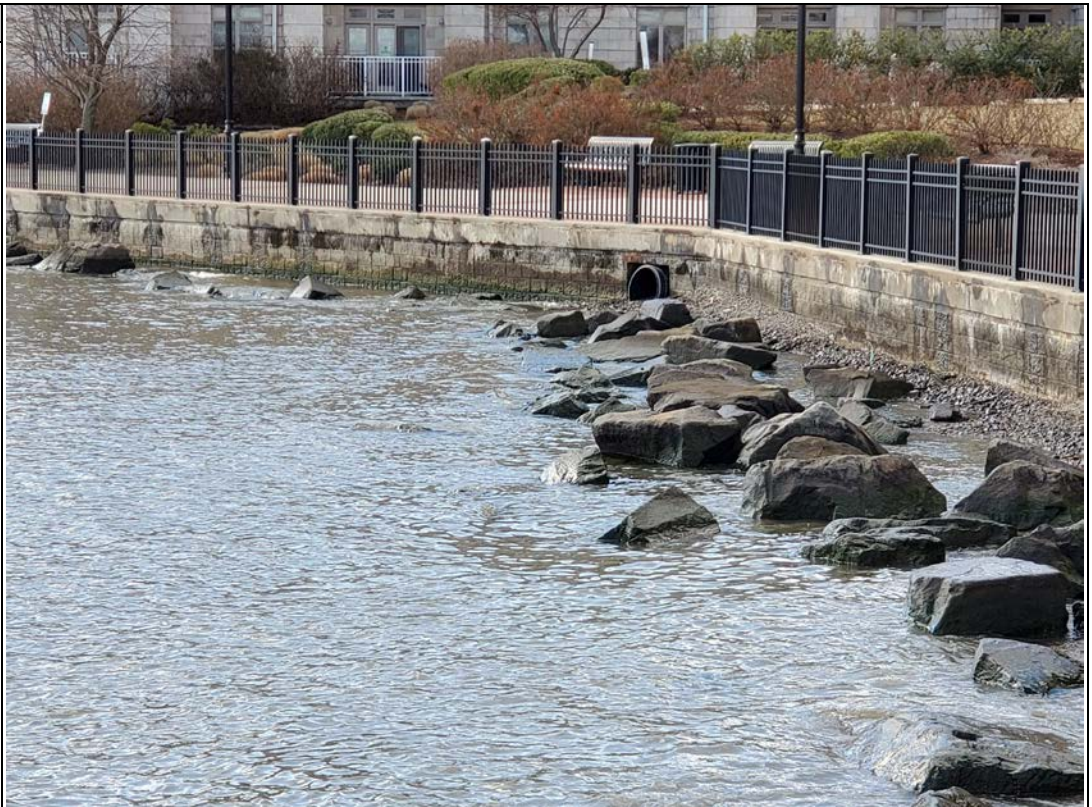
Condition:  
Excellent

Scour:  
No

Illicit Connection:  
No

Repair:  
No

Owner: *Private*





CLIENT NAME:  
Township of North Bergen

SITE LOCATION:  
North Bergen, New Jersey

PROJECT NAME:  
Stormwater Outfall Survey

PROJECT No.:  
NB-1495

**Photo No. 43.**

**Description:**

Discharge ID:  
D-43

Location:  
7200 River Rd

Watercourse:  
Hudson River

Size:  
36" RCP

Condition:  
Unknown

Scour:  
Unknown

Illicit Connection:  
No

Repair:  
No

Owner: County



**Photo No. 44.**

**Description:**

Discharge ID:  
D-44

Location:  
7200 River Rd

Watercourse:  
Hudson River

Size:  
18" RCP

Condition:  
Excellent

Scour:  
No

Illicit Connection:  
No

Repair:  
No

Owner: County





# Illicit Connection Inspection Report Form

Municipality  
Information

Municipality: \_\_\_\_\_ County \_\_\_\_\_

NJPDES # : \_\_\_\_\_ PI ID #: \_\_\_\_\_

Team Member: \_\_\_\_\_

Date \_\_\_\_\_ Effective Date of Permit Authorization (EDPA): \_\_\_\_\_

Outfall #: \_\_\_\_\_ Location: \_\_\_\_\_

Receiving Waterbody: \_\_\_\_\_

1. Is there a dry weather flow? Y () N ()
2. If "YES", what is the outfall flow estimate? \_\_\_\_\_ gpm  
(flow sample should be kept for further testing, and this form will need to be submitted with the Annual Report and Certification)
3. Are there any indications of an intermittent flow? Y () N ()
4. If you answered "NO" to BOTH questions #1 and #3, there is probably not an illicit connection and you can skip to question #7.  
(NOTE: This form **does not** need to be submitted to the Department, but should be kept with your SPPP.)

If you answered "YES" to either question, please continue on to question #5.

(NOTE: This form will need to be submitted to the Department with the Annual Report and Certification.)

