

THE COUNTY OF MONMOUTH

HIGHWAY AGENCY PERMIT

STORMWATER POLLUTION PREVENTION PLAN (SPPP)

NJPDES MUNICIPAL STORMWATER REGULATION
PROGRAM

NJPDES GENERAL PERMIT # NJG0152234

PROGRAM INTEREST ID # 222751

Effective Date of Permit Authorization: April 1, 2004

Date of Initial Completion: April 1, 2005

Revision Date: July 2019
2019 Revision prepared by Najarian Associates



MONMOUTH COUNTY HIGHWAY AGENCY
STORMWATER POLLUTION PREVENTION PLAN (SPPP)

TABLE OF CONTENTS

INTRODUCTION.....	i
SPPP SIGNATURE PAGE.....	iv
SPPP FORM 1 - STORMWATER POLLUTION PREVENTION TEAM.....	1-1
SPPP FORM 2 - PUBLIC NOTICE	2-1
SPPP FORM 3 - NEW DEVELOPMENT AND REDEVELOPMENT PROGRAM.....	3-1
SPPP FORM 4 - LOCAL PUBLIC EDUCATION PROGRAM	4-1
SPPP FORM 5 - STORM DRAIN INLET LABELING.....	5-1
SPPP FORM 6 - MS4 OUTFALL PIPE MAPPING	6-1
SPPP FORM 7 - ILLICIT CONNECTION ELIMINATION PROGRAM	7-1
ILLICIT CONNECTION INSPECTION REPORT FORM.....	7-3
SPPP FORM 8 - ILLICIT CONNECTION RECORDS.....	8-1
SPPP FORM 9 - LITTER PICK UP PROGRAM	9-1
SPPP FORM 10 - IMPROPER DISPOSAL OF WASTE - REGULATORY MECHANISMS....	10-1
SPPP FORM 11 - SOLIDS AND FLOATABLE CONTROL - STORM DRAIN INLETS.....	11-1
SPPP FORM 12 - STREET SWEEPING AND ROAD EROSION CONTROL	12-1
SPPP FORM 13 - STORMWATER FACILITY MAINTENANCE	13-1
SPPP FORM 14 - ROADSIDE VEGETATION MANAGEMENT	14-1
SPPP FORM 15 - OUTFALL PIPE STREAM SCOURING REMEDIATION	15-1
SPPP FORM 16 - DE-ICING MATERIAL STORAGE	16-1
DE-ICING MATERIAL STORAGE INSPECTION CHECKLIST.....	16-2
SPPP FORM 17 - STANDARD OPERATING PROCEDURES	17-1
SOURCE MATERIAL INVENTORY.....	17-3
VEHICLE AND EQUIPMENT FUELING SOP.....	17-6
VEHICLE MAINTENANCE SOP.....	17-10
GOOD HOUSEKEEPING SOP.....	17-13
DE-ICING MATERIAL STORAGE LEACHATE SOP.....	17-19
SPPP FORM 18 - EMPLOYEE TRAINING.....	18-1

FIGURES

Figure 1 – Division of Highways District Maintenance Yards

Figure 2 – District 1

Figure 3 – District 3

Figure 4 – District 4

Figure 5 – District 5

Figure 6 – District 6

Figure 7 – District 7

Figure 8 – District 8

Figure 9 – District 9, District 2, Division of Bridges, Traffic Safety Unit, Division of Fleet Services (Motor Pool, Body Shop and SCAT)

Figure 10 – District 10

Figure 11 – Buildings and Grounds (Special Services)

APPENDICES

Appendix I Highway Agency Stormwater General Permit

Appendix II NJDEP Guidance Document for the Management of Street Sweepings and Other Road Cleanup Materials

Appendix III Highway Agency Stormwater General Permit Post-Construction Program Design Checklist for Individual Projects

Appendix IV Resolutions:

06-45 Post Construction Stormwater Management

06-46 Prohibit the Feeding of Unconfined Wildlife

06-47 Improper Disposal of Wastes into Storm Sewers

06-48 Prohibit Littering


06-49 Prohibit Illicit Connections to Storm Sewers

2010-0848 Covering of Dumpsters

Appendix V MTDs Inspection and Maintenance Information

Appendix VI Annual Report and Certification (previous year)

**Monmouth County Division of Highways
Stormwater Pollution Prevention Plan (SPPP)**

NJPDES #	NJG0152234	
PI ID #	222751	
Effective Date of Permit Authorization (EDPA)	April 1, 2004	
Date of Completion	April 1, 2005	
Date of SPPP Revision	June 2019	

Stormwater/nonpoint sources are the largest remaining major source of pollutants in our waters. It is estimated that up to 60 percent of our existing water pollution problems are attributable to stormwater/nonpoint pollution. To combat this broad “non-point” source pollution problem, Congress amended the Clean Water Act in 1987 to require localities to develop programs to address pollutants entering waters through municipal separate storm sewer systems (MS4s) owned or operated by local, county, state, and federal government agencies. In response to this requirement, the New Jersey Department of Environmental Protection (NJDEP) developed the Municipal Stormwater Regulation Program, through which New Jersey Pollutant Discharge Elimination System (NJPDES) permits are issued to Highway Agencies. The Monmouth County Highway Agency Stormwater General Permit was issued with an effective date of permit authorization (EDPA) of April 1, 2004. A copy of the permit is included in Attachment I.

The Highway Permit requires that each Highway Agency develop, implement, and enforce a stormwater program. The stormwater program is described in the Highway Agency’s written Stormwater Pollution Prevention Plan (SPPP). A SPPP is a document that addresses the following goals:

1. To implement and maintain Best Management Practices (BMPs) that identify, reduce, eliminate, and/or prevent the discharge of stormwater pollutants;
2. To prevent violations of surface water quality, groundwater quality, and sediment management standards; and
3. To eliminate illicit discharges to stormwater drainage systems.

The following facilities are addressed under the County's Highway Agency Stormwater General Permit:

- Highway District #1 – 218 East Road, Belford, Middletown Township
- Highway District #2 – 240 Center Street, Freehold Township
- Highway District #3 – 1160 Pine Brook Road, Tinton Falls Borough
- Highway District #4 – 2060 Hospital Road, Allenwood, Wall Township
- Highway District #5 – 383 Cranberry Road, Farmingdale Borough
- Highway District #6 – 750 Wilson Avenue, Eatontown Borough
- Highway District #7 – 231 County Route 539, Cream Ridge, Upper Freehold Township
- Highway District #8 – 1621 Union Avenue, Hazlet Township
- Highway District #9 – 240 Center Street, Freehold Township
- Highway District #10 – 690 County Route 520, Marlboro Township
- Division of Bridges – 240 Center Street Complex, Freehold Township
- Traffic Safety Unit – 240 Center Street Complex, Freehold Township
- Division of Fleet Services:
(Motor Pool, Body Shop and SCAT) – 250 Center Street Complex, Freehold Township
- Fueling Station – 250 Center Street Complex, Freehold Township
- Vehicle Wash – 250 Center Street Complex, Freehold Township
- Buildings and Grounds (Special Services) – 300 Halls Mill Road, Freehold Township

These facilities are depicted on Figure 1, and aerial photographs of each facility (Figures 2 through 13) are included in the Figures section.

The SPPP is comprised of Forms 1 through 18. The Stormwater Pollution Prevention Team Member list is provided on Form 1 and includes Team Member email addresses and phone numbers.

The procedures to address Illicit Connections are presented on Form 7. Illicit Connection investigations will involve the Monmouth County Health Department.

Four (4) Standard Operating Procedures (SOPs) – Best Management Practices (BMPs) are provided in the Form 17 section as follows:

- Vehicle and Equipment Fueling
- Vehicle Maintenance
- Good Housekeeping Practices
- De-Icing Material Storage Leachate

The County utilizes Geographical Information Systems (GIS) and an Asset Management System to store detailed information regarding County assets, including many components of the Highway Agency SPPP. The Cartegraph Operations Management System (OMS), a high-performance government software, is currently in-use. Any asset data in ArcGIS™ is easily accessible in Cartegraph OMS, and vice versa. Locational, inspection, and repair data have been uploaded, and are continuously updated, in the County GIS/OMS for the following SPPP Forms:

- Storm Drain Inlet Labeling (Form 5)
- MS4Outfall Pipe Mapping (Form 6)
- Litter Pick up Program (Form 9)
- Street Sweeping / Road Erosion Control Logs (Form 12)
- Stormwater Facility Maintenance (Form 13)
- Outfall Pipe Stream Scouring Remediation (Form 15)

The paper logs associated with these forms have been replaced with the County Assess Management System.

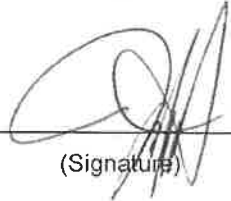
As the SPPP is a dynamic document, it will be revised as changes arise – as such, different sections may be revised at different times. The revision dates are presented at the bottom of each section.

SPPP Signature Page

Monmouth County
Highway Agency
Information

Highway Agency Name: Monmouth County Divisions of Highways
NJPDES #: NJG0152234 PI ID #: 222751
Team Member/Title: John W. Tobia, Director of Public Works & Engineering
Effective Date of Permit Authorization (EDPA): April 1, 2004
Date of Completion: 04/01/2005 Date of most recent update: 07/09/2019

"I certify that this SPPP includes all of the information and items identified in Attachment A of the Highway Agency Stormwater General Permit. 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."



(Signature)

7/9/19
(Date)

John W. Tobia
(Print Name)

Director of Public Works & Engineering
(Title)

(NOTE: A new SPPP signature page should be attached each time the SPPP is updated or modified, excluding data entries. Previous SPPP signature pages shall be retained as part of the SPPP.)

SPPP Form 1

Stormwater Pollution Prevention Team Members

Stormwater Program Coordinator: John W. Tobia
Title: Director of Public Works and Engineering
Email: John.Tobia@co.monmouth.nj.us
Office Phone #: 732-683-8757 ext. 2131
Emergency Phone #: 732-859-3191

Public Notice Coordinator: Trisha Ring Wajda
Title: Deputy Communications Director
Email: tricia.wajda@co.monmouth.nj.us
Office Phone #: 732-431-7310 ext. 7318
Emergency Phone #: _____

Post-Construction Stormwater Management Coordinator: John W. Tobia
Title: Director of Public Works and Engineering
Email: John.Tobia@co.monmouth.nj.us
Office Phone #: 732-683-8757 ext. 2131
Emergency Phone #: 732-859-3191

Local Public Education Coordinator: Trisha Ring Wajda
Title: Deputy Communications Director
Email: tricia.wajda@co.monmouth.nj.us
Office Phone #: 732-431-7310 ext. 7318
Emergency Phone #: _____

Regulatory Mechanism Coordinator: Marion Masnick; John W. Tobia, Joseph Ettore
Title: Clerk of the Board; Director of Public Works and Engineering, County Engineer
Email: Marion.Masnick@co.monmouth.nj.us; John.Tobia@co.monmouth.nj.us;
Joseph.Ettore@co.monmouth.nj.us
Office Phone #: 732-431-7387; 732-683-8757, 732-431-7760
Emergency Phone #: _____

Physical Operations Coordinator: Gary Fread
Title: Superintendent of Highway
Email: Gary.Fread@co.monmouth.nj.us
Office Phone #: 732-431-6550 ext 6558
Emergency Phone #: 732-239-6624

Other: Jessica Kubida
Title: Environmental Specialist 3, Division of Engineering and Traffic Safety
Email: Jessica.Kubida@co.monmouth.nj.us
Office Phone #: 732-431-7760 ext. 6775
Emergency Phone #: _____

Other: Dan Frizell
Title: General Supervisor, Division of Highways, Acting General
Email: Danny.Frizell@co.monmouth.nj.us
Office Phone #: 732-431-6550 ext. 2119
Emergency Phone #: 732-299-8018

Other: Robert Dickerson
Title: Supervising Road Inspector
Email: Robert.Dickerson@co.monmouth.nj.us
Office Phone #: 732-431-6550
Emergency Phone #: 732-861-4541

Other: Ron Boyce, General Supervisor
Title: General Supervisor
Email: Ron.Boyce@co.monmouth.nj.us
Office Phone #: 732-431-6550 ext. 6551
Emergency Phone #: 732-865-0980

Other: James Cerreta
Title: Assistant Director of Public Wirs & Engineering, Department of Public Works and Engineering
Email: James.Cerreta@co.monmouth.nj.us
Office Phone #: 732-683-8758
Emergency Phone #: 732-861-5976

Other: Ming Kao
Title: Engineering
Email: Ming.Kao@co.monmouth.nj.us
Office Phone #: 732-409-7572
Emergency Phone #:

SPPP Form 2 Public Notice

Team Member/Title: Trisha Ring Wajda, Deputy Communications Director

Email: tricia.wajda@co.monmouth.nj.us

Phone: 732-431-7310 ext. 7318

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

For any meetings where public notice is required under the Open Public Meetings Act (“Sunshine Law”, N.J.S.A. 10:4-6 et seq.), Monmouth County provides public notice in a manner that complies with the requirements of that Act.

In regard to the county budget, Monmouth County provides public notice in a manner that complies with the requirements of the Local Budget Law, N.J.S.A. 40A:4-1 et seq.

For resolutions of the Monmouth County Board of Chosen Freeholders that prove a penalty for violation thereof, Monmouth County provides public notice in a manner that complies with the requirements of N.J.S.A. 40:24-3.

All public notices appear in the following periodicals:

- Asbury Park Press

The County must annually certify their compliance with applicable State and local public notice requirements when providing for public participation in developing and implementing the County’s stormwater program.

SPPP Form 3

New Development and Redevelopment Program

Team Member/Title: Joseph Ettore, County Engineer

Email: Joseph.Ettore@co.monmouth.nj.us

Telephone: 732-431-7760

Describe in general terms your post-construction stormwater management in new development and redevelopment program (post-construction program), and how it complies with the Highway Permit minimum standard. This description must address how adequate long term operation and maintenance of BMPs will be ensured; compliance with the standard in Attachment C of the permit (new storm drain inlet design standard); adoption and implementation of applicable design and performance standards established under N.J.A.C. 7:8 for major development; and use of the Post-Construction Program Design Checklist for Individual Projects. Attach additional pages as necessary.

Post Construction Stormwater Management in New Development & Redevelopment

The Monmouth County Division of Highways is implementing a post-construction stormwater management in new development and redevelopment program as per the Highway Agency Permit minimum standard. Monmouth County intends to consider the applicable design and performance standards as early as possible in the project planning and design process.

The Monmouth County Division of Engineering and Traffic Safety will ensure that all projects which are “new development and redevelopment projects” as described in the Highway Agency Permit are designed in accordance with the permit requirements. These applicable projects will be listed in the Annual Report and Certification. The Monmouth County Division of Highways will maintain these projects in accordance with the County’s Highway Agency Stormwater Permit.

On January 12, 2006 the Monmouth County Board of Chosen Freeholders adopted resolution #06-45 which addresses the following goals:

- 1) Adopt (and incorporates by reference) for such projects the applicable design and performance standards (including maintenance requirements) established under N.J.A.C. 7:8 for major development, and the storm drain inlet design standard in Attachment C;
- 2) Requires that all such projects be designed to comply with these design and performance standards and this storm drain inlet design standard; and
- 3) Requires that the Highway Permit’s Post-Construction Program Design Checklist for Individual Projects be completed before each project’s construction is approved.

Resolution #06-45 is included in Appendix IV for reference and Appendix III includes the Post-Construction Program Design Checklist for Individual Projects.

The Monmouth County Division of Engineering and Traffic Safety works cooperatively with the Monmouth County Division of Planning relative to stormwater management responsibilities concerning new development and redevelopment projects. The cooperation of these, and other County Divisions, are intended to encourage consistency and coordination among County stormwater management activities, and may result in some future revisions to the County's post-construction program.

For each new development or redevelopment project regulated by the Highway Permit the following information will be included in the Annual Report and Certification:

- Project name and municipality
- Description of project
- Acres of disturbance (estimate)
- Acres of additional impervious surface (estimate)
- Land use regulation program permit requirement
- Completion of Design Checklist for Individual Projects
- Waiver claims under N.J.A.C. 7:8-5.2(e)
- Project approved for construction
- Completion of project

Compliance with the Storm Drain Inlet Design (Attachment C of Permit)

For most projects, Monmouth County will use the NJDOT bicycle safe grate and (if needed) a curb opening with a clear space no bigger than two (2) inches across the smallest dimension. The storm drain inlets will also be engineered to ensure adequate hydraulic performance.

Please refer to Form 11 – Solids and Floatable Control - Storm Drain Inlets for retrofitting of existing storm drain inlets.

Operation and Maintenance of Best Management Practices (BMPs)

Since the EDPA, Monmouth County has not constructed any projects regulated by the Highway Permit as new development and redevelopment projects. When the County constructs such a project, the County will ensure adequate long-term operation and maintenance of BMPs for that project by preparing (through the Monmouth County Division of Engineering and Traffic Safety) a project maintenance plan in accordance with N.J.A.C. 7:8-5.8 where applicable.

For BMPs at stormwater facilities, maintenance of these BMPs will also be an integral part of the stormwater facility maintenance program that the County is developing to ensure proper function and operation of all County stormwater facilities regulated by the Highway Permit.

Please refer to Form 13 – Stormwater Facility Maintenance for a description of Monmouth County's Stormwater Facility Maintenance program.

SPPP Form 4

Local Public Education Program

Team Member/Title: Trisha Ring Wajda, Deputy Communications Director

Email: tricia.wajda@co.monmouth.nj.us

Phone: 732-431-7310 ext. 7318

Describe your Local Public Education Program. Be specific on how you will distribute your educational information.

Local Public Education Program:

Monmouth County does not currently own or operate any service or rest areas along the County highway system; therefore distribution of the annual brochure to users of the system is not required. However, Monmouth County will post the annual brochure in common areas of appropriate Highway Agency structures.

Educational information will be made available to employees during the employee training sessions.

Please refer to Form 18 - Employee Training for a description of Monmouth County's Employee Training Program.

SPPP Form 5

Storm Drain Inlet Labeling

Team Member/Title: Gary Fread, Division of Highways General Supervisor

Email: Gary.Fread@co.monmouth.nj.us

Phone: 732-431-6550 ext. 6558

Storm Drain Inlet Labeling Program

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

All of the storm drain inlets within the Monmouth County Highway Agency system have been labeled. This was completed during the 2004 – 2009 permit cycle.

Long-Term Inlet Labeling Maintenance

The Monmouth County Division of Highways will ensure long-term maintenance of the storm drain inlet labels during the annual catch basin cleaning program. During the inspection, cleaning or repair of an inlet, the label will be inspected for damage and replaced if needed, where applicable.

Description of Labels

The Monmouth County Division of Highways uses storm drain inlet labels which read “No Dumping – Drains to Water Body.” A typical label is depicted below:



SPPP Form 6

MS4 Outfall Pipe Mapping

Team Member/Title: Meghan Leavey, GIS & Bob Dickerson, Supervising Road Inspector
Email: Meghan.leavey@co.monmouth.nj.us, Robert.Dickerson@co.monmouth.nj.us
Phone: 732-431-7460, 732-431-6550

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

MS4 Outfall Pipe Mapping

The municipal separate storm sewer system (MS4) outfalls are mapped as required in the Highway Agency permit.

The Monmouth County Division of Engineering and Traffic Safety maintains a GIS inventory of the outfalls within the stormwater system. The County MS4 outfall map is available in the Public Works Building located at 250 Center Street, Freehold Township, New Jersey.