## 5. PHYSICAL OBSERVATIONS:

- (a) ODOR: Oil
- (b) COLOR: Yellow
- (c) TURBIDITY: Cloudy
- (d) FLOATABLES: Petroleum
- (e) DEPOSITS/STAINS: Sediment
- (f) VEGETATION CONDITIONS: Excessive Growth
- (g) DAMAGE TO OUTFALL STRUCTURES:

IDENTIFY STRUCTURE: \_\_\_\_\_

DAMAGE: Metal Corrosion

## 6. ANALYSES OF OUTFALL FLOW SAMPLE:

\* field calibrate instruments in accordance with manufacturer's instructions prior to testing.

- (a) DETERGENTS: \_\_\_\_\_ mg/L

(if sample is greater than 0.06 mg/L, the sample is contaminated with detergents [which may be from sanitary wastewater or other sources]. Further testing is required and this outfall should be given the highest priority.)

(if the sample is not greater than 0.06 mg/L and it does not show physical characteristics of sanitary wastewater [e.g., odor, floatables, and/or color] it is unlikely that it is from sanitary wastewater sources, yet there may still be an illicit connection of industrial wastewater, rinse water, backwash or cooling water. Skip to question #6c.)

(b) **AMMONIA (as N) TO POTASSIUM RATIO:** 112

(if the Ammonia to Potassium Ratio is greater than 0.6:1, then it is likely that the pollutant is sanitary sewage)

(if the Ammonia to Potassium Ratio is less than or equal to 0.6:1, then the pollutant is from another wastewater source.)

(c) **FLUORIDE:** 123 mg/L

(if the fluoride levels are between 1.0 and 2.5 mg/L, then the flow is most likely from fluoride treated potable water.)

(if the sample tests below a detection limit of 0.1 mg/L for fluoride, it is likely to be from groundwater infiltration, springs or streams. In some cases, however, it is possible that the discharge could originate from an onsite well used for industrial cooling water, which will test non-detect for both detergents and fluoride. To differentiate between these cooling water discharges and groundwater infiltration, you will have to rely on temperature.)

(d) **TEMPERATURE:** \_\_\_\_\_ °F

(if the temperature of the sample is over 70°F, it is most likely cooling water)

(if the temperature of the sample is under 70°F, it is most likely from ground water infiltration)

7. Is there a suspected illicit connection? Y () N ()

If "**YES**", what is the suspected source? 12

If "**NO**", skip to signature block on the bottom of this form.

8. Has the investigation of the suspected illicit connection been completed?

Y () N ()

If "**YES**", proceed to question #9.

If "**NO**", skip to signature block on the bottom of this form.

9. Was the source of the illicit connection found? Y () N ()

If "**YES**", identify the source. asdfsdf \_\_\_\_\_

What plan of action will follow to eliminate the illicit connection?

Resolution:

If "**NO**", complete the Closeout Investigation Form and attach it to this Illicit Connection Inspection Report Form.

Inspector's Name: \_\_\_\_\_

Title: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

If there is a dry weather flow or evidence of an intermittent flow, be sure to include this form with your Annual Report and Certification.

If there is not a dry weather flow or evidence of an intermittent flow, this form should be retained with your SPPP.

# Closeout Investigation Form

Municipality  
Information

Municipality: \_\_\_\_\_ County \_\_\_\_\_

NJPDES # : **NJG** \_\_\_\_\_ PI ID #: \_\_\_\_\_

Team Member / Title: \_\_\_\_\_

Outfall #: \_\_\_\_\_ Location: \_\_\_\_\_

Receiving Waterbody: \_\_\_\_\_

Basis for Submittal:

- (  ) A non-stormwater discharge was found, but no source was located within six months.
- (  ) An intermittent non-stormwater discharge was observed, and three unsuccessful investigations were conducted to investigate the discharge while it was flowing.

Describe each phase of your investigation, including dates. Attach additional pages as necessary:

Inspector's Name: \_\_\_\_\_

Title: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

**Complete and attach this form to the appropriate Illicit Connection Inspection Report Form and submit with the Annual Report and Certification.**

## SPPP Form 13 – Stormwater Facilities Maintenance

All records must be available upon request by NJDEP.

1. Detail the program in place for the long-term cleaning, operation and maintenance of each stormwater facility owned or operated by the municipality.

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

One (1) Cistern  
One (1) Rain Garden

These stormwater facilities will be inspected annually to ensure 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.

2. Detail the program in place for ensuring the long-term cleaning, operation and maintenance of each stormwater facility NOT owned or operated by the municipality.

The Township is creating an inventory of all privately owned stormwater facilities. Letters will be sent requesting a description of the facility's stormwater system and site specific maintenance plans, logs and any past or present issues or concerns. Once the inventory is complete the Township will inspect the facilities on an annual basis. If the system is in need of cleaning or repair the owner will be notified.

3. Indicate the location(s) of the Stormwater Facilities Inspection and Maintenance Logs listing the type of stormwater facilities inspected, location information, inspection dates, inspector name(s), findings, preventative and corrective maintenance performed.

Records of all stormwater facilities inspections and maintenance logs are kept at the North Bergen Municipal Utilities Authority located at: 6200 Tonnelle Avenue, North Bergen, NJ 07047.

Note that maintenance activities must be reported in the annual report and records must be available upon request. DEP maintenance log templates are available at [http://www.nj.gov/dep/stormwater/maintenance\\_guidance.htm](http://www.nj.gov/dep/stormwater/maintenance_guidance.htm) (select specific logs from choices listed in the Field Manuals section).

*Additional Resources: The NJ Hydrologic Modeling Database contains information and maps of stormwater management basins. To view the database map, see <https://hydro.rutgers.edu>. To download data in an Excel format, see [https://hydro.rutgers.edu/public\\_data/](https://hydro.rutgers.edu/public_data/).*





## SPPP Form 14 – Total Maximum Daily Load Information

All records must be available upon request by NJDEP.

1. Using the Total Maximum Daily Load (TMDL) reports provided on [www.nj.gov/dep/dwq/msrp-tmdl-rh.htm](http://www.nj.gov/dep/dwq/msrp-tmdl-rh.htm), list adopted TMDLs for the municipality, parameters addressed, and the affected water bodies that impact the municipality's MS4 program.

The Township of North Bergen has adopted TMDLs for nickel within the Hackensack River.

Applicable Stream TMDL(s)

- Amendment to the Northeast Water Quality Management Plan to Establish a Total Maximum Daily Load for Nickel in the Hackensack River  
Nickel - 2000 : Hackensack R (Bellmans Ck to Ft Lee Rd)
- Amendment to the Northeast Water Quality Management Plan to Establish a Total Maximum Daily Load for Nickel in the Hackensack River  
Nickel - 2000 : Hackensack R (Rt 3 to Bellmans Ck)
- Amendment to the Northeast Water Quality Management Plan to Establish a Total Maximum Daily Load for Nickel in the Hackensack River  
Nickel - 2000 : Hackensack R (below Amtrak bridge)

Applicable Lake TMDL(s)

- None


Applicable Shellfish TMDL(s)

- None

2. Describe how the permittee uses TMDL information to prioritize stormwater facilities maintenance projects and to address specific sources of stormwater pollutants.

The Township of North Bergen does not currently implement management strategies for nickel.

NJ Home | Services A to Z | Departments/Agencies | FAQs   Governor Phil Murphy • Lt. Governor Sheila Oliver

 new jersey **njdep**  
department of environmental protection  
**DIVISION OF WATER QUALITY**

dephome | dwqhome

DWQ Topics  DWQ Programs & Units

## Bureau of Nonpoint Pollution Control

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

**Water Pollution Management Element**

**Bureau of Nonpoint Pollution Control**



**Industrial Stormwater Permitting Program**



**Municipal Stormwater Regulation Program**

- Tier A Municipalities
- Tier B Municipalities
- Public Complex
- Highway Agency
- Case Manager List
- Emergency Snow Removal and Disposal Policy
- De-Icing Storage Policy
- Cleanwater Multimedia
- Stormwater Training
- TMDL Lookup

**Companion Links**

- [www.cleanwaternj.org](http://www.cleanwaternj.org)
- [www.njstormwater.org](http://www.njstormwater.org)



**Onsite Wastewater Management Program**



**Discharge to Ground Water Permitting Program**



**Stormwater Management**



**Green Infrastructure in New Jersey**



**General Permits**



**Individual Permits**

**Municipality and County**

North Bergen Township  
Hudson County

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

**Applicable Stream TMDL(s)**

- Amendment to the Northeast Water Quality Management Plan to Establish a Total Maximum Daily Load for Nickel in the Hackensack River

Nickel - 2000 : Hackensack R (Bellmans Ck to Ft Lee Rd) : [View the TMDL Document](#)

- Amendment to the Northeast Water Quality Management Plan to Establish a Total Maximum Daily Load for Nickel in the Hackensack River

Nickel - 2000 : Hackensack R (Rt 3 to Bellmans Ck) : [View the TMDL Document](#)

- Amendment to the Northeast Water Quality Management Plan to Establish a Total Maximum Daily Load for Nickel in the Hackensack River

Nickel - 2000 : Hackensack R (below Amtrak bridge) : [View the TMDL Document](#)

**Applicable Lake TMDL(s)**

None

**Applicable Shellfish TMDL(s)**

None

DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DIVISION OF WATERSHED MANAGEMENT

ADOPTION OF THE AMENDMENT TO THE NORTHEAST WATER QUALITY  
MANAGEMENT PLAN TO ESTABLISH A TOTAL MAXIMUM DAILY LOAD FOR  
NICKEL IN THE HACKENSACK RIVER

Public Notice

Take notice that on April 27, 2000, pursuant to the provisions of the New Jersey Water Quality Planning Act, N.J.S.A. 58:11A-1 et seq., and the Statewide Water Quality Management Planning Rules (N.J.A.C. 7:15-3.4), an amendment to the Northeast Water Quality Management Plan was adopted by the Department of Environmental Protection (Department). This amendment established a Total Maximum Daily Load (TMDL) for Nickel in the Hackensack River.