SPPP Form 7

Illicit Connection Elimination Program

Team Member/Title: Bob Dickerson, Supervising Road Inspector & Christopher Merkle, Public Health Coordinator and Health Officer

Email: Robert.Dickerson@co.monmouth.nj.us, health@co.monmouth.nj.us

Phone: 732-431-6550, 732-431-7456

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

Initial Physical Inspection

An initial physical inspection of all municipal separate storm sewer system (MS4) outfalls was completed during the 2004 – 2009 permit cycle during the MS4 outfall pipe mapping process.

Illicit Connection Elimination Program Details

Attachment B *Procedures for Detecting, Investigating, and Eliminating Illicit Connections* of the Highway Agency Stormwater General Permit will be used as a reference.

Outfall pipes found to have dry weather flow or indications of intermittent non-stormwater flow will be further investigated by the Monmouth County Division of Engineering and Traffic Safety, with the assistance of the Monmouth County Health Department, as need. If no dry weather or intermittent flows are observed, there is probably not an illicit connection. Inspection information will be maintained in the County's Asset Management System.

The initial step of the investigation process of an Illicit Connection is the completion by Monmouth County Division of Engineering and Traffic Safety personnel of the Illicit Connection Inspection Report Form. Upon completion, if it is determined further investigation is required, this form will be forwarded to the Monmouth County Health Department and entered into the Health Department's Complaint Database.

The potential Illicit Connection will be further evaluated by the Health Department, as needed. Upon completion of the investigation by the Health Department, documentation will be returned to the Division of Engineering and Traffic Safety for inclusion in the Annual Report and Certification.

For illicit connections from a public source (e.g. the host municipality or a neighboring municipality), notification will be provided to that entity, and a written explanation sent to the NJDEP detailing the results of the investigation. The report should be directed to the permit manager and enforcement case manager.

If the illicit connection poses an immediate threat, employees have been instructed to call the Monmouth County Health Department at 732-431-7456. Separate written notification of such action will also be sent to the NJDEP.

Long Term Illicit Connection Elimination

The County will re-inspect each outfall for illicit connections at least once per five-year permit cycle. In addition, the County will investigate possible illicit connections reported by residents or municipalities. Illicit connection inspections will also be conducted when the outfall pipes are being inspected for stream scouring if the inspection is preceded by a 72 hour dry weather period (see Form 15 Outfall Pipe Stream Scouring Remediation).

Illicit Connection Inspection Report Form

Completed by Monmouth County Division of Engineering and Traffic Safety

Inspector Name: _____

Phone: _____

Inspection Date: _____

Outfall #: _____ Location: _____

Receiving Waterbody: _____

Number of Photographs _____

1. Is there a dry weather flow? Y (___) N (___)
2. If "YES", what is the outfall flow estimate? _____ gpm
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. If you answered "YES" to either question, please continue to question #5.

INITIAL PHYSICAL OBSERVATIONS:

(a) **ODOR:** none___ sewage___ sulfide___ oil___ gas___ rancid/sour___
other: _____

(b) **COLOR:** none___ other: _____

(c) **TURBIDITY:** none___ cloudy___ opaque___

(d) **FLOATABLES:** none___ petroleum___ sheen___ sewage___
other: _____

(e) **DEPOSITS/STAINS:** none___ sediment___ oily___ other: ___

(f) **VEGETATION CONDITIONS:** normal___ excessive growth___ inhibited growth___

(g) **DAMAGE TO OUTFALL STRUCTURES:**

IDENTIFY STRUCTURE: _____

DAMAGE: none___ concrete spalling/cracking___ peeling paint___
metal corrosion___ other damage:___

Additional Observations:

Submit this form and photographs to Ms. Jessica Kubida, Division of Engineering and Mr. Christopher Merkle of the Monmouth County Health Department for further investigation

Date provided to the Health Department: _____

SPPP Form 8

Illicit Connection Records

Team Member/Title: Bob Dickerson, Supervising Road Inspector

Email: Robert.Dickerson@co.monmouth.nj.us

Phone : 732-431-6550

Prior to July 1, 2018

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

Total number of inspections performed this year? _____

Number of outfalls found to have a dry weather flow? _____

Number of outfalls found to have an illicit connection? _____

How many of the Highway Agency's own illicit connections were eliminated? _____

Of the Highway Agency's own illicit connections found, how many remain? _____

How many illicit connections found to emanate from another entity were reported to NJDEP? _____

July 1, 2018 – June 30, 2019

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

Total number of inspections performed this year? _____

Number of outfalls found to have a dry weather flow? _____

Number of outfalls found to have an illicit connection? _____

How many of the Highway Agency's own illicit connections were eliminated? _____

Of the Highway Agency's own illicit connections found, how many remain? _____

How many illicit connections found to emanate from another entity were reported to NJDEP? _____

July 1, 2019 – June 30, 2020

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

Total number of inspections performed this year? _____

Number of outfalls found to have a dry weather flow? _____

Number of outfalls found to have an illicit connection? _____

How many of the Highway Agency's own illicit connections were eliminated? _____

Of the Highway Agency's own illicit connections found, how many remain? _____
How many illicit connections found to emanate from another entity were reported to NJDEP? _____
July 1, 2020 – June 30, 2021
<i>Attach a copy of each illicit connection report form for outfalls found to have a dry weather flow.</i>
Total number of inspections performed this year? _____
Number of outfalls found to have a dry weather flow? _____
Number of outfalls found to have an illicit connection? _____
How many of the Highway Agency's own illicit connections were eliminated? _____
Of the Highway Agency's own illicit connections found, how many remain? _____
How many illicit connections found to emanate from another entity were reported to NJDEP? _____
July 1, 2021 – June 30, 2022
<i>Attach a copy of each illicit connection report form for outfalls found to have a dry weather flow.</i>
Total number of inspections performed this year? _____
Number of outfalls found to have a dry weather flow? _____
Number of outfalls found to have an illicit connection? _____
How many of the Highway Agency's own illicit connections were eliminated? _____
Of the Highway Agency's own illicit connections found, how many remain? _____
How many illicit connections found to emanate from another entity were reported to NJDEP? _____
How many illicit connections found to emanate from another entity were reported to NJDEP? _____

SPPP Form 9

Litter Pick Up Program

Team Member/Title: Gary Fread, Superintendent of Highway; Dan Frizell, General Supervisor, Division of Highways, Acting General

Email: Gary.Fread@co.monmouth.nj.us; Danny.Frizell@co.monmouth.nj.us

Phone: 732-431-6550 ext. 6558; 732-431-6550 ext. 2119

Please describe your litter pick up program. Be sure to include the refuse collection schedule and detail how rest area, service area, and roadside clean ups will be implemented.

(NOTE: Attach a litter pick up log containing the following information: date(s) of roadside clean ups and estimates of the total amount of trash and debris collected.)

Litter Pickup Program

The Monmouth County Division of Highways does not operate any service areas or rest areas. To fulfill the litter pickup program requirement, each Highway District patrols County Roads for litter on an as needed basis. Additionally twice a year, in the Spring and the Fall, litter patrols are sent out to collect litter from all County Roads.

The district supervisors will input their respective litter pickup data into the Cartegraph Asset Management System. This system is utilized in lieu of logs. At the end of the year, the total amount of litter is calculated and exported into spreadsheet and reviewed by Dan Frizell. The total amount of litter is calculated and is reported in the MSRP Annual Report and Certification.

SPPP Form 10

Regulatory Mechanisms

Team Member/Title: Joseph Ettore, County Engineer; John W. Tobia, Director Department of Public Works and Engineering; Marion Masnick, Clerk of the Board of Chosen Freeholders

Email: engineer@co.monmouth.nj.us, PublicWorks@co.monmouth.nj.us,
mmasnick@co.monmouth.nj.us

Phone: 732-431-7765; 732-683-8757; 732-431-7387

Regulatory Mechanisms

For each regulatory mechanism, give the date of adoption. If not yet adopted, explain the development status:

Pet Waste: The Monmouth County Highway Agency does not operate any rest areas or service areas for the Agency facilities subject to this permit.

Improper Disposal of Waste: Monmouth County Board of Chosen Freeholders Resolution # 06-47; adopted January 12, 2006

Wildlife Feeding: Monmouth County Board of Chosen Freeholders Resolution # 06-46; adopted January 12, 2006

Illlicit Connections: Monmouth County Board of Chosen Freeholders Resolution # 06-49; adopted January 12, 2006

Refuse Containers and Dumpsters: Monmouth County Board of Chosen Freeholders Resolution #2010-0848; adopted October 28, 2010

Copies of these Resolutions are provided in Appendix II.

What is the nature of these regulatory mechanisms and how will they be enforced?

Regulatory mechanisms have been adopted in the form of Resolutions by the Monmouth County Board of Chosen Freeholders. Any Monmouth County officer or employee who continues to be in violation of the adopted policies, after being duly notified, shall be subject to removal, suspension, demotion or other disciplinary action. In addition, the general public may be subject to fines if found in violation of the resolution.

If your position is that the Highway Agency has no legal authority to adopt and/or enforce a mechanism to regulate pet waste disposal or wildlife feeding by the general public on Highway Agency property, attach a statement from your attorney supporting this position.

Not applicable.

SPPP Form 11

Solids and Floatable Control - Storm Drain Inlets (Retrofitting)

Team Member/Title: Ming Kao, Engineering

Email: Ming.Kao@co.monmouth.nj.us

Phone: 732-409-7572

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

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

Repaving, repairing, reconstruction or alteration project name (attach additional pages as necessary)	Projected start date	Start Date	Date of completion	# of storm drain inlets	# of storm drains with exemptions

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

Updated form needs to be submitted to Jessica Kubida by March for the previous calendar year to be included in Annual Report and Certification.

SPPP Form 12

Street Sweeping and Road Erosion Control

Team Member/Title: Gary Fread, Superintendent of Highway; Dan Frizell, General Supervisor, Division of Highways, Acting General

Email: Gary.Fread@co.monmouth.nj.us; Danny.Frizell@co.monmouth.nj.us

Phone: 732-431-6550 ext. 6558; 732-431-6550 ext. 2119

Street Sweeping

Please describe the street sweeping schedule that you will maintain.

(NOTE: Attach a street sweeping log containing the following information: date and area swept, # of miles swept, and the total amount of materials collected.)

Monmouth County currently owns/operates 1,000 lane miles of road with approximately 25.3 miles of road that currently meets the Highway Agency general permit criteria requiring monthly sweeping (i.e. 35 mph or less in predominantly commercial areas). Weather permitting, all County roads are swept once per month. Street sweeping diaries are maintained by street sweeper operator and provided to the General Supervisors.

The **Monmouth County Highway Districts** will be utilizing their staff and available equipment in order to comply with this requirement. In addition, Monmouth County currently maintains the following maintenance yards which also fall subject to the monthly street sweeping requirement:

- Highway District 1 – Belford, Middletown Township
- Highway District 2 – Freehold Township
- Highway District 3 – Tinton Falls Borough
- Highway District 4 – Allenwood, Wall Township
- Highway District 5 – Farmingdale Borough
- Highway District 6 – Eatontown Borough
- Highway District 7 – Cream Ridge, Upper Freehold Township
- Highway District 8 – Hazlet Township
- Highway District 9 – Freehold Township
- Highway District 10 – Marlboro Township
- 240 Center Street Complex – Freehold Township
- 250 Center Street Complex – Freehold Township
- Special Services – 300 Halls Mill Road, Freehold Township

(The district supervisors will input their respective street sweepings data into the Cartegraph Asset Management System. This system is utilized in lieu of logs. At the end of the year, a report is calculated and exported into spreadsheet and reviewed by Dan Frizell. The total amount of litter is

calculated and is reported in the MSRP Annual Report and Certification.

Washout Repair - Highway

Describe your Road Erosion Control Maintenance Program, including inspection schedules. A list of all sites of roadside erosion and the repair techniques(s) you will be using for each site should be attached to this form. (NOTE: Attach a road erosion control maintenance log containing the following information: location, repairs, date)

During weekly road inspections by the district supervisor, the roads are visually inspected to evaluate the need for repair due to erosion.

Highway district supervisors will complete repair tasks in Cartegraph Asset Management System during scheduled erosion control repairs. This system is utilized in lieu of logs. At the end of the year, a report is calculated and exported into spreadsheet and reviewed by Dan Frizell.

SPPP Form 13

Stormwater Facility Maintenance

Team Member/Title: Gary Fread, Superintendent of Highway

Email: Gary.Fread@co.monmouth.nj.us

Phone: 732-431-6550 ext. 6558

Please describe your annual catch basin cleaning program and schedule. Attach additional pages as necessary.

Catch Basin Cleaning Program Schedule

There are over 6,000 catch basins within Monmouth County Highway Agency storm water system. Each basin is logged in the County Asset Management System. It is the intent of the Highway Division to inspect annually and schedule cleaning and/or repairs based on the results of the physical inspection.

Catch Basin Cleaning Program Description

The Monmouth County Division of Highways will be responsible for implementing the catch basin cleaning program. Monmouth County currently operates vehicles capable of catch basin cleaning, which are dedicated to this activity. If, at the time of inspection, no sediment, trash or debris is observed in the catch basin, then that catch basin will not be cleaned. At the time of cleaning, the catch basins will also be inspected for proper function. Restoration work will be scheduled for those basins that are in disrepair.

Management of Catch Basin Materials

Catch Basin Materials are added to Street Sweeping Materials. All road clean up materials will remain staged on an impervious surface for the appropriate staging time, as per the standards set in guidance provided by the NJDEP Division of Solid and Hazardous Waste.

Retention / Detention Basins

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

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

The Monmouth County Division of Highways has implemented a stormwater facility maintenance program that ensures the proper function and operation of all highway system stormwater facilities operated by the County. Each Highway District will be responsible for maintaining ditches, swales, retention / detention basins and manufactured treatment devices (MTDs) within the boundaries of that District annually. Respective General Supervisors will be responsible for scheduling the inspection of these facilities to ensure proper function, at a minimum they will be inspected annually and any identified repairs will be made. Any problems impacting the function of the facility identified will be forwarded to Monmouth County Engineering. Maintenance and Inspection Logs are maintained in the asset management system.

The Monmouth County Department of Public Works and Engineering maintains an inventory of all stormwater facilities owned and/or operated by the County. The inventory is maintained in GIS format and is continuously updated.

All records pertaining to Stormwater Facilities are logged in the County Asset Management System.

SPPP Form 14

Roadside Vegetation Management

Team Member/Title: Gary Fread, Superintendent of Highway; George Nobel, General Supervisor, Monmouth County Shade Tree Division

Email: Gary.Fread@co.monmouth.nj.us

Phone: 732-431-6550 ext. 6558

Describe your roadside vegetation management program to limit the application of herbicides and mulch. Attach additional pages as necessary.

Roadside Vegetation Management Program

The Monmouth County Division of Highways performs regular cutting and landscaping of applicable roadside areas. This practice has proven sufficient to control most roadside vegetation. If mulch is applied to areas adjacent to impervious areas, it is stabilized in accordance with the Standards for Soil Erosion and Sediment Control in New Jersey (N.J.A.C. 2:90-1).

The Monmouth County Division of Highways utilizes herbicides on a very limited basis by employees that are licensed applicators. Examples would be to treat poison ivy and in areas not suitable for mowing.

Additional roadside vegetation management recommendations are provided by George Nobel, General Supervisor, Monmouth County Shade Tree Division.

SPPP Form 15

Outfall Pipe Stream Scouring Remediation

Team Member/Title: Gary Fread, Superintendent of Highway

Email: Gary.Fread@co.monmouth.nj.us

Phone: 732-431-6550 ext. 6558

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

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

The Monmouth County Department of Public Works and Engineering will implement a stormwater outfall pipe stream scouring, remediation, and maintenance program to detect and control localized stream scouring in the vicinity of the highway system outfall pipes operated by the County, subject to applicable permit requirements and regulations. When possible, inspections of the outfall pipes will be coordinated with inspections for illicit connections.

A prioritized list will be created of outfall pipes found to have scouring. A schedule will be established for repairs, beginning with the outfall pipes most in need of remediation and those most easily accessible. In addition, repairs that do not require NJDEP Land Use permits or other local, State, or Federal permits will be completed first.

For outfall remediation requiring NJDEP permits, the Monmouth County Division of Engineering and Traffic Safety will prepare and submit all required applications.

Scouring Long-term Maintenance Program

For those outfall pipes in which scouring had been detected, repairs will be scheduled based on the results of the physical inspection with prioritization to areas exhibiting the most severe damage.

All repairs will be made in accordance with the Standards for Soil Erosion and Sediment Control in New Jersey.

Records will be maintained in the County Asset Management System.

SPPP Form 16

De-icing Material Storage

Team Member/Title: Gary Fread, Superintendent of Highway

Email: Gary.Fread@co.monmouth.nj.us

Phone: 732-431-6550 ext. 6558

De-icing Material Storage

Describe how you currently store your highway agency's de-icing materials, and describe your inspection schedule. If your current storage practices do not meet the de-icing material storage SBR describe your construction schedule and your seasonal tarping interim measures. If you plan on sharing a storage structure, please include its location, as well as a complete list of all concerned public entities. If you store sand outdoors, describe how it meets the minimum standard.

The following standard operating procedures for good housekeeping of de-icing material handling will be implemented at each District to ensure minimal environmental impact:

- Prevent and/or minimize the spillage of salt and de-icing materials during loading and unloading activities.
- At the completion of loading and unloading activities, spilled de-icing materials shall be removed using dry cleaning methods and either reused or disposed of properly.
- Sweeping of storage and loading/unloading areas by hand or mechanical means shall be done on a regular basis. More frequent sweeping is required following loading/unloading activities. Sweeping shall also be conducted immediately following, as practicable, loading/unloading activities.
- Tracking of materials from storage and loading/unloading areas shall be minimized.
- Minimize the distance de-icing materials are transported during loading/unloading activities.

All Highway Districts that store de-icing material do so in a permanent structure, which is compliant with the County's Highway Agency Permit. Districts that must store salt for brine separately from the road salt do so in accordance with the Permit's Interim Seasonal Tarping Good Housekeeping Practices section.

Effluent emanating from salt barns is addressed following Best Management Practices to prevent entry into storm drains, as described in the SOP - De-Icing Material Storage Leachate.

De-icing Material Storage Inspection Checklist

Highway District (circle one): 1 2 3 4 5 6 7 8 9 10

Ancillary Locations (circle one): **DOB** **TSU** **MP** **BS** **SCAT** **B&G**

Yes	No	Condition	Notes
		Any spillage observed	
		Structure in good condition	
		Tarp in good condition for salt brine	

SPPP Form 17

Standard Operating Procedures (SOPs)

Team Member/Title: Gary Fread, Superintendent of Highway

Email: Gary.Fread@co.monmouth.nj.us

Phone: 732-431-6550 ext. 6558

BMP	Date SOP went into effect	Describe your inspection schedule
<p>Fueling Operations (including the required practices listed in Attachment D of the permit)</p>	<p>April 1, 2005</p>	<p>Fueling locations will be inspected monthly.</p> <ul style="list-style-type: none"> ▪ A Vehicle and Fueling SOP has been included
<p>Vehicle Maintenance (including the required practices listed in Attachment D of the permit)</p>	<p>April 1, 2005</p>	<p>Monthly inspections will be held at vehicle maintenance sites to ensure that the SOP is being met.</p> <ul style="list-style-type: none"> ▪ A Vehicle Maintenance SOP has been included
<p>Good Housekeeping Practices (including the required practices listed in Attachment D of the permit)</p>	<p>April 1, 2005</p>	<p>Inspections will be conducted on a monthly basis to ensure that good housekeeping practices are in effect.</p> <ul style="list-style-type: none"> • Good Housekeeping SOPs have been included for appropriate facilities.

De-icing Material Storage Leachate	November 2, 2018	De-icing Material Storage areas will be inspected monthly. <ul style="list-style-type: none">▪ A De-icing Material Storage SOP for wooden salt barns has been included
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A Source Material Inventory list for Maintenance Yard operations is provided on the next pages, as required in Attachment D of the NJDPES Master General Permit.