Total Maximum Daily Loads (TMDLs) represent the assimilative or carrying capacity of the receiving water taking into consideration point and nonpoint sources of pollution, as well as surface water withdrawals. A TMDL is developed as a mechanism for identifying all the contributors to surface water quality impacts and setting goals for load reductions for specific pollutants as necessary to meet surface water quality standards. TMDLs are required, under Section 303(d) of the federal Clean Water Act, to be developed for waterbodies that cannot meet water quality standards after the implementation of technology-based effluent limitations. TMDLs may also be established to help maintain or improve water quality in waters that are not impaired. A TMDL establishes waste load allocations and load allocations for point and nonpoint sources, respectively.

Regulations concerning TMDLs are contained in USEPA's Water Quality Planning and Management Regulations (40 CFR 130).

Where TMDLs are required to address documented surface water quality impairment, such changes are to be made to the varying sources contributing to the water quality problem in order to reduce the total pollutant load received by the waterbody. Load reduction goals established through TMDLs are achieved through the issuance of wasteload allocations (WLAs) for points source discharges, load allocations (LAs) for nonpoint source discharges, and a margin of safety. Since nonpoint source pollution, by definition, does not come from discrete, identifiable sources, load allocations would consist of the identification of categories of nonpoint sources that contribute to the parameters of concern. The load allocation would also include specific load reduction measures for those categories of sources, to be implemented through best management practices (BMPs) including local ordinances for stormwater management and nonpoint source pollution control, headwaters protection practices, or other mechanisms for addressing the priority issues of concern.

USEPA established a TMDL for Nickel in the Hackensack River effective December 27, 1999 pursuant to 40 CFR 130.7 (d), see volume 65 of the Federal Register, page 2398, dated January 14, 2000. Under N.J.A.C. 7:15-7(l), TMDLs established by USEPA are considered part of the appropriate areawide WQM plan.

Table 1. TMDL/WLAs/LAs for nickel in the Hackensack River.

<b>Source:</b>	<b>Existing load (lbs/day)</b>	<b>WLA/LA (lbs/day)</b>
Bergen County Utilities Authority [NJPDES Permit #NJ0020028]	11.3	2.2 <sup>1</sup>
North Bergen Sewage Treatment Plant (STP) [NJPDES Permit #NJ0034339]	0.28	0.38 <sup>2</sup>
Secaucus STP [NJPDES Permit #NJ0025038]	0.04	0.06 <sup>3</sup>
Combined Sewage Overflows	0.10	0.10
Storm Water	0.81	0.81
ΣWLAs.....	.....	3.55
Atmospheric.....	1.06	1.06
Boundary (Background)	0.37	0.37 <sup>4</sup>
<b>TMDL.....</b>	<b>.....</b>	<b>4.98</b>

<sup>1</sup> The WLA of 2.2 lbs/day is established at an effluent concentration of 3.6 µg/l (total recoverable) and flow of 75 mgd. If the effluent flow is 109 mgd, the WLA is 3.3 lbs/day with an effluent concentration of 3.6 µg/l.

<sup>2</sup> Based on design flow of 10 mgd and means effluent concentration of 4.6 µg/l (total recoverable).

<sup>3</sup> Based on design flow of 10 mgd and mean effluent concentration of 1.5 µg/l (total recoverable).

<sup>4</sup> Calculated at the boundary condition of the Hackensack River upstream at the Oradell Dam.

---

Lance R. Miller  
 Director  
 Division of Watershed Management  
 Department of Environmental Protection

---

Date

## SPPP Form 15 – Optional Measures

All records must be available upon request by NJDEP.

1. Describe any Best Management Practice(s) the permittee has developed that extend beyond the requirements of the Tier A MS4 NJPDES permit that prevents or reduces water pollution.

None currently in place.

2. Has the permittee adopted a Refuse Container/Dumpster Ordinance?

No.



### Attachment D – Major Development Stormwater Summary

#### General Information

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

#### Site Design Specifications

1. Area of Disturbance (acres):	Area of Proposed Impervious (acres):
2. List all Hydrologic Soil Groups:	
3. Please Identify the Amount of Each Best Management Practices (BMPs) Utilized in Design Below: Bioretention Systems ___ Constructed Wetlands ___ Dry Wells ___ Extended Detention Basins ___ Infiltration Basins ___ Combination Infiltration/Detention Basins ___ Manufactured Treatment Devices ___ Pervious Paving Systems ___ Sand Filters ___ Vegetative Filter Strips ___ Wet Ponds ___ Grass Swales ___ Subsurface Gravel Wetlands ___ Other _____	

#### Storm Event Information

Storm Event - Rainfall (inches and duration):	2 yr.: _____	10 yr.: _____
	100 yr.: _____	WQDS: _____
Runoff Computation Method: NRCS: Dimensionless Unit Hydrograph <input type="checkbox"/> NRCS: Delmarva Unit Hydrograph <input type="checkbox"/> Rational <input type="checkbox"/> Modified Rational <input type="checkbox"/> Other: _____		