Source Material Inventory

Highway District: 1 2 3 4 5 6 7 8 9 10

Ancillary Locations: DOB TSU MP BS SCAT B&G

SOURCE MATERIAL	RECOMMENDATION	ADDRESSED IN SOP:	LOCATION
Bulk Construction Debris	<ul style="list-style-type: none"> Separate by type of material and store temporarily on impervious surface until recycled 	Good Housekeeping	DOB/TSU
Catch Basin Cleaning Materials	<ul style="list-style-type: none"> Store on an impervious surface 	Good Housekeeping	1, 3, 4, 5, 6, 7, 8, 9, 10
Clean Sand	<ul style="list-style-type: none"> Store greater than 50 feet from wetland area 	Good Housekeeping	8, 9
Cold Patch	<ul style="list-style-type: none"> Cover material to prevent exposure to precipitation 	Good Housekeeping	1, 4, 7, 9, 10
Construction Related Waste (i.e. asphalt millings)	<ul style="list-style-type: none"> Remove properly subsequent to construction projects 	Good Housekeeping	7
De-icing Material	<ul style="list-style-type: none"> Store de-icing material in a permanent storage structure or as per Appendix D of permit 	Good Housekeeping / De-Icing Material Storage Leachate	1, 3, 4, 5, 6, 8, 10
Drums	<ul style="list-style-type: none"> Properly label Dispose of empty/unused drums Correctly store drums, covered on spill platforms 	Good Housekeeping	3, 5, 6, 7, 8, 10, B&G, MP, BS, SCAT
Dumpsters	<ul style="list-style-type: none"> Keep lids closed when not in use, where appropriate 	Good Housekeeping	B&G, MP, BS, SCAT

SOURCE MATERIAL	RECOMMENDATION	ADDRESSED IN SOP:	LOCATION
Lead Acid Batteries	<ul style="list-style-type: none"> Store in permanently covered storage area and dispose of regularly 	Good Housekeeping	MP, BS, SCAT
New CCA Wood	<ul style="list-style-type: none"> Store under overhang to prevent exposure to precipitation 	Good Housekeeping	DOB/TSU
Solid Waste	<ul style="list-style-type: none"> Store in covered dumpster 	Good Housekeeping	3, 6, 7, 8, 10, B&G
Street Sweepings	<ul style="list-style-type: none"> Store on an impervious surface and cover with waterproof material 	Good Housekeeping	1, 3, 4, 5, 6, 7, 8, 9, 10
Top Soil	<ul style="list-style-type: none"> Store greater than 5 feet from storm drain inlet 	Good Housekeeping	1, 10
Used Tires	<ul style="list-style-type: none"> Store in permanently covered storage area and dispose of regularly 	Good Housekeeping	MP, BS, SCAT
Waste Oil Storage Area (outdoor)	<ul style="list-style-type: none"> Clean area of residual spills 	Good Housekeeping	5
Waste Oil Tanks	<ul style="list-style-type: none"> Practice good housekeeping and maintenance of waste oil storage areas 	Good Housekeeping	3, 6, MP, BS, SCAT
Waste Paint	<ul style="list-style-type: none"> Store indoors or in a shed 	Good Housekeeping	3, 5, 6, 8, 10, B&G

SOURCE MATERIAL	RECOMMENDATION	ADDRESSED IN SOP:	LOCATION
Vehicle Parts	<ul style="list-style-type: none"> • Store indoors or keep covered to prevent exposure to precipitation 	Good Housekeeping	MP, BS, SCAT
Vehicle/Equipment Spare and Scrap Parts	<ul style="list-style-type: none"> • Dispose of all scrap material properly • Store all parts containing petroleum products on spill pallets and covered 	Good Housekeeping	1, 3, 4, 5, 6, 7, 8, 9, 10, B&G, MP, BS, SCAT
Asphalt Recycling	<ul style="list-style-type: none"> • Store material to be recycled within bin block containment area 	Good Housekeeping	9
De-icing Vehicle Lubrication	<ul style="list-style-type: none"> • Capture all excess lubricant for re-use or disposal 	Good Housekeeping; Vehicle Maintenance	1, 3, 4, 5, 6, 7, 8, 9, 10
Vehicle Fueling Area	<ul style="list-style-type: none"> • Comply with County fueling SOP 	Vehicle & Equipment Fueling	1, 3, 4, 5, 6, 7, 8, 9, 10, B&G, MP, BS, SCAT
Vehicle Washing	<ul style="list-style-type: none"> • Wash all vehicles and equipment indoors • Do not allow vehicle and equipment washwater to discharge to the environment 	Vehicle Maintenance	1, 3, 4, 5, 6, 7, 8, 9, 10, B&G, MP, BS, SCAT

Standard Operating Procedure – Best Management Practices Vehicle and Equipment Fueling



Monmouth County Highway Agency Facilities

Highway District #1	Belford, Middletown Township
Highway District #2	Freehold Township
Highway District #3	Tinton Falls Borough
Highway District #4	Allenwood, Wall Township
Highway District #5	Farmingdale Borough
Highway District #6	Eatontown Borough
Highway District #7	Cream Ridge, Upper Freehold Township
Highway District #8	Hazlet Township
Highway District #9	Freehold Township
Highway District #10	Marlboro Township
Division of Bridges	240 Center Street Complex, Freehold Township
Traffic Safety Unit	250 Center Street Complex, Freehold Township
Division of Fleet Services (Motor Pool, Body Shop and SCAT)	300 Halls Mills Road, Freehold Township
Buildings and Grounds (Special Services)	Belford, Middletown Township

Introduction and Purpose

Standard vehicle and equipment fueling operating procedures and practices are designed to minimize the potential of petroleum spills that may impact surface or ground waters. Understanding the procedures for delivering fuel into vehicles, mobile fuel tanks, and storage tanks is critical for this purpose. Safety is always the priority.

Scope

These procedures are to be implemented during fueling operations conducted at all County Highway Agency operations. This SOP-BMP will apply to all fuel transfer operations.

In addition, for those facilities with aboveground petroleum storage capacities greater than 1,320 gallons, the procedures outlined in the Spill Prevention, Control, and Countermeasure (SPCC) Plan must also be followed.

Standards and Specifications – (Fueling)

**Equipment & Vehicle
Fueling
(All County Departments)**

- Shut the engine off.
- Ensure that the fuel is the proper type of fuel for the equipment/vehicle.
- Absorbent spill clean-up materials and spill kits shall be available in fueling areas and on mobile fueling vehicles and shall be disposed of properly after use.
- Nozzles used in vehicle and equipment fueling shall be equipped with an automatic shut-off to prevent overfill.
- Fuel tanks and storage tanks shall not be “topped off”.
- Mobile fueling shall be minimized. All mobile fueling vehicles must be equipped with spill kits. Whenever practical, vehicles and equipment shall be transported to the designated fueling area in the maintenance yard.
- Clearly post, in a prominent area of the facility, instructions for safe operation of fueling equipment, and appropriate contact information for the person(s) responsible for spill response.
- Attend vehicle at all times during fueling.
- Do not fill an unapproved container.
- Repair any leaks or any equipment in disrepair immediately

Standards and Specifications – (Bulk Fueling)	
Bulk Product Transfer (All Highway Districts Motor Pool)	<ul style="list-style-type: none"> • Ensure fuel supplier verifies available capacity of tank prior to filling. • Never leave vehicle unattended during fueling • Use Drip pans or absorbent pads under all hose and pipe connections and other leak-prone areas during bulk fueling, or evacuation of waste tanks (i.e. waste oil). • 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 are being used instead of blocking the storm sewer inlets, all hose connection points associated with the transfer of fuel/waste must be within the temporary berms during the loading/unloading of bulk fuels. • Protect fueling areas with berms and/or dikes to prevent run-on, runoff, and to contain spills. • A trained County employee must always be present to supervise during bulk transfer. • Absorbent spill clean-up materials and spill kits shall be available in all delivery areas.
Spill Response (All County Departments)	<ul style="list-style-type: none"> • Conduct cleanups of any fuel spills immediately after discovery. • Clean uncontained spills using dry cleaning methods only. Spills shall be cleaned up with a dry, absorbent material (e.g., kitty litter, sawdust, etc.) and absorbent materials shall be swept up and properly contained. • Collected waste is to be disposed of properly. • Contact the Police Department at 911. • Contact Monmouth County HAZMAT at 732-431-7456 • Contact the NJDEP by calling 1-877-WARNDEP
Maintenance and Inspection (All Highway Districts, Motor Pool, SCAT)	<ul style="list-style-type: none"> • Wipe down daily all waste oil storage areas of any residuals and small spills • Oil/water separators shall be checked monthly for: <ul style="list-style-type: none"> ○ Proper operation of high level alarm, or product level ○ Proper function of sand/grit interceptor – clean if necessary ○ Cleaned annually • Fueling areas and storage tanks shall be inspected monthly for the following: <ol style="list-style-type: none"> 1. leaks 2. spills 3. proper function 4. external damage • Keep an ample supply of spill cleanup material on the site. • Any equipment, tanks, pumps, piping and fuel dispensing equipment found to be leaking or in disrepair must be repaired or replaced immediately by a certified or appropriate contractor. • Inspect monthly for compliance with SOP

Standard Operating Procedure – Best Management Practices Vehicle Maintenance



Monmouth County Highway Agency Facilities

Highway District #1	Belford, Middletown Township
Highway District #2	Freehold Township
Highway District #3	Tinton Falls Borough
Highway District #4	Allenwood, Wall Township
Highway District #5	Farmingdale Borough
Highway District #6	Eatontown Borough
Highway District #7	Cream Ridge, Upper Freehold Township
Highway District #8	Hazlet Township
Highway District #9	Freehold Township
Highway District #10	Marlboro Township
Division of Bridges	240 Center Street Complex, Freehold Township
Traffic Safety Unit	250 Center Street Complex, Freehold Township
Division of Fleet Services (Motor Pool, Body Shop and SCAT)	300 Halls Mills Road, Freehold Township
Buildings and Grounds (Special Services)	Belford, Middletown Township

Introduction and Purpose

This SOP-BMP contains the basic practices of vehicle maintenance to be implemented at all Monmouth County Highway Agency facilities. The purpose of this SOP is to provide a set of guidelines for developing safe, responsible vehicle maintenance practices which protect the quality of stormwater run-off originating from County sites.

Scope

This SOP-BMP applies to all vehicle maintenance activities performed within the Monmouth County Highway Agency and its ancillary operations.

Standards and Specifications	
General Vehicle Maintenance Guidelines	<ul style="list-style-type: none"> • Conduct vehicle maintenance operation only in designated areas. • When possible, perform all vehicle and equipment maintenance at an indoor location with a paved floor. • Always use drip pans. • Use portable tents or construct a roofing-device over long-term maintenance areas and for projects that must be performed outdoors.
Fluid Disposal	<ul style="list-style-type: none"> • All waste liquids should be collected and disposed of properly. • All containers storing liquids should be clearly labeled. • All drips & spills should be addressed using dry-cleaning methods. (absorbent material use & broom sweep up)
Battery & Tire Storage	<ul style="list-style-type: none"> • All waste lead-acid batteries should be stored indoors. If stored outdoors, all batteries should be under cover and elevated. • Scrap tires should be stored indoors or in a container dedicated to scrap tire storage.
De-icing Vehicle Lubrication	<ul style="list-style-type: none"> • Perform indoors, if practical • Capture all excess lubricant for re-use or proper disposal • Clean any drips or spills immediately
Vehicle and Equipment Washing	<ul style="list-style-type: none"> • Do not allow vehicle and equipment washwater to discharge to environment.
Maintenance and Inspection	<ul style="list-style-type: none"> • Monthly check for compliance with this SOP
Spill Response	<ul style="list-style-type: none"> • Conduct vehicle maintenance operation only in designated areas. • When possible, perform all vehicle and equipment maintenance at an indoor location with a paved floor. • Always use drip pans. • Use portable tents or construct a roofing-device over long-term maintenance areas and for projects that must be performed outdoors.

Standard Operating Procedure - Best Management Practices Good Housekeeping



Monmouth County Highway Agency Facilities

Highway District #1	Belford, Middletown Township
Highway District #2	Freehold Township
Highway District #3	Tinton Falls Borough
Highway District #4	Allenwood, Wall Township
Highway District #5	Farmingdale Borough
Highway District #6	Eatontown Borough
Highway District #7	Cream Ridge, Upper Freehold Township
Highway District #8	Hazlet Township
Highway District #9	Freehold Township
Highway District #10	Marlboro Township
Division of Bridges and Traffic Safety Unit	240 Center Street Complex, Freehold Township
Division of Fleet Services (Motor Pool, Body Shop and SCAT)	250 Center Street Complex, Freehold Township
Buildings and Grounds (Special Services)	300 Halls Mills Road, Freehold Township

INTRODUCTION AND PURPOSE

This SOP-BMP contains the basic practices of good housekeeping to be implemented during typical day-to-day maintenance activities at the Monmouth County Highway Agency Facilities. The purpose of this SOP is to provide a set of guidelines for all County employees at maintenance yards.

SCOPE

This SOP-BMP applies to all housekeeping operations conducted within the Monmouth County Division of Highways and its ancillary operations.

Standards and Specifications (general housekeeping)		Facility
New CCA Wood	<ul style="list-style-type: none"> • Store under overhang to prevent exposure to precipitation 	<ul style="list-style-type: none"> • Division of Bridges Garage • Traffic Safety Unit Garage
All Container and Drums (All Containers Storing Liquids or Solids)	<ul style="list-style-type: none"> • All containers should be properly labeled and marked, and the labels must remain clean and visible. • All containers must be kept in good condition and tightly closed when not in use. • When practical, chemicals, fluids and supplies should be kept indoors. • Keep a spill kit on hand at all liquid storage locations. • Have available & make use of use drip pans during liquid transfers. • Absorbent spill clean-up materials must be available in maintenance areas and shall be disposed of properly after use. • Collect waste fluids in properly labeled containers and dispose of them properly. • Place trash, dirt and other debris in dumpsters • Keep lids on dumpsters closed when not in use. 	<ul style="list-style-type: none"> • Division of Bridges Garage • Traffic Safety Unit Garage • Division of Fleet Services (Motor Pool, Body Shop, SCAT, Fueling Station, Vehicle Wash) • Buildings and Grounds (Special Services) • All Highway Districts (1 – 10)
Bulk Storage Debris	<ul style="list-style-type: none"> • Separate by type of material • Store temporarily on impervious surface until recycled 	<ul style="list-style-type: none"> • Division of Bridges Garage • Traffic Safety Unit Garage
Clean Sand/ Top Soil	<ul style="list-style-type: none"> • Store clean sand and top soil greater than 50 feet from a stormwater conveyance system 	<ul style="list-style-type: none"> • All Highway Districts (1 – 10)
Containers and Drums Stored Outside	<ul style="list-style-type: none"> • Cover all drums and containers and place on spill platforms 	<ul style="list-style-type: none"> • Division of Fleet Services (Motor Pool, Body Shop, SCAT, Fueling Station, Vehicle Wash) • Buildings and Grounds (Special Services) • All Highway Districts (1 – 10)
Lead Acid Batteries	<ul style="list-style-type: none"> • Store batteries in permanently covered storage area and dispose of regularly 	<ul style="list-style-type: none"> • Division of Fleet Services (Motor Pool, Body Shop, SCAT, Fueling Station, Vehicle Wash)
Spare/Scrap Equipment and Vehicle Parts	<ul style="list-style-type: none"> • Dispose of on a regular basis • Cover parts on an impervious surface 	<ul style="list-style-type: none"> • Division of Fleet Services (Motor Pool, Body Shop, SCAT, Fueling Station, Vehicle Wash) • Buildings and Grounds (Special Services)

Standards and Specifications (general housekeeping)		Facility
		<ul style="list-style-type: none"> All Highway Districts (1 – 10)
Used Tires	<ul style="list-style-type: none"> Store tires in permanently covered storage area and dispose of regularly 	<ul style="list-style-type: none"> Division of Fleet Services (Motor Pool, Body Shop, SCAT, Fueling Station, Vehicle Wash)
Waste Paint	<ul style="list-style-type: none"> Store waste paint indoors whenever possible. If outdoors, waste paint should be placed in a storage shed to keep materials covered 	<ul style="list-style-type: none"> Division of Fleet Services (Motor Pool, Body Shop, SCAT, Fueling Station, Vehicle Wash) Buildings and Grounds (Special Services) All Highway Districts (1 – 10)
Waste Oil Storage	<ul style="list-style-type: none"> Wipe down the waste oil storage area daily of any residuals or small spills. Clean small drips and spills immediately Use Oil Water Separators to treat water entering the floor drains in buildings Ensure alarm is functioning on all oil water separators to alert that the separator is full Contact vendor for all waste oil disposal 	<ul style="list-style-type: none"> Division of Fleet Services (Motor Pool, Body Shop, SCAT, Fueling Station, Vehicle Wash) All Highway Districts (1 – 10)
Solid Waste	<ul style="list-style-type: none"> Store in covered dumpster 	<ul style="list-style-type: none"> Buildings and Grounds (Special Services)
Cold Patch	<ul style="list-style-type: none"> Keep material covered to prevent exposure to precipitation 	<ul style="list-style-type: none"> All Highway Districts (1 – 10)
Catch Basins	<ul style="list-style-type: none"> Construct vector dump areas using sand berms on impervious surface to contain vector truck wastes Locate sand berms away from catch basins and environmentally sensitive areas Transport solids removed from catch basins to MC Reclamation Center 	<ul style="list-style-type: none"> All Highway Districts (1 – 10)
Construction Related Waste	<ul style="list-style-type: none"> Properly remove subsequent to construction projects 	<ul style="list-style-type: none"> All Highway Districts (1 – 10)
De-icing Material and Storage	<ul style="list-style-type: none"> Store de-icing material in a permanent storage structure or as per Attachment D of permit Use conveyor belts to transport de-icing material into the storage facility. Remove any salt that overtops the inner walls and exits the building Place hay bales and/or fabric material around storm drains that receive runoff 	<ul style="list-style-type: none"> All Highway Districts (1 – 10)

Standards and Specifications (general housekeeping)		Facility
	<ul style="list-style-type: none"> Inspect the roof, floors and walls of the storage buildings/barns for any leakage and upgrade, if needed 	
Street Sweepings	<ul style="list-style-type: none"> Cover and transport all waste to MC Reclamation Center Follow guidance in Appendix II of this plan 	<ul style="list-style-type: none"> All Highway Districts (1 – 10)
De-icing Vehicle Lubrication	<ul style="list-style-type: none"> Perform indoors, if practical Capture all excess lubricant for re-use or proper disposal Clean any drips or spills immediately. 	<ul style="list-style-type: none"> All Highway Districts (1 – 10)

Standards and Specifications (Maintenance and Inspection)		Facility
Maintenance and Inspection	<ul style="list-style-type: none"> Inspect dumpsters monthly to ensure they are properly covered (lids closed, where applicable) and are not leaking. Periodically check for leaks and damaged equipment and make repairs as necessary. Perform monthly inspections to ensure compliance with SOP 	<ul style="list-style-type: none"> Division of Fleet Services (Motor Pool, Body Shop, SCAT, Fueling Station, Vehicle Wash) Buildings and Grounds (Special Services) All Highway Districts (1 – 10)
	<ul style="list-style-type: none"> Wipe down the waste oil storage area daily of any residuals or small spills. Inspect salt storage area monthly and during deliveries (loading) and unloading activities 	<ul style="list-style-type: none"> Division of Fleet Services (Motor Pool, Body Shop, SCAT, Fueling Station, Vehicle Wash) All Highway Districts (1 – 10)

Standards and Specifications (Salt and De-icing Material Handling)		Facility
Salt Handling and Deliveries	<ul style="list-style-type: none"> During loading and unloading of salt and de-icing materials, prevent and/or minimize spills. If salt or de-icing materials are spilled, remove the materials using dry cleaning methods. Sweeping should be conducted as needed to get rid of dirt and other debris. Sweeping should also be conducted immediately following loading/unloading activities, when practical. Minimize the tracking of materials from storage and loading/unloading areas. Minimize the distance that salt and de-icing materials are transported during loading/unloading activities. Tarp any materials that are stored outside when not actively being used. 	<ul style="list-style-type: none"> All Highway Districts (1 – 10)

Standards and Specifications (Spill Response and Inspections)		Facility
Spill Response and Reporting	<ul style="list-style-type: none"> • Follow Spill Prevention Control and Countermeasure (SPCC) plan, if applicable. • Periodically check for leaks and damaged equipment and make repairs as necessary. • Inspect dumpsters monthly to ensure they are properly covered (lids closed, where applicable) and are not leaking. • Perform monthly inspections to ensure compliance with SOP 	<ul style="list-style-type: none"> • Division of Bridges Garage • Traffic Safety Unit Garage
	<ul style="list-style-type: none"> • Conduct clean-up of any spill(s) immediately after discovery. • Clean spills using dry cleaning methods only. • Dispose of contaminated absorbent material properly. • Dial 911 in case of an emergency. • Contact Monmouth County HAZMAT at 732-431-7456 • Notify the NJDEP at 1-877-WARNDEP for all spill emergencies. 	<ul style="list-style-type: none"> • Division of Fleet Services (Motor Pool, Body Shop, SCAT, Fueling Station, Vehicle Wash) • Buildings and Grounds (Special Services) • All Highway Districts (1 – 10)

Standard Operating Procedure - Best Management Practices De-Icing Material Storage Leachate



Monmouth County Highway Agency Facilities

Highway District #1	Belford, Middletown Township
Highway District #2	Freehold Township
Highway District #3	Tinton Falls Borough
Highway District #4	Allenwood, Wall Township
Highway District #5	Farmingdale Borough
Highway District #6	Eatontown Borough
Highway District #7	Cream Ridge, Upper Freehold Township
Highway District #8	Hazlet Township
Highway District #9	Freehold Township
Highway District #10	Marlboro Township
Division of Bridges	240 Center Street Complex, Freehold Township
Traffic Safety Unit	250 Center Street Complex, Freehold Township
Division of Fleet Services (Motor Pool, Body Shop and SCAT)	300 Halls Mills Road, Freehold Township
Buildings and Grounds (Special Services)	Belford, Middletown Township

Introduction and Purpose

This SOP-BMP contains the practices to address possible leachate bubbling from the surfaces surrounding the wooden barns storing de-icing material. These practices will be implemented upon discovery of the leachate. The purpose of this SOP is to provide a set of guidelines for all county employees at those yards where this condition may exist.

SCOPE

This SOP-BMP applies to all de-icing material storage barns within the Monmouth County Division of Highway where a dark-colored, viscous leachate may be periodically observed emanating from cracks in the asphalt surfaces and ground surfaces surrounding the wooden salt barns. It has been prepared to prevent the migration of the leachate and residue to nearby storm drains and other pervious areas.

Standards and Specifications	
AREAS SURROUNDING WOODEN SALT BARNs THAT EXHIBIT LEACHATE	<ul style="list-style-type: none">• Upon observation of possible leachate from the asphalt/ground surfaces, sand berms will be constructed and maintained on the downgradient side of the leachate impacted areas and immediately upgradient of nearby storm drains/outfalls.• Hay bales and/or fabric material will be placed at nearby storm drains/outfalls and will remain in place until the leachate has subsided.• A layer of sand will be spread over the impacted areas.• The sand will be collected via a street sweeper during routine sweeping of the facility, along with all saturated sands comprising the berms (at least monthly).• Saturated sands will be swept more frequently, as necessary.
MAINTENANCE AND INSPECTION	<ul style="list-style-type: none">• The sand berms, hay bales/fabric, and sand layer over the leachate will remain in place for the duration leachate is observed.• The efficacy of the sand in preventing the migration of the leachate will be evaluated weekly.• Additional sand will be applied, as needed, to prevent the migration of the leachate from the immediate area.

SPPP Form 18

Employee Training

Team Member/Title: : Gary Fread, Superintendent of Highway

Email: Gary.Fread@co.monmouth.nj.us

Phone: 732-431-6550 ext. 2429

Describe your employee training program. For each required topic, list the employees that will receive training on that topic, and the date the training will be held. Attach additional pages as necessary.

Monmouth County will conduct a training program for appropriate employees in accordance with topics contained in the permit. The coordinator for these trainings is Gary Fread, Superintendent of Highway. Sign-In sheets are attached to the SPPP.

Dates of employee training sessions are included in the Annual Report and Certification, previous years' Report and Certification are included in Appendix VI. An Employee Training Log Sign In Sheet is provided on the next page.

Topics to be covered under annual training as well as new hire training are:

WASTE DISPOSAL EDUCATION: Training will include how to respond to inquiries regarding proper waste disposal.

CONTROL MEASURES: Training will include an overview of the Pet Waste Control, Litter Control, Improper Waste Disposal Control, Wildlife Feeding Control and Illicit Connection Prohibition measures, where applicable. This overview will include requirements, enforcements policies and hazards associated with improper waste disposal.

VEGETATIVE WASTE: Training will include details on handling, storage and disposal of vegetative wastes and the frequency of pickups and schedules. Training shall also include alternatives such as composting and recycling.

ILLICIT CONNECTION ELIMINATION AND OUTFALL PIPE MAPPING: Training will include information regarding the hazards associated with illicit connections and details of the program including investigation techniques, physical observations, field sampling, and mapping procedures.

STREET SWEEPING: Training will include sweeping schedules and record keeping requirements.

ROAD EROSION CONTROL AND OUTFALL PIPE STREAM SCOURING REMEDIATION: Training will include identifying road erosion and outfall pipe scouring and repairs.

MAINTENANCE YARD OPERATIONS: Training will include de-icing material storage, fueling, vehicle maintenance; equipment/vehicle washing and good housekeeping stand operating procedures (SOPs).

Employee Training Log Sign In Sheet

COURSE TOPICS			
#1	Waste Disposal Education	#2	Control Measured
#3	Vegetative Waste	#4	Illicit Connection Elimination and Outfall Pipe Mapping
#5	Street Sweeping	#6	Stormwater Facility Maintenance
#7	Road Erosion Control and Outfall Pipe Scouring Remediation	#8	Maintenance Yard Operations
#9	Construction Activity/Post-Construction Stormwater Management		

SIGN IN SHEET				
Date	Print Name / Sign Name	Check all appropriate Topics		
		<input type="checkbox"/> Topic #1	<input type="checkbox"/> Topic #4	<input type="checkbox"/> Topic #7
		<input type="checkbox"/> Topic #2	<input type="checkbox"/> Topic #5	<input type="checkbox"/> Topic #8
		<input type="checkbox"/> Topic #3	<input type="checkbox"/> Topic #6	<input type="checkbox"/> Topic #9
		<input type="checkbox"/> Topic #1	<input type="checkbox"/> Topic #4	<input type="checkbox"/> Topic #7
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Employee Training Log Sign In Sheet

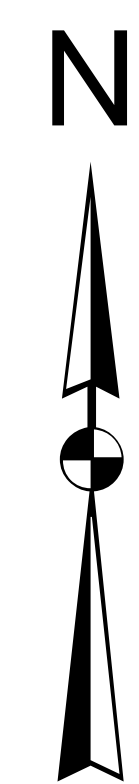
Employee Training Log Sign In Sheet				
Date	Print Name / Sign Name	Check all appropriate Topics		
		<input type="checkbox"/> Topic #1	<input type="checkbox"/> Topic #4	<input type="checkbox"/> Topic #7
		<input type="checkbox"/> Topic #2	<input type="checkbox"/> Topic #5	<input type="checkbox"/> Topic #8
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FIGURES

COUNTY OF MONMOUTH

Department of Public Works and Engineering

Division of Highways - District Maintenance Yards

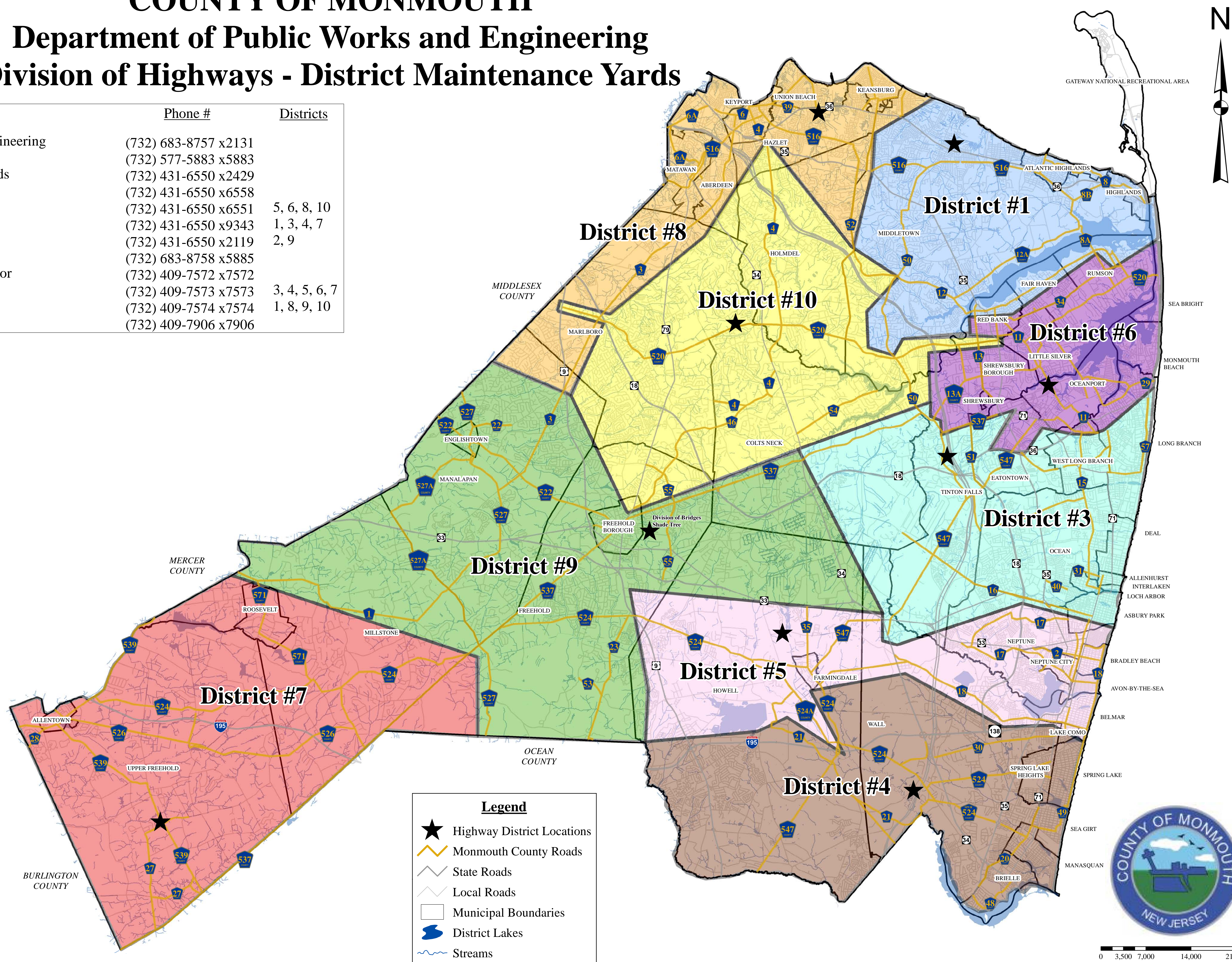


	Phone #	Districts
John Tobia, Director of Public Works & Engineering	(732) 683-8757 x2131	
James Cerreta, Assistant Director	(732) 577-5883 x5883	
Joseph Santora, County Superintendent Roads	(732) 431-6550 x2429	
Gary Fread, County Superintendent Roads	(732) 431-6550 x6558	
Ron Boyce, General Supervisor	(732) 431-6550 x6551	5, 6, 8, 10
Alex Whiteside, Acting General Supervisor	(732) 431-6550 x9343	1, 3, 4, 7
David Milmo, Acting General Supervisor	(732) 431-6550 x2119	2, 9
David Morris, Management Assisstant	(732) 683-8758 x5885	
Robert Dickerson, Supervising Road Inspector	(732) 409-7572 x7572	
Chris Lane, Senior Road Inspector	(732) 409-7573 x7573	3, 4, 5, 6, 7
Eric Zimmer, Road Inspector	(732) 409-7574 x7574	1, 8, 9, 10
Ellias Sarrinikolaou, Lanscape Architect	(732) 409-7906 x7906	

Revised: March 2018

COUNTY OF MONMOUTH
Division of Highways
(732) 431-6550

- District #1
Michael Ruscett, Supervisor - x8480
Michael DePalma, Act. Asst. Supervisor - x8480
218 East Road, Middletown, NJ
- District #2 (Construction, Milling, and Paving)
Donald Holmes, Act. Supervisor - x6676
Brian Ruggiero, Act. Asst. Supervisor - x6676
240 Center Street, Freehold, NJ
- District #3
Kevin Ortiz, Supervisor - x3783
Mark Koehler, Act. Asst. Supervisor - x5935
1160 Pine Brook Road, Tinton Falls, NJ
- District #4
Dominick Del Bene, Act. Supervisor - x6066
Robert Marshall, Act. Asst. Supervisor - x6066
2060 Hospital Road, Wall, NJ
- District #5
Scott Schmitt, Supervisor - x5550
Rich Kniesler, Asst. Supervisor - x5550
383 Cranberry Road, Farmingdale, NJ
- District #6
Kyle Kacicz, Supervisor - x9345
Jason Lawhon, Asst. Supervisor - x9345
750 Wilson Avenue, Eatontown, NJ
- District #7
Rich Floyd, Act. Supervisor - 609-758-8281
Steve Toporek, Asst. Supervisor - 609-758-8281
231 County Route 539, Upper Freehold, NJ
- District #8
Daniel Frizell, Supervisor - x6771
Ron Burkhardt, Act. Asst. Supervisor - x6771
1621 Union Avenue, Hazlet, NJ
- District #9
Nick Killmer, Supervisor - x6679
Charles Cocuzza, Act. Asst. Supervisor - x6679
240 Center Street, Freehold, NJ
- District #10
Pete Gray, Act. Supervisor - x4861
Steve Walters, Asst. Supervisor - x4861
690 County Route 520, Marlboro, NJ



Legend

- Highway District Locations
- Monmouth County Roads
- State Roads
- Local Roads
- Municipal Boundaries
- District Lakes
- Streams



0 3,500 7,000 14,000 21,000 Feet

Scale : 1" = 7,000' Date: March 29, 2018



HIGHWAY DISTRICT #1
BLOCK 302, LOT 8
218 EAST ROAD, MIDDLETOWN
MONMOUTH COUNTY, NEW JERSEY



HIGHWAY DISTRICT #3
1160 PINE BROOK ROAD
BLOCK 97; LOT 21.01
TINTON FALLS BORO MONMOUTH CNTY, NJ



SITE LOCATION



HOSPITAL RD

GARDEN STATE PARKWAY SECONDARY

GARDEN STATE PARKWAY

HIGHWAY DISTRICT #4
2060 HOSPITAL ROAD
BLOCK 957; LOT 5
WALL TOWNSHIP MONMOUTH CNTY, NJ



MONMOUTH COUNTY HIGHWAY DISTRICT #5
383 CRANBERRY RD, HOWELL TOWNSHIP
BLOCK 184 LOT 24.03
MONMOUTH COUNTY, NEW JERSEY



DISTRICT 6 GARAGE
BLOCK 301 LOT p/o 1
750 WILSON AVENUE
EATONTOWN BORO, MONMOUTH COUNTY, NJ



SITE LOCATION

HIGHWAY DISTRICT #7
231 ROUTE 539
BLOCK 39; LOTS 2 & 3
UPPER FREEHOLD TWP MONMOUTH CNTY, NJ



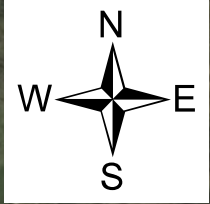
SITE LOCATION



HIGHWAY DISTRICT #8
BLOCK 120 LOT 1
1621 UNION AVENUE
HAZLET TWP, MONMOUTH COUNTY, NJ



DISTRICT 2, DISTRICT 9, DIV. OF BRIDGES, TRAFFIC SAFETY UNIT, 240 CENTER STREET
DIV. OF FLEET SERV., FUELING STATION, VEHICLE WASH 250 CENTER STREET
BLOCK 43 LOTS 16, 16.01, 18, 18.01
250 CENTER STREET
FREEHOLD TWP, MONMOUTH COUNTY, NJ



SITE LOCATION



HIGHWAY DISTRICT #10
BLOCK 157 LOT 11
690 ROUTE 520
MARLBORO TWP, MONMOUTH CTY, NJ



BUILDINGS AND GROUNDS (SPECIAL SERVICES)
BLOCK 78 LOT 8.02
300 HALLS MILL ROAD
FREEHOLD TWP, MONMOUTH COUNTY, NJ

APPENDIX I

Highway Agency Stormwater General Permit (NJ0141887)

FINAL - NJPDES Master General Permit Renewal

PART I NARRATIVE REQUIREMENTS:

A. Authorization Under this Permit

1. Permit Area

- a. This permit applies to all areas of the State of New Jersey.

2. Eligibility

- a. This permit may authorize all new and existing stormwater discharges to surface water and groundwater from small municipal separate storm sewer systems (MS4s) at highways or other thoroughfares owned or operated by a Highway Agency (Highway Agency) under N.J.A.C. 7:14A-25.2(a)3 except as provided in A.5 below.
- b. A "Highway Agency" is a county, State, interstate, or Federal agency that operates a small MS4 at a highway or other thoroughfare (including a maintenance or service facility or rest area for such a thoroughfare). For purposes of N.J.A.C. 7:14A-25 and this permit, a "highway or other thoroughfare" does not include:
 - i. Any thoroughfare confined to the grounds of a single building, or of two or more buildings that are not a "public complex" pursuant to N.J.A.C. 7:14A-25.2(a)2 (unless that building(s) is a maintenance or service facility for a highway or other thoroughfare not confined to such grounds);
 - ii. Any thoroughfare confined to the grounds of a "public complex" (each such thoroughfare is instead part of the "public complex"); or
 - iii. Any thoroughfare (other than the Palisades Interstate Parkway) confined to an officially designated park, forest, recreational area, natural area, wildlife management area, or set aside for water supply protection.
- c. On a case-by-case basis, the Department may use this permit to authorize new and existing stormwater discharges to surface water and groundwater from municipal separate storm sewers owned or operated by a county, State, interstate, or Federal agency at a thoroughfare identified under b.iii above, or by an agency (other than a county, State, interstate, or Federal agency) at a thoroughfare not identified under b.i or b.ii above. As used in this permit, the term "Highway Agency" includes such agencies, and the term "small MS4" includes such municipal separate storm sewers, pursuant to this provision of this permit. This provision does not apply to:
 - i. Any municipal separate storm sewer that is owned or operated by a municipality that is assigned to Tier A under N.J.A.C. 7:14A-25.3(a)1; or
 - ii. Any municipal separate storm sewer that is owned or operated by a municipality that is assigned to Tier B under N.J.A.C. 7:14A-25.3(a)2, unless the stormwater discharge from that sewer is identified under N.J.A.C. 7:14A-

APPENDIX I

25.2(a)4 (special designations) but the Department does not determine that such identification warrants assignment of the municipality to Tier A under N.J.A.C. 7:14A-25.3(a)1v.