#### Basin Specifications (answer all that apply)

\*If more than one basin, attach multiple sheets\*

1. Type of Basin:	Surface/Subsurface (select one):	Surface <input type="radio"/>	Subsurface <input type="radio"/>
2. Owner (select one):	<input type="radio"/> Public	<input type="radio"/> Private: If so, Name:	Phone number:
3. Basin Construction Completion Date:			
4. Drain Down Time (hr.):			
5. Design Soil Permeability (in./hr.):			
6. Seasonal High Water Table Depth from Bottom of Basin (ft.):		Date Obtained:	
7. Groundwater Recharge Methodology (select one): 2 Year Difference <input type="radio"/> NJGRS <input type="radio"/> Other <input type="radio"/> NA <input type="radio"/>			
8. Groundwater Mounding Analysis (select one): Yes <input type="radio"/> No <input type="radio"/> If, Yes Methodology Used:			
9. Maintenance Plan Submitted: Yes <input type="radio"/> No <input type="radio"/> Is the Basin Deed Restricted: Yes <input type="radio"/> No <input type="radio"/>			

Comments:

Name of Person Filling Out This Form: \_\_\_\_\_

Signature: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

2/2/2018

**Basin Specifications (answer all that apply)**

\*If more than one basin, attach multiple sheets\*

1. Type of Basin:	Surface/Subsurface (select one): Surface <input type="radio"/> Subsurface <input type="radio"/>		
2. Owner (select one):	<input type="radio"/> Public	<input type="radio"/> Private: If so, Name:	Phone number:
3. Basin Construction Completion Date:			
4. Drain Down Time (hr.):			
5. Design Soil Permeability (in./hr.):			
6. Seasonal High Water Table Depth from Bottom of Basin (ft.):			Date Obtained:
7. Groundwater Recharge Methodology (select one):	2 Year Difference <input type="radio"/>	NJGRS <input type="radio"/>	Other <input type="radio"/> NA <input type="radio"/>
8. Groundwater Mounding Analysis (select one):	Yes <input type="radio"/>	No <input type="radio"/>	If, Yes Methodology Used:
9. Maintenance Plan Submitted:	Yes <input type="radio"/>	No <input type="radio"/>	Is the Basin Deed Restricted: Yes <input type="radio"/> No <input type="radio"/>

**Basin Specifications (answer all that apply)**

\*If more than one basin, attach multiple sheets\*

1. Type of Basin:	Surface/Subsurface (select one): Surface <input type="radio"/> Subsurface <input type="radio"/>		
2. Owner (select one):	<input type="radio"/> Public	<input type="radio"/> Private: If so, Name:	Phone number:
3. Basin Construction Completion Date:			
4. Drain Down Time (hr.):			
5. Design Soil Permeability (in./hr.):			
6. Seasonal High Water Table Depth from Bottom of Basin (ft.):			Date Obtained:
7. Groundwater Recharge Methodology (select one):	2 Year Difference <input type="radio"/>	NJGRS <input type="radio"/>	Other <input type="radio"/> NA <input type="radio"/>
8. Groundwater Mounding Analysis (select one):	Yes <input type="radio"/>	No <input type="radio"/>	If, Yes Methodology Used:
9. Maintenance Plan Submitted:	Yes <input type="radio"/>	No <input type="radio"/>	Is the Basin Deed Restricted: Yes <input type="radio"/> No <input type="radio"/>

**Basin Specifications (answer all that apply)**

\*If more than one basin, attach multiple sheets\*

1. Type of Basin:	Surface/Subsurface (select one): Surface <input type="radio"/> Subsurface <input type="radio"/>		
2. Owner (select one):	<input type="radio"/> Public	<input type="radio"/> Private: If so, Name:	Phone number:
3. Basin Construction Completion Date:			
4. Drain Down Time (hr.):			
5. Design Soil Permeability (in./hr.):			
6. Seasonal High Water Table Depth from Bottom of Basin (ft.):			Date Obtained:
7. Groundwater Recharge Methodology (select one):	2 Year Difference <input type="radio"/>	NJGRS <input type="radio"/>	Other <input type="radio"/> NA <input type="radio"/>
8. Groundwater Mounding Analysis (select one):	Yes <input type="radio"/>	No <input type="radio"/>	If, Yes Methodology Used:
9. Maintenance Plan Submitted:	Yes <input type="radio"/>	No <input type="radio"/>	Is the Basin Deed Restricted: Yes <input type="radio"/> No <input type="radio"/>

Name of Person Filling Out This Form: \_\_\_\_\_

Signature: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

## Attachment E – Best Management Practices for Municipal Maintenance Yards and Other Ancillary Operations

The Tier A Municipality shall implement the following practices at municipal maintenance yards and other ancillary operations owned or operated by the municipality. Inventory of Materials and Machinery, and Inspections and Good Housekeeping shall be conducted at all municipal maintenance yards and other ancillary operations. All other Best Management Practices shall be conducted whenever activities described below occur. Ancillary operations include but are not limited to impound yards, permanent and mobile fueling locations, and yard trimmings and wood waste management sites.

### Inventory of Materials and Machinery

The SPPP shall include a list of all materials and machinery located at municipal maintenance yards and ancillary operations which could be a source of pollutants in a stormwater discharge. The materials in question include, but are not limited to: raw materials; intermediate products; final products; waste materials; by-products; machinery and fuels; and lubricants, solvents, and detergents that are related to the municipal maintenance yard operations and ancillary operations. Materials or machinery that are not exposed to stormwater at the municipal maintenance yard or related to its operations do not need to be included.

### Inspections and Good Housekeeping

1. Inspect the entire site, including the site periphery, monthly (under both dry and wet conditions, when possible). Identify conditions that would contribute to stormwater contamination, illicit discharges or negative impacts to the Tier A Municipality's MS4. Maintain an inspection log detailing conditions requiring attention and remedial actions taken for all activities occurring at Municipal Maintenance Yards and Other Ancillary Operations. This log must contain, at a minimum, a record of inspections of all operations listed in Part IV.B.5.c. of this permit including dates and times of the inspections, and the name of the person conducting the inspection and relevant findings. This log must be kept on-site with the SPPP and made available to the Department upon request. See the Tier A Municipal Guidance document ([www.nj.gov/dep/dwq/tier\\_a\\_guidance.htm](http://www.nj.gov/dep/dwq/tier_a_guidance.htm)) for additional information.
2. Conduct cleanups of spills of liquids or dry materials immediately after discovery. All spills shall be cleaned using dry cleaning methods only. Clean up spills with a dry, absorbent material (i.e., kitty litter, sawdust, etc.) and sweep the rest of the area. Dispose of collected waste properly. Store clean-up materials, spill kits and drip pans near all liquid transfer areas, protected from rainfall.
3. Properly label all containers. Labels shall be legible, clean and visible. Keep containers in good condition, protected from damage and spillage, and tightly closed when not in use. When practical, store containers indoors. If indoor storage is not practical, containers may be stored outside if covered and placed on spill platforms or clean pallets. An area that is graded and/or bermed to prevent run-through of stormwater may be used in place of spill platforms or clean pallets. Outdoor storage locations shall be regularly maintained.

## Fueling Operations

1. Establish, maintain and implement standard operating procedures to address vehicle fueling; receipt of bulk fuel deliveries; and inspection and maintenance of storage tanks, including the associated piping and fuel pumps.
  - a. Place drip pans under all hose and pipe connections and other leak-prone areas during bulk transfer of fuels.
  - b. Block storm sewer inlets, or contain tank trucks used for bulk transfer, with temporary berms or temporary absorbent booms during the transfer process. If temporary berms or booms are being used instead of blocking the storm sewer inlets, all hose connection points associated with the transfer of fuel shall be within the temporarily bermed or boomed area during the loading/unloading of bulk fuels. A trained employee shall be present to supervise the bulk transfer of fuel.
  - c. Clearly post, in a prominent area of the facility, instructions for safe operation of fueling equipment. Include all of the following:
    - “Topping off of vehicles, mobile fuel tanks, and storage tanks is strictly prohibited”
    - “Stay in view of fueling nozzle during dispensing”
    - Contact information for the person(s) responsible for spill response.
  - d. Immediately repair or replace any equipment, tanks, pumps, piping and fuel dispensing equipment found to be leaking or in disrepair.

## Discharge of Stormwater from Secondary Containment

The discharge pipe/outfall from a secondary containment area (e.g. fuel storage, de-icing solution storage, brine solution) shall have a valve and the valve shall remain closed at all times except as described below. A municipality may discharge stormwater accumulated in a secondary containment area if a visual inspection is performed to ensure that the contents of aboveground storage tank have not come in contact with the stormwater to be discharged. Visual inspections are only effective when dealing with materials that can be observed, like petroleum. If the contents of the tank are not visible in stormwater, the municipality shall rely on previous tank inspections to determine with some degree of certainty that the tank has not leaked. If the municipality cannot make a determination with reasonable certainty that the stormwater in the secondary containment area is uncontaminated by the contents of the tank, then the stormwater shall be hauled for proper disposal.

## Vehicle Maintenance

1. Operate and maintain equipment to prevent the exposure of pollutants to stormwater.
2. Whenever possible, conduct vehicle and equipment maintenance activities indoors. For projects that must be conducted outdoors, and that last more than one day, portable tents or covers shall be placed over the equipment being serviced when not being worked on, and drip pans shall be used at all times. Use designated areas away from storm drains or block storm drain inlets when vehicle and equipment maintenance is being conducted outdoors.