- d. After the Effective Date of Permit Authorization (EDPA), the permit authorizes the following new and existing non-stormwater discharges from small MS4s owned or operated by Highway Agencies:
- i. Water line flushing and discharges from potable water sources
 - ii. Uncontaminated ground water (e.g., infiltration, crawl space or basement sump pumps, foundation or footing drains, rising ground waters)
 - iii. Air conditioning condensate (excluding contact and non-contact cooling water)
 - iv. Irrigation water (including landscape and lawn watering runoff)
 - v. Flows from springs, riparian habitats and wetlands, water reservoir discharges and diverted stream flows
 - vi. Residential car washing water, and residential swimming pool discharges
 - vii. Sidewalk, driveway and street wash water
 - viii. Flows from fire fighting activities including the washing of fire fighting vehicles
 - ix. Flows from rinsing of the following equipment with clean water:
 - Beach maintenance equipment immediately following their use for their intended purposes; and
 - 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 in the above situations is limited to exterior, undercarriage, and exposed parts and does not apply to engines or other enclosed machinery.
- e. If any of the discharges listed in 2.d above are identified by the Highway Agency as a significant contributor of pollutants to or from the MS4, the Highway Agency must address the discharge as an illicit connection or as an improper disposal of waste as specified in Part I, Section F of this permit.

3. Authorization

- a. In order to obtain authorization under this permit (except for automatic renewal of authorization under A.4 below) a complete Request for Authorization (RFA) shall be submitted in accordance with the requirements of this permit. Upon review of the RFA, the Department may, in accordance with N.J.A.C. 7:14A-6.13, either:

APPENDIX I

- i. Issue notification of authorization under this permit, in which case, authorization is deemed effective the first day of the following month of the date of the notification of authorization;
 - ii. Deny authorization under this permit and require submittal of an application for an individual permit; or
 - iii. Deny authorization under this permit and require submittal of an RFA for another general permit.
- b. For discharges from a small MS4 authorized by this permit, the Highway Agency is exempt from N.J.A.C. 7:14A-6.2(a)2. This exemption means that the discharge of any pollutant not specifically regulated in the NJPDES permit or listed and quantified in the NJPDES application or RFA shall not constitute a violation of the permit.
- c. Authorization under this permit shall cease to be effective under N.J.A.C. 7:14A-6.13(f), (h), (j) and (o), where applicable.

4. Automatic Renewal of Authorization

- a. Authorization under this permit will be automatically renewed when this general permit is reissued as provided by N.J.A.C. 7:14A-6.13(d)9 and 25.4(a)3 so long as the discharge authorized under the general permit continues to be eligible. The Department shall issue a notice of renewed authorization to the Highway Agency.
- b. If the Highway Agency is aware of any information in the most recently submitted RFA that is no longer true, accurate, and/or complete, the Highway Agency shall provide the correct information to the Department within 90 days of the effective renewal authorization notice.

5. Stormwater Discharges Not Authorized

- a. This permit does not authorize “stormwater discharge associated with industrial activity” as defined in N.J.A.C. 7:14A-1.2. Types of facilities that a Highway Agency may operate and that are considered to be engaging in “industrial activity” include but are not limited to certain landfills and recycling facilities, certain transportation facilities (including certain local passenger transit and air transportation facilities), certain facilities handling domestic sewage or sewage sludge, steam electric power generating facilities, and construction activity that disturbs five acres or more (see N.J.A.C. 7:14A-1.2 for the full definition of “stormwater discharge associated with industrial activity”). Any Highway Agency that operates an industrial facility with such a discharge must submit a separate request for authorization (RFA) or individual permit application for that discharge. An RFA submitted for the Highway Agency Stormwater General Permit does not qualify as an RFA for such a discharge.
 - i. Deadlines to apply for a NJPDES permit for “stormwater discharge associated with industrial activity” are set forth in N.J.A.C. 7:14A-24.4(a)1. If such a discharge is from a facility (other than an airport, powerplant, or uncontrolled sanitary landfill) that is owned or operated by a Highway Agency with a population of less than 100,000, the Highway Agency shall submit the RFA or individual permit application by March 3, 2004. If such a discharge is from any other industrial facility, N.J.A.C. 7:14A-24.4(a)1 specifies earlier deadlines to apply.

APPENDIX I

b. This permit does not authorize “stormwater discharge associated with small construction activity” as defined in N.J.A.C. 7:14A-1.2. In general, this is the discharge to surface water of stormwater from construction activity that disturbs at least one but less than five acres (see N.J.A.C. 7:14A-1.2 for the full definition). Any Highway Agency that operates a construction site with such a discharge must submit a separate RFA or individual permit application for that discharge. An RFA submitted for the Highway Agency Stormwater General Permit does not qualify as an RFA for such a discharge.

c. This permit does not authorize any stormwater discharge that is authorized under another NJPDES permit. A Highway Agency does not have to implement measures contained in this NJPDES permit for stormwater discharges at facilities owned or operated by that Highway Agency that are regulated under a separate NJPDES stormwater permit authorizing those discharges.

d. This permit does not authorize stormwater discharges from projects or activities that conflict with an adopted areawide or Statewide WQM plan.

B. Requests for Authorization Requirements

1. Deadline for Requesting Authorization for an Existing Discharge

a. An RFA for the existing discharges from the small MS4 owned or operated by a Highway Agency must be submitted to the Department on or before March 3, 2004, except as provided below.

i. The Department may, in its discretion, accept an RFA submitted after the foregoing deadline; however, the Highway Agency may still be held liable for violating the deadline to apply in accordance with N.J.A.C. 7:14A-25.4 and for discharging pollutants without a valid NJPDES permit in accordance with N.J.A.C. 7:14A-2.1(d).

2. Deadline for Requesting Authorization for a New Discharge

a. An RFA for discharges from a new small MS4 owned or operated by a Highway Agency must be submitted to the Department at least ninety (90) days prior to the operation of the new MS4 system.

i. A Highway Agency that already has authorization to discharge from a small MS4 under the Highway Agency Stormwater General Permit does not need to submit an additional RFA for the expansion of an existing small MS4.

ii. A new small MS4 is a small MS4 that did not exist on March 1, 2009 and results in a new discharge to surface or ground waters of the State.

3. Requesting Authorization

a. A separate RFA shall be submitted by each Highway Agency applying for authorization under this permit.

i. A single RFA may be submitted for the stormwater discharge from an entire small MS4 owned and operated by a Highway Agency, or the Highway Agency may divide the small MS4 into smaller regions and submit a separate RFA for each of these smaller regions.

- ii. The Department may choose to issue single or multiple authorizations under this permit to a Highway Agency regardless of whether the Highway Agency submitted a single or multiple RFAs.

4. Contents of the Request for Authorization

- a. A completed RFA shall include all of the following information regarding the Highway Agency and shall be completed using the Department's RFA form:
 - i. The name of the Highway Agency that operates the small MS4, and the address of the main Highway Agency office (or other appropriate office if the RFA is for a smaller region).
 - ii. The name and mailing address of the Stormwater Program Coordinator of the Highway Agency who will submit any reports or certifications required by the permit and to whom the Department shall send all correspondence concerning the permit.
 - iii. A certification acknowledging the best management practices and measurable goals specified in the permit.
 - iv. A list of the locations of any maintenance facilities, service areas, or rest stops on property owned or operated by the Highway Agency.
 - v. If the RFA is for a smaller region, a map identifying the region.
 - vi. A list of other NJPDES Stormwater Permits held by the Highway Agency.
 - vii. Additional information may be required by the Department to be included as part of the RFA if the Department determines that such additional information (including other data, reports, specifications, plans, permits, or other information) is reasonably necessary to determine whether to authorize the discharge under this permit.

5. Where to Submit

- a. A completed and signed RFA shall be submitted to the Department at the address specified on the Department's RFA form.

C. Definitions

1. The following definitions apply to this permit.

- a. "Catch Basin" means a cistern, vault, chamber or well that is usually built along a street as part of the storm sewer system to capture sediment, debris, and pollutants.
- b. "EDPA" means Effective Date of Permit Authorization.
- c. "Existing Highway Agency" means a Highway Agency that was authorized to discharge under the Highway Agency Stormwater General Permit on February 28, 2009 (or whose authorization to discharge under that permit was transferred from such a Highway Agency).
- d. "Illicit connection" means any physical or non-physical connection that discharges the following to a municipal separate storm sewer system, unless that discharge is authorized under a NJPDES permit other than the NJPDES permit for discharges from

APPENDIX I

that system (non-physical connections may include, but are not limited to, leaks, flows, or overflows into the municipal separate storm sewer system):

- i. Domestic sewage;
 - ii. Non-contact cooling water, process wastewater, or other industrial waste (other than stormwater); or
 - iii. Any category of non-stormwater discharges that a Highway Agency for the MS4 identifies as a source or significant contributor of pollutants pursuant to 40 C.F.R. 122.34(b)(3)(iii).
- e. “MS4” means a municipal separate storm sewer system.
- f. “Municipal separate storm sewer” means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains):
- i. Owned or operated by the United States, an interstate agency, a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe organization, or a designated and approved management agency under section 208 of the CWA that discharges to surface water or groundwater;
 - ii. Designed and used for collecting or conveying stormwater;
 - iii. Which is not a combined sewer;
 - iv. Which is not part of a POTW; and
 - v. Which is not either of the following:
 - A separate storm sewer(s) that is at an industrial facility, and that collects or conveys stormwater discharges associated with industrial activity that occurs at that facility; or
 - A separate storm sewer(s) that is at a construction site, and that collects or conveys stormwater discharges associated with small construction activity that occurs at that site.
- g. “New Highway Agency” means a Highway Agency that obtains its first authorization to discharge under the Highway Agency Stormwater General Permit after February 28, 2009 (unless that authorization was transferred from a Highway Agency that obtained that authorization before February 28, 2009).
- h. “Original EDPA” means the initial date of authorization to discharge under the Highway Agency Stormwater General Permit issued on February 2, 2004.
- i. “Permanent Structure” means a permanent building or permanent structure that is anchored to a permanent foundation with an impermeable floor, and that is completely roofed and walled (a door is recommended, but not required). A fabric frame structure is a permanent structure if it meets the following specifications:
- i. structure must be designed to withstand at least 110 mph winds;

APPENDIX I

- ii. structure must be covered by a PVC or other similar fire rated material with a minimum twenty (20) year warranty;
 - iii. concrete blocks, jersey barriers or other similar material must be placed around the interior of the structure to protect the side walls during loading and unloading de-icing materials;
 - iv. the design must prevent stormwater run-on and run through;
 - v. structure must be erected on an impermeable slab;
 - vi. structure cannot be open sided; and
 - vii. must have a roll up door or other means of sealing the access way from wind driven rainfall.
- j. “Small municipal separate storm sewer system” or “small MS4” means all municipal separate storm sewers (other than “large” or “medium” municipal separate storm sewer systems as defined in N.J.A.C. 7:14A-1.2) that are:
- i. Owned or operated by municipalities described under N.J.A.C. 7:14A-25.1(b);
 - ii. Owned or operated by county, State, interstate, or Federal agencies, and located at public complexes as described under N.J.A.C. 7:14A-25.2(a)2;
 - iii. Owned or operated by county, State, interstate, or Federal agencies, and located at highways and other thoroughfares as described under N.J.A.C. 7:14A-25.2(a)3; or
 - iv. Owned or operated by county, State, interstate, Federal or other agencies, and receive special designation under N.J.A.C. 7:14A-25.2(a)4.
- k. “Solid and floatable materials” means sediment, debris, trash, and other floating, suspended, or settleable solids.
- l. “Stormwater” means 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.
- m. “Stormwater facility” includes, but is not limited to: catch basins, detention basins, filter strips, riparian buffers, infiltration trenches, sand filters, constructed wetlands, wet basins, bioretention systems, low flow bypasses, and stormwater conveyances.
- n. “Yard waste” means loose leaves and grass clippings.

D. Special Conditions

1. Sharing of Responsibilities

- a. A Highway Agency may rely on another governmental, private, or nonprofit entity (for example, a watershed association) to satisfy the Highway Agency’s NJPDES permit obligations to implement one or more control measures (or components(s) thereof) pursuant to N.J.A.C. 7:14A-25.7(a) if:
 - i. The other entity, in fact, implements the measure(s), or component(s) thereof;

APPENDIX I

- ii. The particular measure(s), or component(s) thereof, is at least as stringent as the corresponding NJPDES permit requirement;
- iii. The other entity agrees in writing (or is required by law) to implement the measure(s), or component(s) thereof, on the Highway Agency's behalf. The Highway Agency is responsible for compliance with this permit if the other entity fails to implement the measure(s), or component(s) thereof. In the annual reports the Highway Agency must submit under Part I, Section H.3, the Highway Agency shall specify that it is relying on another entity to satisfy some of the Highway Agency's NJPDES permit obligations.
- iv. If the Highway Agency is relying on another entity regulated under the NJPDES permit program to satisfy all of that Highway Agency's NJPDES permit obligations, including that Highway Agency's obligation to file these annual reports, the Highway Agency shall notify the Department of this reliance in writing, and shall also note this reliance in the Highway Agency's SPPP.

E. Stormwater Program and Stormwater Pollution Prevention Plan

1. Stormwater Program

a. Highway Agencies are required to develop, implement, and enforce a stormwater program. This program shall be designed to reduce the discharge of pollutants from the Highway Agency's small MS4 to the maximum extent practicable, to protect water quality, and to satisfy the appropriate water quality requirements of the Federal Act and the State Act by including the Statewide Basic Requirements (SBRs) set forth in Part I, Section F and any Additional Measures (AMs) required under Part I, Section G below. At the Highway Agency's discretion, the stormwater program may also include Optional Measures (OMs) also in accordance with Part I, Section G below.

2. Stormwater Pollution Prevention Plan (SPPP)

a. Highway Agencies shall have prepared and implemented a written Stormwater Pollution Prevention Plan (SPPP) that describes the Highway Agency's stormwater program and serves as the mechanism for the implementation of the Statewide Basic Requirements. The SPPP must address stormwater quality issues related to new development, redevelopment and existing development. The SPPP shall include, at a minimum, all the items identified in Attachment A.

- i. Highway Agency's shall revise their SPPP on or before June 1, 2009 to incorporate additional Statewide Basic Requirements, best management practices and other changes required by the renewal of the Highway Agency Permit.
- ii. The SPPP shall be signed, dated and retained by the Stormwater Program Coordinator of the Highway Agency.

b. For any projects or activities which the Highway Agency contracts out to private contractors after the EDPA, the awarded contract must require the contractor to conduct projects or activities in a manner that complies with the Highway Agency's SPPP and this permit's conditions. The Highway Agency is responsible for any violations of this permit resulting from a contractor's noncompliance.

APPENDIX I

c. SPPPs may be amended so long as they continue to meet the requirements of this permit. Any amended SPPPs shall be signed, dated, implemented, retained, and otherwise treated in the same manner as the original SPPP. The Highway Agency shall retain each previous SPPP for a period of at least five years from the date of that previous SPPP. This period may be extended by written request of the Department at any time.

F. Statewide Basic Requirements (SBRs)

1. Stormwater quality issues related to new development, redevelopment and existing development at the Highway Agency's small MS4 are to be addressed through the implementation of the following Statewide Basic Requirements (SBRs). The permit specifies the BMPs that will be implemented for those SBRs. These SBRs and related BMPs are to be detailed in the Highway Agency's SPPP.

a. Additional information is provided and each of the SBRs and related BMPs are described in more detail in the Department's Highway Agency Stormwater Permit Guidance Document.

2. Public Notice

a. Minimum Standard - Highway Agencies shall comply with applicable State and local public notice requirements when providing for public participation in the development and implementation of the Highway Agency's stormwater program.

b. Measurable Goal - Highway Agencies shall certify annually that all applicable State and local public notice requirements were followed.

c. Implementation – On March 1, 2009 and thereafter.

3. Post-Construction Stormwater Management in New Development and Redevelopment

a. Minimum Standard - To prevent or minimize water quality impacts, the Highway Agency shall develop, implement, and enforce a program to address stormwater runoff from new development and redevelopment projects on property owned or operated by the Highway Agency that disturb one acre or more, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into the Highway Agency's small MS4. The Highway Agency shall in its post-construction program:

i. Comply with the applicable design and performance standards established under N.J.A.C. 7:8 for major development, unless:

- Those standards do not apply because of a variance or exemption granted under N.J.A.C. 7:8; or

- Alternative standards are applicable under an areawide or Statewide Water Quality Management Plan adopted in accordance with N.J.A.C. 7:15.

ii. Ensure adequate long-term operation and maintenance of BMPs.

iii. Comply with standards set forth in Attachment C of the permit to control passage of solid and floatable materials through storm drain inlets.

iv. Projects that do not require any Department permits (the term "permit", in this case, shall include transition area waivers under the Freshwater Wetlands Protection Act) under the Flood Hazard Area Control Act (N.J.S.A. 58:16A-50

APPENDIX I

et seq.), Freshwater Wetlands Protection Act (N.J.S.A. 13:9B-1 et seq.), Coastal Area Facility Review Act (N.J.S.A.:19-1 et seq.), or Waterfront and Harbor Facilities Act (N.J.S.A. 12:5-3) are not considered “new development or redevelopment projects” if construction began prior to 12 months from the original EDPA, or if the projects went to bid or had right-of-way authorization prior to the original EDPA.

- b. Measurable Goal – Highway Agencies shall certify annually that they have developed, implemented, and are actively enforcing a program to address stormwater runoff from new development and redevelopment projects in accordance with the minimum standard.
- c. Implementation - On March 1, 2009 and thereafter, Highway Agencies shall:
 - i. Implement applicable design and performance standards established under N.J.A.C. 7:8 for major development at the Highway Agency pursuant to 3.a.i. above.
 - ii. Comply with the standards set forth in Attachment C of the permit to control passage of solid and floatable materials through storm drainage inlets for storm drain inlets the Highway Agency installs within the Highway Agency’s small MS4.
 - iii. Ensure adequate long-term operation and maintenance of BMPs on property owned or operated by the Highway Agency.

4. Local Public Education

- a. Local Public Education Program
 - i. Minimum Standard –The Local Public Education Program shall describe how the Highway Agency will distribute educational information to appropriate users and employees of the Highway Agency to satisfy this minimum standard. The following SBR topics shall be included in the Local Public Education Program: Storm Drain Labeling, Pet Waste Control, Improper Waste Disposal Control and Wildlife Feeding Control.
To satisfy the requirement to distribute educational material, Highway Agencies shall provide information material in any form (e.g., calendars, brochures, signs, sheets, booklets) by locating this material at rest areas and service areas located along the Highway Agency’s small MS4.
 - ii. Measurable Goal - Highway Agencies shall certify annually that they have met the Local Public Education Program minimum standard.
 - iii. Implementation – On March 1, 2009 and thereafter, Highway Agencies shall comply with the Local Public Education Program minimum standard.
- b. Storm Drain Inlet Labeling and Maintenance
 - i. Minimum Standard - Highway Agencies shall label and maintain the legibility of labels on all storm drain inlets located at rest areas, service areas, maintenance facilities, and storm drain inlets along streets with sidewalks within the Highway Agency’s small MS4.

APPENDIX I

ii. Measurable Goal - Highway Agencies shall certify annually that a storm drain inlet labeling maintenance program has been developed and is being implemented.

iii. Implementation - Within 60 months from the original EDPA and thereafter, Highway Agencies shall ensure, for the storm drains identified in the minimum standard that all storm drain inlets are labeled and that the labels are being maintained.

5. Improper Disposal of Waste

a. Pet Waste Control

i. Minimum Standard - Highway Agencies shall, to the extent allowable under law, adopt and enforce an appropriate regulatory mechanism that requires pet owners or their keepers to immediately and properly dispose of their pet's solid waste deposited at rest areas and service areas within the Highway Agency's small MS4.

ii. Measurable Goal - Highway Agencies shall certify annually that they have met the Pet Waste Control minimum standard.

iii. Implementation - On March 1, 2009 and thereafter, Highway Agencies shall have fully implemented the Pet Waste Control minimum standard.

b. Litter Pick Up Program

i. Minimum Standard - Highway Agencies shall develop and implement a litter pick up program that includes roadside clean up of trash and debris and regular collection of refuse from litter receptacles owned and operated by the Highway Agency including those located at rest areas and service areas. Highway Agencies shall maintain records of roadside clean ups and estimates of the total amount of trash and debris collected.

ii. Measurable Goal - Highway Agencies shall certify annually that they have met the Litter Pick Up Program Control minimum standard and shall report dates of roadside clean ups and estimates of trash and debris collected.

iii. Implementation - On March 1, 2009 and thereafter, Highway Agencies shall have fully implemented the Litter Pick Up Program minimum standard.

c. Improper Waste Disposal Control

i. Minimum Standard - Highway Agencies shall, to the extent allowable under law, adopt and enforce an appropriate regulatory mechanism prohibiting the Highway Agency and its employees from the improper spilling, dumping, or disposal of materials other than stormwater into the Highway Agency's small MS4 (excluding those authorized in Part I, Section A.2.d). If the Highway Agency observes anyone else engaging in the improper spilling, dumping, or disposal of materials other than stormwater, the Highway Agency shall report the incident to the Department's Action Hotline (877-927-6337).

ii. Measurable Goal - Highway Agencies shall certify annually that they have met the Improper Waste Disposal Control minimum standard.

APPENDIX I

iii. Implementation - On March 1, 2009 and thereafter, Highway Agencies shall have fully implemented the Improper Waste Disposal Control minimum standard.

d. Wildlife Feeding Control

i. Minimum Standard - Highway Agencies shall, to the extent allowable under law, adopt and enforce an appropriate regulatory mechanism that prohibits the feeding on any property owned or operated by the Highway Agency of any wildlife (excluding confined animals, for example, wildlife confined in zoos, parks, or rehabilitation centers or unconfined wildlife at environmental education centers or feral cats as part of an approved Trap-Neuter-Release (TNR) program.)

ii. Measurable Goal - Highway Agencies shall certify annually that they have met the Wildlife Feeding Control minimum standard.

iii. Implementation - On March 1, 2009 and thereafter, Highway Agencies shall have fully implemented the Wildlife Feeding Control minimum standard.

e. Refuse Containers and Dumpsters

i. Minimum Standard - Highway Agencies shall ensure that dumpsters and other refuse containers that they own and operate, and that are outdoors or exposed to stormwater, are covered at all times, and prevent the spilling, dumping, leaking, or otherwise discharge of liquids, semi-liquids or solids from the containers (excluding temporary demolition containers, litter receptacles, and containers that hold large bulky items).

ii. Measurable Goal - Highway Agencies shall certify annually that they have met the Refuse Containers and Dumpsters minimum standard.

iii. Implementation - Highway Agencies shall have fully implemented the Refuse Containers and Dumpsters minimum standard on or before September 1, 2010.

6. Illicit Connection Elimination and MS4 Outfall Pipe Mapping

a. Minimum Standard

i. Storm Sewer Outfall Pipe Mapping – Highway Agencies shall complete and maintain an outfall pipe map showing the location of the end of all MS4 outfall pipes owned and operated by the Highway Agency which discharge to a surface water body (e.g., a lake, ocean, or stream including an intermittent stream).

ii. Prohibiting Illicit Connections - Each Highway Agency shall, to the extent allowable under law, effectively prohibit through an appropriate regulatory mechanism, illicit connections to the Highway Agency's small MS4, and implement appropriate enforcement procedures and actions.

iii. Illicit Connection Elimination Program – Highway Agencies must complete an initial physical inspection of all its outfall pipes and maintain an ongoing program to detect and eliminate illicit connections in accordance with the procedures found in Attachment B of the permit. The ongoing program will

APPENDIX I

respond to complaints and reports of illicit connections, including those from operating entities of interconnected small MS4s, and continue to investigate dry weather flows discovered during routine inspections and maintenance of the small MS4.

b. Measurable Goal

- i. Highway Agencies shall certify annually that an outfall pipe map has been completed or is being prepared in accordance with permit conditions and shall report the number of outfall pipes mapped within the year being reported and the total number of outfall pipes mapped to date.
- ii. Highway Agencies shall submit an annual certification to the Department certifying that an appropriate regulatory mechanism is in place prohibiting illicit connections and is being actively enforced.
- iii. Highway Agencies shall certify annually that an illicit connection elimination program has been developed in accordance with permit conditions to detect and eliminate illicit connections into the Highway Agencies' small MS4. Annual certifications shall also include the number of outfalls physically inspected, the number of outfalls found to have dry weather flow, the number of illicit connections found and the number of illicit connections eliminated. Copies of inspection reports shall be submitted with the annual certification for those outfalls found to have dry weather flow.

c. Implementation

- i. Storm Sewer Outfall Pipe Mapping – Within 60 months from the original EDPA, Highway Agencies shall have mapped the location of, and performed an initial inspection of, all outfall pipes subject to the minimum standard.
- ii. Ordinance Prohibiting Illicit Connections – On March 1, 2009 and thereafter, Highway Agencies shall have adopted and shall enforce a regulatory mechanism to prohibit illicit connections to the Highway Agency's small MS4.
- iii. Illicit Connection Elimination Program – On March 1, 2009 and thereafter, Highway Agencies shall continue to implement a program to detect and eliminate illicit connections into the Highway Agency's small MS4.

7. Solids and Floatable Controls

a. Street Sweeping

- i. Minimum Standard –
(For County Agencies Only) County Highway Agencies shall sweep, at a minimum of once per month (weather and street conditions permitting) all streets (including roads or highways) that meet all of the following criteria:
 - the street is owned or operated by the County Agency;
 - the street is curbed and has storm drains;
 - the street has a posted speed limit of 35 mph or less;
 - the street is not an entrance or exit ramp; and
 - the street is in a predominantly commercial area.

APPENDIX I

Highway Agencies other than County Highway Agencies shall sweep at a minimum of once per quarter (weather and street conditions permitting) all streets (including roads or highways) that meet all of the following criteria:

- the street is owned or operated by the Highway Agency;
- the street is curbed and has storm drains;
- the street has a posted speed limit of 35 mph or less;
- the street is not an entrance or exit ramp; and
- the street is in a predominantly commercial area.

All remaining streets (including roads or highways) that they own or operate shall be swept at a minimum of once every 2 years.

ii. Measurable Goal - Highway Agencies shall certify annually that they have met the Street Sweeping minimum standard. Highway Agencies must maintain records including the date and areas swept, number of miles of streets swept and the total amount of materials collected. Information shall be reported to the Department in the annual report and certification.

iii. Implementation - On March 1, 2009 and thereafter, Highway Agencies shall have fully implemented a street sweeping program that meets the minimum standard above.

b. Storm Drain Inlets

i. Minimum Standard - Retrofitting of existing storm drain inlets to meet the standard contained in Attachment C of the permit is required where such inlets are in direct contact with repaving, repairing (excluding repair of individual potholes), reconstruction, resurfacing (including top coating or chip sealing with asphalt emulsion or a thin base of hot bitumen), or alterations of facilities owned or operated by the Highway Agency. For exemptions to this standard, refer to "Exemptions" in Attachment C.

ii. Measurable Goal – Highway Agencies shall certify annually that such storm drain inlets have been retrofitted to meet the minimum standard contained in Attachment C, unless otherwise exempted.

iii. Implementation - On March 1, 2009 and thereafter, Highway Agencies shall retrofit all such storm drain inlets in accordance with the Storm Drain Inlets minimum standard.

c. Stormwater Facility Maintenance

i. Minimum Standard - Highway Agencies shall continue to implement a stormwater facility maintenance program for cleaning and maintenance of all stormwater facilities operated by the Highway Agency. Stormwater facilities include, but are not limited to: catch basins, detention basins, filter strips, riparian buffers, infiltration trenches, sand filters, constructed wetlands, wet ponds, bioretention systems, low flow bypasses, and stormwater conveyances. The stormwater facility maintenance must be performed as required to ensure the proper function and operation of the stormwater facility.

ii. Measurable Goal - Highway Agencies shall certify annually that all stormwater facilities are properly functioning in accordance with the minimum

APPENDIX I

standard. If stormwater facilities were found not to be functioning properly and repairs were not made, a schedule for such repairs shall be included in the annual report and certification. Highway Agencies shall also maintain records of inspections, maintenance and repairs that were performed which shall be reported in the annual report and certification.

iii. Implementation - On March 1, 2009 and thereafter, Highway Agencies shall have implemented a stormwater facility maintenance program in accordance with the minimum standard.

d. Catch Basin Inspection and Cleaning

i. Minimum Standard – Highway Agencies shall inspect all catch basins operated by the Highway Agency for accumulated sediment, trash, and debris; and clean those basins to remove sediment, trash, or debris (if any observed during inspection). Highway Agencies with:

- less than 10,000 catch basins shall annually inspect and (to the extent noted above) clean at least 2,000 catch basins, or as many catch basins as they own and operate.
- 10,000 or more catch basins shall inspect and (to the extent noted above) clean all catch basins that they own and operate by February 28, 2014.

ii. Measurable Goal – Highway Agencies shall certify annually that all municipally owned and operated catch basins have been inspected and cleaned, as necessary. Highway Agencies shall maintain records including the number of catch basins owned and operated, the number of catch basins inspected, the number of catch basins cleaned, and the amount of materials collected during catch basin cleaning activities. This information shall be reported in the annual report and certification.

iii. Implementation - On March 1, 2009 and thereafter, Highway Agencies shall inspect and clean all catch basins in accordance with the Catch Basin Inspection and Cleaning minimum standard.

e. Outfall Pipe Stream Scouring Remediation

i. Minimum Standard - Highway Agencies shall implement a stormwater outfall pipe scouring detection, remediation and maintenance program to detect and control localized stream and stream bank scouring in the vicinity of outfall pipes operated by the Highway Agency. This program shall identify all areas where localized stream and bank scouring occurs as a result of stormwater discharges from the Highway Agency's MS4. These areas shall then be prioritized and repairs shall be scheduled and completed. Repairs shall be made in accordance with the Standards for Soil Erosion and Sediment Control in New Jersey at N.J.A.C. 2:90-1 (e.g., Conduit Outlet Protection 12-1), or N.J.A.C. 16:25A where NJDOT is the Highway Agency.

ii. Measurable Goal - Highway Agencies shall certify annually that they have met the Outfall Pipe Stream Scouring Remediation minimum standard. In addition, the Highway Agency shall list the location of outfall scouring

APPENDIX I

identified, the dates control measures are to begin, and the dates any control measures were completed.

iii. Implementation - On March 1, 2009 and thereafter, Highway Agencies shall have implemented an outfall pipe stream scouring detection, remediation and maintenance program in accordance with the minimum standard.

f. Roadside Vegetation Management

i. Minimum Standard - Highway agencies shall implement a Roadside Vegetation Management Program that limits the application of herbicides and restricts the methods by which mulch is applied. Highway Agencies shall only apply herbicides in a 2 foot radius around structures where it is not practical to mow (such as around guardrails, signposts, telephone poles, etc.). If mulch is applied, it shall be stabilized in accordance with the Standards for Soil Erosion and Sediment Control in New Jersey N.J.A.C. 2:90-1 (or N.J.A.C. 16:25A where NJDOT is the Highway Agency) to prevent it from being washed away with stormwater into the waters of the State.

ii. Measurable Goal – Highway Agencies shall certify annually that they have met the Roadside Vegetation Management minimum standard.

iii. Implementation - On March 1, 2009 and thereafter, Highway Agencies shall have implemented the Roadside Vegetation Management minimum standard.

8. Maintenance Yard Operations (including Maintenance Activities at Service Areas, and Ancillary Operations)

a. De-icing Material Storage

i. Minimum Standard - Highway Agencies shall store salt and other de-icing materials in a permanent structure (a permanent building or permanent structure that is anchored to a permanent foundation with a impermeable floor, and that is completely roofed and walled) and shall perform regular maintenance and inspections of both the permanent structure and the surrounding area (see Good Housekeeping in Appendix D).

Sand may be stored outside and uncovered if a 50-foot setback is maintained from storm sewer inlets, ditches or other stormwater conveyance channels, and surface water bodies.

ii. Measurable Goal - Highway Agencies shall certify annually that they have met the De-icing Material Storage minimum standard.

iii. Implementation - On March 1, 2009 and thereafter, Highway Agencies shall store salt, and other de-icing materials in accordance with the De-icing Material Storage minimum standard.

b. Equipment and Vehicle Washing

i. Minimum Standard – Highway Agencies shall manage any equipment and vehicle washing activities so that there are no unpermitted discharges of wash wastewater to the surface or ground waters of the State.

Highway Agencies shall maintain a record of where and when equipment and

APPENDIX I

vehicle washing occurs to document proper management of wash water discharge.

ii. Measurable Goal - Highway Agencies shall certify annually that there is no unpermitted discharge from vehicle and equipment washing activities and describe the BMP implemented at each of the locations where vehicle and equipment washing activities occur.

iii. Implementation – On March 1, 2009 and thereafter, Highway Agencies shall manage any equipment and vehicle washing activities so that there are no unpermitted discharges of wash wastewater to the surface or ground waters of the State.

c. Standard Operating Procedures

i. Minimum Standard - Highway Agencies shall implement standard operating procedures, which include the required practices listed in Attachment D, for each of the following activities:

- Vehicle fueling and receiving of bulk fuel deliveries;
- Vehicle maintenance and repair activities; and
- Good housekeeping practices for all materials or machinery listed in the Inventory Requirements for Maintenance Yard Operations prepared in accordance with Attachment D.

ii. Measurable Goal - Highway Agencies must certify annually that there are standard operating procedures in place for vehicle fueling, vehicle maintenance, and good housekeeping practices.

iii. Implementation - On March 1, 2009 and thereafter, Highway Agencies shall implement the required standard operating procedures.

9. Employee Training

a. Minimum Standard - Highway Agencies shall conduct an annual employee training for all employees on those stormwater topics which are applicable to their job and title. At a minimum, annual employee training will include the following topics:

i. Waste Disposal Education – Training shall include how to respond to inquires regarding proper waste disposal.

ii. Control Measures – Training shall include an overview of proper disposal of pet waste and littering, negative effects of feeding wildlife, what are illicit connections, proper application, storage and disposal of fertilizer and pesticides; appropriate refuse containers and dumpsters, enforcement policy, and hazards associated with improper waste disposal.

iii. Roadside Vegetation Management – Training shall include herbicide and mulch application requirements.

iv. Illicit Connection Elimination and Outfall Pipe Mapping – Training shall include information regarding the hazards associated with illicit connections and details of the program including investigation techniques, physical observations, field sampling, and mapping procedures.

APPENDIX I

- v. Street Sweeping – Training shall include sweeping schedules and record keeping requirements.
 - vi. Stormwater Facility Maintenance - Training shall include catch basin cleaning schedules and record keeping requirements.
 - vii. Outfall Pipe Stream Scouring Remediation – Training shall include identifying outfall pipe scouring and repairs.
 - viii. Maintenance Yard Operations (including Ancillary Operations) – Training shall include de-icing material storage, fueling, vehicle maintenance, equipment/vehicle washing and good housekeeping SOPs, if applicable.
 - ix. Equipment and Vehicle Washing - Training shall include proper management of wash water discharge and record keeping requirements.
 - x. Construction Activity / Post-Construction Stormwater Management in New Development and Redevelopment – Training shall include information regarding the requirement to obtain a NJPDES construction activity stormwater permit (see Part I, Section A.5.a and A.5.b of this permit) and requirements for Post-Construction Stormwater Management in New Development and Redevelopment (See Part I, Section F.3 of this permit).
- b. Measurable Goal - Highway Agencies must certify annually the date of the annual employee training.
 - c. Implementation - On March 1, 2009 and thereafter, Highway Agencies shall implement employee training in accordance with the minimum standard.

10. Construction Site Stormwater Runoff Control

- a. Pursuant to N.J.A.C. 7:14A-25.6(b)2 and 25.7(b), the Department is responsible for developing, implementing, and enforcing a NJPDES permit program to reduce pollutants in stormwater runoff to small MS4s from construction activities. The Highway Agency is not required to include this SBR in its stormwater program or discuss this SBR in its SPPP.

G. Additional Measures and Optional Measures

1. Additional Measures

- a. Additional Measures (AMs) are non-numeric or numeric effluent limitations that are expressly required to be included in the stormwater program by an adopted areawide or Statewide Water Quality Management Plan (WQM plan). AMs may modify or be in addition to SBRs. AMs may be required by a TMDL approved or established by USEPA, a regional stormwater management plan, or other elements of adopted areawide or Statewide WQM plans.
- b. The Department will provide written notice of the adoption of an AM to each Highway Agency whose stormwater program will be affected, and will list each adopted AM in the permit by making a minor modification to the permit. The AMs, other than numeric effluent limitations, will specify the BMPs that must be implemented and the measurable goals for each BMP. The AMs will also specify time periods for implementation.

2. Optional Measures

- a. At the Highway Agency's discretion, the stormwater program may also include Optional Measures (OMs), which are BMPs that are not implemented for SBRs or AMs but that prevent or reduce the pollution of the waters of the State.

H. Deadlines and Certifications

1. Stormwater Pollution Prevention Plan

- a. On or before June 1, 2009, the Highway Agency shall revise their SPPP to incorporate changes required by the renewal of the Highway Agency Permit.
 - i. The SPPP shall include, at a minimum, all of the information and items identified in Attachment A. The SPPP shall be signed, dated and retained by the Highway Agency.

2. Statewide Basic Requirements

- a. Each SBR contained in Part I, Section F of the permit has a specific implementation schedule based on the effective date of permit authorization. Each SBR shall be implemented in accordance with that schedule. Highway Agencies shall certify in the Annual Report and Certification the status of the implementation of each SBR and the date implementation was completed, as appropriate.
 - i. The Department may grant a six-month extension to the deadlines contained in an implementation schedule for any of the SBRs if the Highway Agency submits a written request for such extension, at least 30 days prior to the deadline, establishing to the Department's satisfaction that the Federal, State and local permits and approvals necessary for the construction of best management practices could not with due diligence be obtained within the time period set forth in Section F above. The written request shall be submitted to:
NJDEP
Division of Water Quality
Bureau of Nonpoint Pollution Control
Municipal Stormwater Regulation Program
P.O. Box 029
Trenton, NJ 08625-0029

3. Annual Report and Certification

- a. Highway Agencies shall complete an Annual Report (on a form provided by the Department) summarizing the status of compliance with this permit including measurable goals and the status of the implementation of each SBR and BMP contained in Part I, Section F of the permit. This report shall include a certification that the Highway Agency is in compliance with its stormwater program, SPPP and this permit, except for any incidents of noncompliance. Any incidents of noncompliance with permit conditions shall be identified in the Annual Report and Certification. A copy of each Annual Report and Certification shall be kept at a central location and shall be made available to the Department for inspection.
 - i. If there are incidents of noncompliance, the report shall identify the steps being taken to remedy the noncompliance and to prevent such incidents from recurring.