## On-Site Equipment and Vehicle Washing and Wash Wastewater Containment

1. Manage any equipment and vehicle washing activities so that there are no unpermitted discharges of wash wastewater to storm sewer inlets or to waters of the State.
2. Tier A Municipalities which cannot discharge wash wastewater to a sanitary sewer or which cannot otherwise comply with 1, above, may temporarily contain wash wastewater prior to proper disposal under the following conditions:
  - a. Containment structures shall not leak. Any underground tanks and associated piping shall be tested for integrity every 3 years using appropriate methods determined by “*The List of Leak Detection Evaluations for Storage Tank Systems*” created by the National Work Group on Leak Detection Evaluations (NWGLDE) or as determined appropriate and certified by a professional engineer for the site specific containment structure(s).
  - b. For any cathodically protected containment system, provide a passing cathodic protection survey every three years.
  - c. Operate containment structures to prevent overflowing resulting from normal or abnormal operations, overflowing, malfunctions of equipment, and human error. Overfill prevention shall include manual sticking/gauging of the tank before each use unless system design prevents such measurement. Tank shall no longer accept wash wastewater when determined to be at 95% capacity. Record each measurement to the nearest ½ inch.
  - d. Before each use, perform inspections of all visible portions of containment structures to ensure that they are structurally sound, and to detect deterioration of the wash pad, catch basin, sump, tank, piping, risers, walls, floors, joints, seams, pumps and pipe connections or other containment devices. The wash pad, catch basin, sump and associated drains should be kept free of debris before each use. Log dates of inspection; inspector's name, and conditions. This inspection is not required if system design prevents such inspection.
  - e. Containment structures shall be emptied and taken out of service immediately upon detection of a leak. Complete all necessary repairs to ensure structural integrity prior to placing the containment structure back into service. Any spills or suspected release of hazardous substances shall be immediately reported to the NJDEP Hotline (1-877-927-6337) followed by a site investigation in accordance with N.J.A.C. 7:26C and N.J.A.C 7:26E if the discharge is confirmed.
  - f. All equipment and vehicle wash wastewater placed into storage must be disposed of in a legally permitted manner (e.g. pumped out and delivered to a duly permitted and/or approved wastewater treatment facility).
  - g. Maintain a log of equipment and vehicle wash wastewater containment structure clean-outs including date and method of removal, mode of transportation (including name of hauler if applicable) and the location of disposal. See Underground Vehicle Wash Water Storage Tank Use Log at end of this attachment.
  - h. Containment structures shall be inspected annually by a NJ licensed professional engineer. The engineer shall certify the condition of all structures including: wash pad, catch basin, sump, tank, piping, risers to detect deterioration in the, walls, floors, joints, seams, pumps and pipe connections or other containment devices using the attached Engineer’s Certification of Annual Inspection of Equipment and Vehicle Wash Wastewater Containment Structure. This

certification may be waived for self-contained systems on a case-by-case basis. Any such waiver would be issued in writing by the Department.

3. Maintain all logs, inspection records, and certifications on-site. Such records shall be made available to the Department upon request.

### **Salt and De-icing Material Storage and Handling**

1. Store material in a permanent structure.
2. Perform regular inspections and maintenance of storage structure and surrounding area.
3. Minimize tracking of material from loading and unloading operations.
4. During loading and unloading:
  - a. Conduct during dry weather, if possible;
  - b. Prevent and/or minimize spillage; and
  - c. Minimize loader travel distance between storage area and spreading vehicle.
5. Sweep (or clean using other dry cleaning methods):
  - a. Storage areas on a regular basis;
  - b. Material tracked away from storage areas;
  - c. Immediately after loading and unloading is complete.
6. Reuse or properly discard materials collected during cleanup.
7. Temporary outdoor storage is permitted only under the following conditions:
  - a. A permanent structure is under construction, repair or replacement;
  - b. Stormwater run-on and de-icing material run-off is minimized;
  - c. Materials in temporary storage are tarped when not in use;
  - d. The requirements of 2 through 6, above are met; and
  - e. Temporary outdoor storage shall not exceed 30 days unless otherwise approved in writing by the Department;
8. Sand must be stored in accordance with Aggregate Material and Construction Debris Storage below.

## Aggregate Material and Construction Debris Storage

1. Store materials such as sand, gravel, stone, top soil, road millings, waste concrete, asphalt, brick, block and asphalt based roofing scrap and processed aggregate in such a manner as to minimize stormwater run-on and aggregate run-off via surface grading, dikes and/or berms (which may include sand bags, hay bales and curbing, among others) or three sided storage bays. Where possible the open side of storage bays shall be situated on the upslope. The area in front of storage bays and adjacent to storage areas shall be swept clean after loading/unloading.
2. Sand, top soil, road millings and processed aggregate may only be stored outside and uncovered if in compliance with item 1 above and a 50-foot setback is maintained from surface water bodies, storm sewer inlets, and/or ditches or other stormwater conveyance channels.
3. Road millings must be managed in conformance with the “Recycled Asphalt Pavement and Asphalt Millings (RAP) Reuse Guidance” (see [www.nj.gov/dep/dshw/rntp/asphaltguidance.pdf](http://www.nj.gov/dep/dshw/rntp/asphaltguidance.pdf)) or properly disposed of as solid waste pursuant to N.J.A.C. 7:26-1 et seq.
4. The stockpiling of materials and construction of storage bays on certain land (including but not limited to coastal areas, wetlands and floodplains) may be subject to regulation by the Division of Land Use Regulation (see [www.nj.gov/dep/landuse/](http://www.nj.gov/dep/landuse/) for more information).

## Street Sweepings, Catch Basin Clean Out, and Other Material Storage

1. For the purposes of this permit, this BMP is intended for road cleanup materials as well as other similar materials. Road cleanup materials may include but are not limited to street sweepings, storm sewer clean out materials, stormwater basin clean out materials and other similar materials that may be collected during road cleanup operations. These BMPs do not cover materials such as liquids, wastes which are removed from municipal sanitary sewer systems or material which constitutes hazardous waste in accordance with N.J.A.C. 7:26G-1.1 et seq.
2. Road cleanup materials must be ultimately disposed of in accordance with N.J.A.C. 7:26-1.1 et seq. See the “Guidance Document for the Management of Street Sweepings and Other Road Cleanup Materials” ([www.nj.gov/dep/dshw/rntp/sweeping.htm](http://www.nj.gov/dep/dshw/rntp/sweeping.htm)).
3. Road cleanup materials placed into storage must be, at a minimum:
  - a. Stored in leak-proof containers or on an impervious surface that is contained (e.g. bermed) to control leachate and litter; and
  - b. Removed for disposal (in accordance with 2, above) within six (6) months of placement into storage.

## Yard Trimmings and Wood Waste Management Sites

1. These practices are applicable to any yard trimmings or wood waste management site:
  - a. Owned and operated by the Tier A Municipality;
    - i. For staging, storing, composting or otherwise managing yard trimmings, or
    - ii. For staging, storing or otherwise managing wood waste, and
  - b. Operated in compliance with the Recycling Rules found at N.J.A.C. 7:26A.
2. Yard trimmings or wood waste management sites must be operated in a manner that:
  - a. Diverts stormwater away from yard trimmings and wood waste management operations; and
  - b. Minimizes or eliminates the exposure of yard trimmings, wood waste and related materials to stormwater.
3. Yard trimmings and wood waste management site specific practices:
  - a. Construct windrows, staging and storage piles:
    - i. In such a manner that materials contained in the windrows, staging and storage piles (processed and unprocessed) do not enter waterways of the State;
    - ii. On ground which is not susceptible to seasonal flooding;
    - iii. In such a manner that prevents stormwater run-on and leachate run-off (e.g. use of covered areas, diversion swales, ditches or other designs to divert stormwater from contacting yard trimmings and wood waste).
  - b. Maintain perimeter controls such as curbs, berms, hay bales, silt fences, jersey barriers or setbacks, to eliminate the discharge of stormwater runoff carrying leachate or litter from the site to storm sewer inlets or to surface waters of the State.
  - c. Prevent on-site storm drain inlets from siltation using controls such as hay bales, silt fences, or filter fabric inlet protection.
  - d. Dry weather run-off that reaches a municipal stormwater sewer system is an illicit discharge. Possible sources of dry weather run-off include wetting of piles by the site operator; uncontrolled pile leachate or uncontrolled leachate from other materials stored at the site.
  - e. Remove trash from yard trimmings and wood waste upon receipt.
  - f. Monitor site for trash on a routine basis.
  - g. Store trash in leak-proof containers or on an impervious surface that is contained (e.g. bermed) to control leachate and litter;
  - h. Dispose of collected trash at a permitted solid waste facility.
  - i. Employ preventative tracking measures, such as gravel, quarry blend, or rumble strips at exits.

## Roadside Vegetation Management

1. Tier A Municipalities shall restrict the application of herbicides along roadsides in order to prevent it from being washed by stormwater into the waters of the State and to prevent erosion caused by de-vegetation, as follows: Tier A Municipalities shall not apply herbicides on or adjacent to storm drain inlets, on steeply sloping ground, along curb lines, and along unobstructed shoulders. Tier A Municipalities shall only apply herbicides within a 2 foot radius around structures where overgrowth presents a safety hazard and where it is unsafe to mow.

**ENGINEERS CERTIFICATION OF ANNUAL INSPECTION OF EQUIPMENT  
AND VEHICLE WASH WASTEWATER CONTAINMENT STRUCTURE**

**(Complete a separate form for each vehicle wash wastewater containment structure)**

Permittee: \_\_\_\_\_ NJPDES Permit No: \_\_\_\_\_

Containment Structure Location: \_\_\_\_\_

The annual inspection of the above referenced vehicle wash wastewater containment structure was conducted on \_\_\_\_\_ (date). The containment structure and appurtenances have been inspected for:

1. The integrity of the structure including walls, floors, joints, seams, pumps and pipe connections
2. Leakage from the structure's piping, vacuum hose connections, etc.
2. Bursting potential of tank.
3. Transfer equipment
4. Venting
5. Overflow, spill control and maintenance.
6. Corrosion, splits, and perforations to tank, piping and vacuum hoses

The tank and appurtenances have been inspected for all of the above and have been determined to be:

Acceptable \_\_\_\_\_

Unacceptable \_\_\_\_\_

Conditionally Acceptable \_\_\_\_\_

List necessary repairs and other conditions: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment (N.J.A.C. 7:14A-2.4(d)).

Name (print): \_\_\_\_\_ Seal:

Signature: \_\_\_\_\_

Date: \_\_\_\_\_