APPENDIX I

- ii. The Annual Report and Certification shall be signed and dated by the Highway Agency, and shall be maintained for a period of at least five years. This period may be extended by written request of the Department at any time.
- b. The Annual Report and Certification shall be submitted to the Department pursuant to the following submittal schedule:
 - i. Submit an Annual Report and Certification: on or before every May 2nd annually.
 - ii. The Annual Report and Certification shall include information for activities and projects conducted by the Highway Agency between January 1 and December 31 of each reporting year.

I. Standard Conditions

1. The following general conditions are incorporated by reference. The Highway Agency is required to comply with the regulations, which were in effect as of March 1, 2009.

- a. General Permits N.J.A.C. 7:14A-6.13
- b. Penalties for Violations N.J.A.C. 7:14-8.1 et seq.
- c. Incorporation by Reference N.J.A.C. 7:14A-2.3
- d. Toxic Pollutants N.J.A.C. 7:14A-6.2(a)4i
- e. Duty to Comply N.J.A.C. 7:14A-6.2(a)1 & 4
- f. Duty to Mitigate N.J.A.C. 7:14A-6.2(a)5 & 11
- g. Inspection and Entry N.J.A.C. 7:14A-2.11(e)
- h. Enforcement Action N.J.A.C. 7:14A-2.9
- i. Duty to Reapply N.J.A.C. 7:14A-4.2(e)3
- j. Signatory Requirements for Applications and Reports N.J.A.C. 7:14A-4.9
- k. Effect of Permit/Other Laws N.J.A.C. 7:14A-6.2(a)6 & 7 & 2.9(c)
- l. Severability N.J.A.C. 7:14A-2.2
- m. Administrative Continuation of Permits N.J.A.C. 7:14A-2.8
- n. Permit Actions N.J.A.C. 7:14A-2.7(c)
- o. Reopener Clause N.J.A.C. 7:14A-6.2(a)10, 16.4(b) & 25.7(b)
- p. Permit Duration and Renewal N.J.A.C. 7:14A-2.7(a) & (b)
- q. Consolidation of Permit Process N.J.A.C. 7:14A-15.5
- r. Confidentiality N.J.A.C. 7:14A-18.2 & 2.11(g)
- s. Fee Schedule N.J.A.C. 7:14A-3.1
- t. UIC Corrective Action N.J.A.C. 7:14A-8.4
- u. Additional Conditions Applicable to UIC Permits N.J.A.C. 7:14A-8.9
- v. UIC Operating Criteria N.J.A.C. 7:14A-8.16

APPENDIX I

2. Operation And Maintenance

- a. Need to Halt or Reduce not a Defense N.J.A.C. 7:14A-2.9(b)
- b. Proper Operation and Maintenance N.J.A.C. 7:14A-6.12

3. Monitoring And Records

- a. Monitoring N.J.A.C. 7:14A-6.5
- b. Recordkeeping N.J.A.C. 7:14A-6.6
- c. Signatory Requirements for Monitoring Reports N.J.A.C. 7:14A-6.9

4. Reporting Requirements

- a. Planned Changes N.J.A.C. 7:14A-6.7
- b. Reporting of Monitoring Results N.J.A.C. 7:14A-6.8
- c. Noncompliance Reporting N.J.A.C. 7:14A-6.10 & 6.8(h)
- d. Hotline/Two Hour & Twenty-four Hour Reporting N.J.A.C. 7:14A-6.10(c) & (d)
- e. Written Reporting N.J.A.C. 7:14A-6.10(e) & (f) & 6.8(h)
- f. Duty to Provide Information N.J.A.C. 7:14A-2.11, 6.2(a)14 & 18.1
- g. Compliance Schedules N.J.A.C. 7:14A-6.4
- h. Transfer N.J.A.C. 7:14A-6.2(a)8 & 16.2

5. Copies of the NJPDES rules may be purchased by contacting Lexis Nexis – Customer Service at (800) 223-1940, or go to the Lexis Nexis bookstore on the internet at www.lexisnexis.com/bookstore.

J. Additional Conditions

1. Agency and Public Review

- a. The Highway Agency shall make the SPPP available upon request to an authorized representative of the Department and to the owner of and operating entity for any municipal separate storm sewer system that receives discharges from the Highway Agency's small MS4.
- b. Upon review by an authorized representative, the Department may notify the Highway Agency at any time that the SPPP does not meet one or more of the minimum requirements. Within 30 days after receiving such notification (unless otherwise specified by the Department), the SPPP shall be amended to adequately address all deficiencies, and written certification of such amendments shall be submitted to the Department.
- c. Highway Agencies shall make records required by this permit, including its SPPP, available to the public at reasonable times during regular business hours (see N.J.A.C. 7:14A-18 for confidentiality provisions).

2. Other Laws

- a. In accordance with N.J.A.C. 7:14A-6.2(a)7, this permit does not authorize any infringement of State or local law or regulations, including, but not limited to the Pinelands rules (N.J.A.C. 7:50), N.J.A.C. 7:1E (Department rules entitled "Discharges

APPENDIX I

of Petroleum and other Hazardous Substances"), the New Jersey Register of Historic Places Rules (N.J.A.C. 7:4), and all other Department rules. No discharge of hazardous substances (as defined in N.J.A.C. 7:1E-1.6) resulting from an onsite spill shall be deemed to be "pursuant to and in compliance with [this] permit" within the meaning of the Spill Compensation and Control Act at N.J.S.A. 58:10-23.11c.

3. Operations and Maintenance Manual

a. In accordance with N.J.A.C. 7:14A-6.12(c), for a discharge authorized by this permit, the Highway Agency is exempt from the requirement to prepare an operations and maintenance manual.

Attachment A

CONTENTS OF THE STORMWATER POLLUTION PREVENTION PLAN

A. SPPP Team

1. The Stormwater Pollution Prevention Plan (SPPP) shall identify the person or persons responsible for implementing or coordinating the SPPP activities (including, at the Highway Agency's discretion, OMs).

B. Description of Required Best Management Practices

1. The SPPP shall identify and discuss each Statewide Basic Requirement (SBR) and best management practice (BMP) required by the Highway Agency Stormwater General Permit.
2. The SPPP shall identify and discuss each Additional Measure (AM), if any, required by the Highway Agency Stormwater General Permit.
3. The SPPP shall identify and discuss any Optional Measures (OMs) the Highway Agency chooses to include in its stormwater program.
4. For each SBR, AM, or OM included in the Highway Agency's stormwater program, the SPPP shall:
 - a. Describe the method of implementation;
 - b. Include detailed record keeping, as appropriate or as required;
 - c. Include an implementation schedule consistent with permit requirements, including interim milestones;
 - d. Include any special diagrams required by the permit (i.e., Storm Drain Inlet Labeling and Illicit Connection Elimination and MS4 Outfall Pipe Mapping);
 - e. Sharing responsibilities (If the Highway Agency wants to share responsibilities for implementing one or more control measures (other than OMs) with one or more other entities pursuant to N.J.A.C. 7:14A-25.7(a), the SPPP must describe which measure(s) the Highway Agency will implement, and identify the entity(ies) that will implement the other measure(s));
 - f. Maintenance schedules, as appropriate; and
 - g. Inspection schedules, as appropriate.

C. Identifying Areas Served by Combined Sewer

1. Highway Agencies that want to exclude any "combined sewer area" from the stormwater program must include a map showing the boundaries of the combined sewer area. A "combined sewer area" is an area that is excluded because all stormwater from that area (and operated by the Highway Agency) is discharged to combined (or sanitary) sewer systems.

Attachment B

PROCEDURES FOR DETECTING, INVESTIGATING, AND ELIMINATING ILLICIT CONNECTIONS

Detection

An illicit connection for the purposes of this permit, is 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 Highway Agency's small MS4, unless that discharge is authorized under a NJPDES permit other than this Highway Agency Stormwater General Permit (non-physical connections may include, but are not limited to, leaks, flows, or overflows into the municipal separate storm sewer system). An illicit connection is also any category of non-stormwater discharges that a Highway Agency identifies as a source or significant contributor of pollutants pursuant to 40 C.F.R. 122.34(b)(3)(iii).

MS4 outfall pipes, for the most part, should not be discharging during substantial dry periods (72 hours after a rain event). Such flow is frequently referred to as "dry weather flow", which may be the result of an illicit connection. All dry weather flows are generally non-stormwater discharges, however not all dry weather flows are illicit connections. Some non-stormwater flows result from the improper disposal of waste (e.g., radiator flushing, engine degreasing, improper disposal of oil) and some may be the result of allowable discharges such as residential car washing, irrigation runoff, permitted (NJPDES) discharges and natural waters (e.g., spring water and groundwater infiltration). By using the Department's Illicit Connection Inspection Report form and making physical observations, a Highway Agency will compile information that will help determine if the dry weather flow is an illicit connection and the most likely source of the illicit connection. After making these physical observations, additional chemical field testing will enable a Highway Agency to further narrow the potential sources of the illicit connection.

The first physical observation is to observe if there is a dry weather flow. Some dry weather discharges are continuously flowing and some are intermittent. Observations will allow the Highway Agency to establish with reasonable certainty if there is an intermittent flow. If there are indications of intermittent flows (staining, odors, deterioration of outfall structure) follow-up investigations are required (see Investigation section). An estimate of the flow rate of the discharge shall also be noted (flow rate can be estimated by various methods, including timing how long it takes to fill a container of a known size). Additional physical observations and measurements shall be made for odor, color, turbidity, floatable matter, temperature, deposits and stains, vegetation and algal growth, and condition of outfall structure (see Illicit Connection Inspection Report form). Information compiled from physical observations and field monitoring should be used to help identify potential sources. These observations are very important since they are the simplest method of identifying grossly contaminated dry weather flows. If physical observations alone are sufficient to warrant further investigation, then field testing is not required.

If a dry weather flow exists and after making all physical observations (unless physical observations are enough to warrant further investigation), the Highway Agency shall field test for surfactants (detergents). If these flows contain surfactants in excess of the detection limit, Highway Agencies shall field test for ammonia (as N) and potassium to help distinguish sanitary wastewater sources from other non-stormwater flows that contain detergents. Non-stormwater discharges that are absent of surfactants shall be tested for fluoride to help distinguish potable from

APPENDIX I

non-potable sources. Highway Agencies should refer to the “Highway Agency Stormwater General Permit Guidance Manual” for assistance and interpretation of field testing results.

All of the tests for the tracing of illicit connections may be performed in the field by employees of the Highway Agency or may be contracted out. Lab certification for those parameters is **not** required, however all person(s) responsible for calibrating, maintaining, and taking field samples shall be trained in the use of the equipment and appropriate field testing protocol.

Investigation

Any storm sewer outfall pipe found during the initial inspection or on any subsequent inspection to have a non-stormwater discharge or indications of an intermittent non-stormwater discharge requires further investigation by the Highway Agency to identify and locate the specific source. Non-stormwater discharges suspected of being sanitary sewage and/or significantly contaminated shall be prioritized and investigated first. Investigations of non-stormwater discharges suspected of being cooling water, washwater, or natural flows may be delayed until after all suspected sanitary sewage and/or significantly contaminated discharges have been investigated, eliminated and/or resolved.

Dry weather flows believed to be an immediate threat to human health or the environment shall be reported immediately to the Department’s Action Hotline at 1-877-WARNDEP (1-877-927-6337).

Physical observations and field testing can help narrow the identification of potential sources of a non-stormwater discharge. However it is unlikely that either will pinpoint the exact source. Therefore, Highway Agencies will need to perform investigations “upstream” to identify illicit connections to systems with identified problem outfalls.

All non-stormwater discharges, whether continuous or intermittent must be investigated by the Highway Agency. All investigations must be resolved. If the source is found to be a non-stormwater discharge authorized under Part I, Section A.2.d of the permit, no further action is required. If a non-stormwater discharge is found but no source is able to be located within six (6) months of beginning the investigation, then the Highway Agency shall submit to the Department a Closeout Investigation form to close out the investigation. The Highway Agency must document that a good faith effort was made to find the source of the dry weather discharge and document each phase of the investigation. If the observed discharge is intermittent the Highway Agency must document, in the Illicit Connection Inspection Report form, that a minimum three (3) separate investigations were made to observe the discharge when it is flowing. If these attempts are unsuccessful, the Highway Agency shall submit to the Department the Closeout Investigation form noted above. However, since this is an ongoing program, the Highway Agency should periodically recheck these suspected intermittent discharges.

Elimination

Non-stormwater discharges traced to their source and found to be the Highway Agency’s own illicit connections shall be eliminated within six (6) months of their discovery. The Highway Agency may apply for a NJPDES permit for the discharge, but the discharge shall be ceased until a valid NJPDES permit has been issued by the Department. Highway Agencies are required to verify that the illicit discharge was eliminated within the specified timeframe and ensure that

APPENDIX I

measures taken to eliminate the discharge are permanent and are not done in such a manner that would allow easy reconnection to the MS4.

If an illicit connection cannot be located or is found to emanate from an entity other than the Highway Agency then the Highway Agency must submit to the Department a written explanation detailing the results of the investigation. If the illicit connection is found to be from another public entity, the Highway Agency shall also notify that entity.

Attachment C

DESIGN STANDARD - STORM DRAIN INLETS

This standard applies to storm drainage inlets installed as part of new development and redevelopment projects that disturb one acre or more. In addition, retrofitting of existing storm drainage inlets to this standard is required where such inlets are in direct contact with repaving, repairing (excluding repair of individual potholes), reconstruction or alterations of facilities owned or operated by the Highway Agency. For exemptions to this standard see "Exemptions" below.

Grates in Pavement or Other Ground Surfaces

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).
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.

(In regard to whether the different grate must also be bicycle safe, the Residential Site Improvement Standards include requirements for bicycle-safe grates.)

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.

Curb-Opening Inlets (Including Curb-Opening Inlets in Combination Inlets)

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.

Exemptions

Retrofitting Exemptions

1. Repaving, repairing, reconstruction or alterations projects that began construction prior to March 3, 2004, and projects that were awarded bid prior to March 3, 2004, are exempted from the storm drain inlet design standard.
2. Existing curb-opening inlets do not need to be retrofitted to meet the design standard if each individual clear space in the curb opening has an area of no more than nine (9.0) square inches.

APPENDIX I

Hydraulic Performance Exemptions

1. New Development and Redevelopment Projects - 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 drainage inlets that meet these standards.
2. Retrofitting of existing storm drain inlets - Where the review agency determines that this standard would cause inadequate hydraulic performance.

Alternative Device Exemptions

1. Where flows from the water quality design storm as specified in N.J.A.C. 7:8 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.
2. 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 N.J.A.C. 7:8.

Note - The preceding exemptions do not authorize any infringement of requirements in the Residential Site Improvement Standards for bicycle-safe grates in new residential development (N.J.A.C. 5:21-4.18(b)2 and 7.4(b)1).

Historic Places Exemption

Where the Department 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.

Attachment D
REQUIRED PRACTICES FOR FUELING OPERATIONS, VEHICLE
MAINTENANCE, AND GOOD HOUSEKEEPING SBRs

D. The following BMPs must be implemented at maintenance yards, including maintenance activities at Service Areas and ancillary operations (for example, impound yards, solid waste transfer stations, mobile fueling), where applicable, that are operated by the Highway Agency:

1. Inventory Requirements for Maintenance Yard Operations (including Service Areas, and Ancillary Operations)

- a. Highway Agencies shall include for maintenance yard operations an inventory that includes the following:
 - i. A list to be made part of the SPPP of general categories of all materials or machinery located at the maintenance yard, 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 maintenance yard operations or ancillary operations. Materials or machinery that are not exposed to stormwater or that are not located at the maintenance yard or related to its operations do not need to be included.

2. Fueling

- a. No topping off vehicles, mobile fuel tanks, and storage tanks. Drip pans must be used under all hose and pipe connections and other leak-prone areas during bulk transfer of fuels.
- b. During bulk transfer block storm sewer inlets, or contain tank with temporary berms or temporary absorbent booms during the transfer process. If temporary berms are being used instead of blocking the storm sewer inlets, all hose connection points associated with the transfer of fuel must be within the temporary berms during the loading/unloading of bulk fuels. A trained employee must always be present to supervise during bulk fuel transfer.
- c. Clearly post, in a prominent area of the facility, instructions for safe operation of fueling equipment, and appropriate contact information for the person(s) responsible for spill response.
- d. Any equipment, tanks, pumps, piping and fuel dispensing equipment found to be leaking or in disrepair must immediately be repaired or replaced.

3. Vehicle Maintenance

- a. Perform all vehicle and equipment maintenance at an indoor location with a paved floor whenever possible. For projects that must be performed outdoors that last more than one day, portable tents or covers must be placed over the equipment being serviced when not being worked on, and drip pans must be used.

4. General Good Housekeeping

- a. Properly mark or label all containers. Labels must be kept clean and visible. All containers must be kept in good condition and tightly closed when not in use. When practical, containers must be stored indoors. If indoor storage is not practical, containers may be stored outside as long as they are covered and placed on spill platforms. An area that is graded and/or bermed that prevents run-through of stormwater may be used in place of spill platforms. Outdoor storage locations must be regularly maintained.
- b. Conduct cleanups of any spills or liquids or dry materials immediately after discovery. Clean all maintenance areas with dry cleaning methods only. Spills shall be cleaned up with a dry, absorbent material (i.e., kitty litter, sawdust, etc.) and the rest of the area is to be swept. Collected waste is to be disposed of properly. Clean-up materials, spill kits and drip pans must be kept near any liquid transfer areas, protected from rainfall.

5. Good Housekeeping Practices for Salt and De-icing Material Handling

- a. The SPPP for De-icing Material Storage shall include the following required practices to ensure that Maintenance Yard Operations prevent or minimize the exposure of salt and de-icing materials to stormwater runoff from storage, loading and unloading areas and activities:
 - i. Prevent and/or minimize the spillage of salt and de-icing materials during loading and unloading activities.
 - ii. At the completion of loading and unloading activities, spilled salt and de-icing materials shall be removed using dry cleaning methods and either reused or properly discarded.
 - iii. Sweeping by hand or mechanical means of storage and loading/unloading areas shall be done on a regular basis. More frequent sweeping is required following loading/unloading activities. Sweeping shall also be conducted immediately following, as practicable, loading/unloading activities.
 - iv. Tracking of materials from storage and loading/unloading areas shall be minimized.
 - v. Minimize the distance salt and de-icing materials are transported during loading/unloading activities.
- b. Interim Seasonal Tarping - All Highway Agencies must tarp all de-icing materials until a permanent structure is built. Interim storage measures must include, but are not limited to the following:
 - i. Tarping materials that are not actively being used.
 - ii. The storage of de-icing materials (salt and de-icing products) outside is limited to October 15th through April 30th. All salt and de-icing materials must be removed from the site prior to May 1st and may not be stored outside again until October 15th.
 - iii. The implementing of a regular inspection, sweeping and housekeeping program to ensure that the material is maintained and stored in a proper manner.

6. Inspections

a. Inspections of all Municipal Maintenance Yard Operations shall be conducted regularly.

b. Discharge of Stormwater from Secondary Containment

i. The discharge pipe/outfall from a secondary containment area must have a valve and the valve must remain closed at all times except as described below. A Highway Agency may discharge stormwater that accumulated in the 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 Highway Agency must rely on previous tank inspections to determine with some degree of certainty that the tank has not leaked. If the Highway Agency 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 should be hauled for proper disposal.

APPENDIX II

APPENDIX II

Solid and Hazardous Waste Management Program
Bureau of Landfills and Hazardous Waste Permitting
P.O. Box 420
Mail Code: 401-02C
401 East State Street, 2nd Floor, West Wing
Trenton, New Jersey 08625-0420
Telephone: (609) 984-6985 Fax: (609) 633-9839
<http://www.nj.gov/dep/dshw/lhwp/index.html>

Guidance Document for the Management of Street Sweepings and Other Road Cleanup Materials

(Updated 10/16/2013)

This document presents guidance for the handling, characterization and management of street sweepings and other road cleanup materials (road cleanup materials) to provide options for the use and management of the material without direct oversight of the New Jersey Department of Environmental Protection (Department or DEP). These materials would otherwise be waste, and may include but be limited to street sweepings, storm sewer clean out materials, retention basin clean out materials and other similar road wastes. Wastes removed from municipal sanitary sewer systems (a.k.a. municipal wastewater systems) are not included in these types of wastes.

Road cleanup materials may be considered as one of two categories as a function of the type and amount of contaminants present. These are as follows: 1) Road cleanup material that contain hazardous waste, and 2) Road cleanup material classified as waste type ID 10 municipal solid waste (i.e., materials that may contain contaminants above or below regulatory concern).

This guidance must be consulted in conjunction with the solid waste regulations at N.J.A.C. 7:26 et seq. For the reader's convenience, an unofficial version of N.J.A.C. 7:26 et seq. can be found using the "NJ Regulations" selection on the Department's Solid and Hazardous Waste Management Program web page at <http://www.state.nj.us/dep/dshw> or directly by using the Web link <http://www.state.nj.us/dep/dshw/resource/rules.htm>. These are courtesy copies of the adoption. The official versions of these rules were published in the New Jersey Register. Should there be any discrepancies between this text and the official version of the adoption, the official version will govern. For more information, see the New Jersey Office of Administrative Law's Rules page. To obtain official copies of these regulations consult the NJDEP Office of Legal Affairs' How to Get Copies of Departmental Rules page at http://www.state.nj.us/dep/legal/get_rule.htm.

I. INTRODUCTION & BACKGROUND:

The DEP is very interested in supporting the beneficial use of solid wastes such as road cleanup material whenever feasible. To assure that these uses are protective of human health and the environment, uses of road cleanup material should be approved by DEP for consistency with Department policies, guidance (e.g., this document) and Departmental regulations. In many instances, road cleanup materials are known to contain elevated concentrations of contaminants such as lead and organic compounds associated with petroleum products, which above certain levels are known to be hazardous to human health. Therefore, uses of road cleanup material should be managed in order to manage the risks posed to human health and the environment.

Many beneficial uses of road cleanup material involve some form of land application, some of which may require the Department's authorization. When solid wastes like road cleanup material are used beneficially in land application they are exempted from regulation as solid waste and thus, will herein be referred to as "materials". The process of using road cleanup material either with or without case-by-case Departmental review for land application and other uses is outlined below.

APPENDIX II

When collected in the course of cleaning the state's streets, storm basins and storm sewers, road cleanup materials are classified as waste type ID 10 municipal solid waste as defined and regulated at N.J.A.C. 7:26-1.1 et seq. Normally, road cleanup material classified as ID 10, as well as other types of solid wastes, must be directed to a solid waste facility permitted to receive such waste for disposal. However, an exemption to solid waste regulation at N.J.A.C. 7:26-1.1(a)1 is allowed for solid waste, separated at the point of generation, that is sent to an approved facility for use or reuse as raw materials or directly as products. It is this exemption process and the associated beneficial use regulations found at N.J.A.C.7:26-1.7(g) that allows road cleanup material to be authorized for beneficial uses exempt from waste flow and solid waste disposal regulations. Also exempted from solid waste regulations is waste managed and manifested as hazardous waste in accordance with the rules and regulations as set forth at N.J.A.C. 7:26G-1.1 et seq., and transported directly to a hazardous waste facility from the point of generation.

II. CONTAMINANT STANDARDS:

This section describes the basis for DEP's application of contaminant standards to road cleanup material. The DEP has adopted site cleanup standards that form the basis for developing more specific regulations for the use or reuse of materials contaminated with hazardous substances. For further guidance in this area, these standards are specified and referenced at N.J.A.C. 7:26D, the Remediation Standards adopted June 2, 2008.. A copy of the latest Site Remediation Standards (SRS) is available at the Department's web site at <http://www.nj.gov/dep/srp/regs/rs/>.

In view of the health-based criteria set forth in the SRS for contaminated sites and the available analytical data for typical road cleanup materials, the contaminants in road cleanup material are not consistently at sufficiently low levels to allow uncontrolled use. The DEP is concerned about spikes of high concentrations of petroleum hydrocarbons such as gasoline, oils, the organic compounds found in asphalt, or other contaminants such as lead that typically occur in road cleanup materials. Road cleanup material should also be classified to determine whether the waste is hazardous waste required to be regulated as hazardous waste per N.J.A.C. 7:26G. Road wastes are normally not sufficiently contaminated to prevent their use under controlled circumstances per this guidance. Therefore, given the limited contaminant characterization data available, approvals for use of road cleanup material containing aggregate contaminants at a level exceeding the most stringent latest available SRS for guidance are reviewed on a case-by-case basis by the Bureau of Landfill and Hazardous Waste Permitting (BLHWP)..

Blanket approvals are available at this time for certain uses as outlined herein. For the class of road cleanup material contaminated below the department's most stringent SRS, a one-time site-specific use is allowed as described below in Sections VI and VII of this Appendix. Applications of any such road cleanup material to a site more than once require written authorization of the BLHWP in order to prevent potential environmental degradation (refer to section V.2.b.). This process ensures that use of all road cleanup material will be consistent with the most recent health-based guidance when road cleanup materials are proposed for use in situations where human or environmental exposure to contaminants is possible.

III. GENERAL HANDLING REQUIREMENTS:

This section describes the general requirements applicable to handling road cleanup materials.

1. Litter - Road cleanup materials are generally contaminated with oversized "litter" such as plastics and paper items, road matter, vehicle parts and other miscellaneous wastes. Before road cleanup material may be sampled for analysis, this litter must be removed and disposed of as ID 10 municipal solid waste or preferably, be recycled. Small screening operations may not require separate approvals, however processing road cleanup material in large quantities, or near sensitive receptors may warrant separate authorization by the Department. Contact the Solid and Hazardous Waste

APPENDIX II

Management Program at 609-292-9880 for information concerning permitting of screening operations. Bulky materials, such as significant amounts of chunks of concrete or asphalt, should be taken to DEP approved recycling centers, or asphalt manufacturers, for proper recycling. Road cleanup material normally does not require this cleaning step if disposed of unless required by the disposal facility.

2. De-icing Salts - In some cases, road cleanup material may contain concentrations of road de-icing salts. Standards for applications of de-icing salts are not established as it is common practice to dispense large quantities of salts on roads for deicing during winter months. With normal precipitation levels, significant amounts of these salts with typically high water solubility should not be present in road cleanup materials. Use of road cleanup material containing road de-icing salts or other compounds, however, must be consistent with all State, Federal and local requirements and the user should also be aware of the phytotoxic effects of salts particularly during the growing season.

3. Transport - Disposal of road cleanup material as solid waste in accordance with N.J.A.C. 7:26 requires transport only by licensed solid waste transporters in registered solid waste vehicles. Transport of road cleanup material destined for recycling centers (refer to section V.2. below), or beneficial uses authorized by the department pursuant to N.J.A.C. 7:26-1.7(g), is not subject to the solid waste transporter licensing requirements, therefore, use of licensed solid waste transporters and registered solid waste vehicles is not required in these instances.

IV. CHARACTERIZATION:

This section describes the requirements for sampling and analysis of all road cleanup material, except those being disposed of as ID 10 solid waste which do not require testing except as required by the disposal facility.

All road cleanup material must be sampled and analyzed in accordance with standard DEP quality assurance standards and practices to fully characterize the SRS contaminants, regardless of the intended future disposition of the road cleanup materials except for disposal as solid waste. Detailed sampling guidance may also be obtained from BLHWP at (609) 984-6985.

The generator of road cleanup material must determine if the road cleanup material constitute hazardous waste in accordance with requirements at N.J.A.C. 7:26G-1.1 et seq. A hazardous waste classification may be required if elevated levels of contaminants are detected, at the discretion of the department. For uses of road cleanup material requiring DEP authorization as described herein (refer to section V.), all analytical data must be submitted to BLHWP for review on a case-by-case basis.

Road cleanup material proposed for most beneficial use projects must also be analyzed for any and all contaminants found on the USEPA's current Target Analyte List (TAL)/Target Compound List (TCL) and Priority Pollutants + 40 scans. The list of TAL inorganic compounds/elements and TCL organic compounds designated for analysis are those contained in the version of the USEPA Contract Laboratory Program Statement of Work for Inorganics and Organic Analysis, Multi-Media, Multi-Concentration in effect as of the date on which the laboratory is performing the analysis or the project's specific contaminant testing results.

Additional sampling may be required based on the results of the initial data collected if further contaminant delineation is necessary. A higher frequency of sampling, screening and analysis may be required to characterize the road cleanup material when "hotspots" of contamination are known or suspected to exist in a pile. For very large quantities of road cleanup material a lower frequency of sampling may be appropriate, subject to departmental authorization, based on site-specific data. It is recommended that the DEP review sampling plans that vary from the sampling methods outlined in Appendix G prior to sampling.

APPENDIX II

While typical road cleanup material would not be expected to exhibit excessive amounts of radioactivity, it cannot contain material regulated pursuant to the Atomic Energy Act or any regulations for radioactive materials administered by the Nuclear Regulatory Commission ("NRC") or other agencies, be classified as technologically enhanced naturally-occurring radionuclide material (TENORM) which is ID 27 Dry Industrial Solid Waste in New Jersey, or contain any radionuclide over the levels established in the "Soil Remediation Standards for Radioactive Materials" at N.J.A.C. 7:28-12.

V. MANAGEMENT OPTIONS:

This section describes various management options for the following categories of road cleanup material: 1) Road cleanup material that contain hazardous waste, and 2) Road cleanup material classified as waste type ID 10 municipal solid waste (i.e., materials that may contain contaminants above or below regulatory concern). It also describes the process of obtaining department authorization for use of road wastes. Whenever any road cleanup materials are used for any purpose other than disposal in accordance with N.J.A.C. 7:26-1.1 et seq., the following conditions must be met:

1. Hazardous Waste - Road cleanup material that contain a hazardous waste must be managed as hazardous wastes when contamination is above the non-hazardous waste limits or the road cleanup materials are otherwise classified a hazardous waste. The road cleanup material must always be managed as a hazardous waste in accordance with N.J.A.C. 7:26G-1.1 et seq. and the USEPA Code of Federal Regulations Title 40, Parts 260-299. The only management option for road cleanup material containing a hazardous waste is management as a hazardous waste.

Handling - All road cleanup material designated as hazardous waste per N.J.A.C. 7:26G-5 and 40 CFR 261 must be properly staged and removed within 90 days. Hazardous waste piles are prohibited. When road cleanup material are determined to contain a hazardous waste they must be staged during the remaining 90-day period in accordance with N.J.A.C. 7:26G-6 and 40 CFR 262 (i.e. either sealed roll-off container or sealed drums).

2. Non-hazardous ID 10 Municipal Solid Waste - Road cleanup material contaminated at levels above the regulatory concern limit (see section V.3. below), and which are not classified as hazardous waste, are considered to be non-hazardous solid waste. Road cleanup materials are classified as ID 10 municipal solid waste if treatment, storage or disposal at an authorized solid waste facility is a short or long-term management option. If ID 10 road cleanup material are used beneficially with DEP authorization in accordance with section V.2.b. below, the road cleanup materials are then considered beneficially useable materials exempt from solid waste regulation, not ID 10 solid waste.

a. Handling - Contaminated road cleanup material designated as non-hazardous solid waste may not be stockpiled for more than six months pursuant to the solid waste regulations, N.J.A.C. 7:26-1.1;1.4. Security and public access must be considered when selecting a location for stockpiling of any potentially contaminated road cleanup materials. Staging of any potentially contaminated road cleanup material must be performed using methods that minimize the disturbance of the road cleanup material and minimize on-site handling and storage. At a minimum, all potentially contaminated road cleanup material must be staged on an impervious surface and covered with a waterproof material (i.e., tarpaulin or 10-mil plastic sheeting). The containment must be maintained for the duration of the staging period to prevent contaminant volatilization, runoff, leaching, or fugitive dust emissions.

b. Beneficial Use Authorization Process - For use of contaminated materials such as road cleanup material contaminated above the latest most stringent SRS, a written application by the generator and a written determination from the DEP must be made for the non-applicability of the solid waste regulations set forth in N.J.A.C. 7:26-1.1 et seq. This is required for any in-state or out-of-state use

APPENDIX II

for road cleanup material with any contaminant level exceeding the latest most stringent SRS and is also required for second or additional applications of any road cleanup material in New Jersey at the same site. The following are the standard requirements for a Certificate of Authority to Operate beneficial use project. Additional requirements are specified at N.J.A.C. 7:26-1.7(g) that also apply to application for the use of road cleanup material, and are detailed in the main body of this Technical Manual.

c. General Requirements for Use - In all cases, any use of road cleanup material must be protective of ground water and surface water bodies and subsurface structures, such as basements and other indoor areas, as well as all other potential human and other ecological receptors. In addition, all other requirements for any prospective use of road cleanup material must be met. These requirements include, but are not limited to: any limitations imposed by wetlands restrictions; stream encroachment regulations; limitations on use of materials contaminated at any level where the contaminants could pose a risk to surface or ground water; hazardous waste recycling regulations; and any other requirements, in addition to i-iv. below:

i. Pinelands Area - Road cleanup material generated outside or within the Pinelands Area that contain contaminants at or below the most stringent cleanup levels established by the DEP shall not be moved from the site of generation into or within the Pinelands Protection Area unless the road cleanup materials are at or below the receiving site's contaminant background levels. Road cleanup material generated in the Pinelands Area that exceed background levels may not remain in the Pinelands Area but may be used elsewhere with written permission of the DEP in accordance with the requirements set forth in this document. Written approval from the New Jersey Pinelands Commission, New Lisbon, NJ 08064, must be obtained before any disturbance or moving of road cleanup material at any level of contamination within the Pinelands Area.

ii. Objectionable Odors or Appearance - Road cleanup material having objectionable odors, including petroleum or synthetic chemical odors, shall not be used in residential areas or other locations where the public would be exposed or where such odors or appearance would render a site or its improvements unusable for their reasonably intended purpose. Specifically, the road cleanup material to be used must not violate the air pollution rules, N.J.A.C. 7:28-1.1 et seq. or local nuisance codes.

iii. Regulatory Compliance - The road cleanup material must be used in accordance with all applicable federal, state and local requirements.

iv. Allowable Storage Time - Non-hazardous road cleanup material contaminated at levels above the most stringent SRS must not be stockpiled at the site of generation, or elsewhere, for more than six months from the date of collection until disposition pursuant to the solid waste regulations, N.J.A.C. 7:26-1.1; 1.4. Therefore, road cleanup material use considerations and subsequent actions should be acted on as soon as anticipated.

3. Contaminated Below Regulatory Concern - Road cleanup material with contaminant levels consistently below the latest most stringent site-specific SRS standards are generally suitable for use without prior approval on a one-time site-specific basis, or if the road cleanup materials are recycled at an approved recycling center. Only road cleanup material that contain contaminants at levels below the most stringent SRS established by the DEP for a specific site, are not of regulatory concern with the exception of sites in the Pinelands Area which may require separate authorization from the Pinelands Commission - see Section V.2.c.i. In addition, the minimum criteria for all use applications, as noted in section V.2.c. above, also apply to road cleanup material below regulatory concern.

VI. EXAMPLES OF USES:

APPENDIX II

This section outlines the department's guidance for a number of different potential uses for road cleanup materials. All uses described below require written BLHWP authorization as outlined in section V. of this document, unless explicitly stated otherwise in each section. The general handling requirements outlined in section III., and all other requirements, are also applicable to all potential uses listed below except as noted below. All references to use criteria in this document shall be taken to mean the latest available criteria from the department.

- 1. Fill for potholes - Road cleanup materials, with analytical values at levels below the latest non-residential SRS criteria, are normally suitable for direct use as fill for potholes, whether the road cleanup materials are incorporated into an asphalt binder or are used directly as sub-fill for larger holes. If the road cleanup materials are used as sub-fill for larger holes, they must be capped with normal road surfacing material, such as concrete or asphalt. Department approval is not required for this use.**
- 2. Embankment for emergency road repairs - Road cleanup material with analytical values at levels below the most stringent SRS criteria are usable for embankment material without prior Department approval. Embankment material is needed by DOT for emergency road repairs when road surfaces and base materials are eroded or removed due to washout or other circumstances.**
- 3. Containment/absorption medium for hazardous materials spill response - Road cleanup materials, unless determined to be hazardous wastes, are suitable for use as absorptive material to contain or to absorb hazardous materials in emergency situations. Following such use, the road cleanup material must be immediately handled in accordance with all requirements for hazardous materials. The road cleanup material cannot be permitted to wash into surface waters. If road cleanup materials are used in the form of embankments to contain larger spills, the road cleanup material must be stabilized to prevent surface waste contamination, and be collected and managed appropriately as a contaminated material.**
- 4. Sub-base fill - Road cleanup material contaminated at levels below the latest non-residential SRS may be used for sub-base fill.**
- 5. Soil mix additive for pavement materials - Road cleanup material may be used directly as replacement for raw material in concrete or asphalt for paving or other uses, without prior approval, if not contaminated above the latest non-residential SRS limits, and all other requirements for manufacture and use of the product are met.**
- 6. Deicing/Antiskid Material - Road cleanup material may be used as deicing or antiskid material if contaminated below the residential SRS without prior Department approval.**
- 7. Landfill cover - Under most circumstances, unless road cleanup material have been analyzed and determined to be hazardous wastes, road cleanup materials are suitable for landfill cover from the standpoint of pollutant contamination levels. Use of road cleanup material for landfill cover, especially road cleanup material with higher levels of contamination, isolates these contaminants from further contact with the environment and provides a favored option for road cleanup material use. It is, of course, the prerogative of individual landfill operators to require analyses of materials they are using for cover and under those circumstances, individual facilities may set certain limits or other criteria for contaminant levels in the materials. The generator of the road cleanup material should contact the landfill operator.**
- 8. Recycling Centers - For recycling at approved Class B and Class C recycling centers in New Jersey: contact the authorized recycling center directly or Bureau of Transfer Stations and Recycling Facilities (BTSRF) at 609-292-9880. The Recycling Center must be authorized to accept road cleanup material specifically in its General Approval, or otherwise in writing by the Solid and Hazardous**

APPENDIX II

Waste Management Program road cleanup material accepted at an approved DEP recycling center do not require a waste flow exemption or a prior site-specific use approval as outlined below.

9. Other Uses Land Application - Other one-time land application uses of road cleanup material without prior approval are feasible in line with the above guidance if all contamination levels are below the latest most stringent site-specific SRS. Direct land application of road cleanup material contaminated at any level above the most stringent SRS and second or additional applications of road cleanup material contaminated below regulatory concern at the same site require DEP authorization on a case-by-case basis. Application for such uses must be made to BLHWP for a Certificate of Authority to Operate (CAO) a Beneficial Use Project pursuant to N.J.A.C. 7:26-1.7(g). This type of authorization is technically rigorous, will require a detailed site description and may require at least six to eight weeks for review. Contact BLHWP for details. Actual standards applied at a particular site are determined by the DEP on a case-by-case basis and may differ from site to site. This variation is due to many factors, including site-specific human health and environmental exposure pathways, the presence and combinations of synergistic or additive site contaminants, and site-specific physical characteristics, however it is not the Department's intention to introduce contaminated materials into areas with lower levels of contamination.

Asphalt Incorporation - Road cleanup materials may be used directly at asphalt manufacturing plants as an ingredient in asphalt (bituminous concrete) production as exempt from solid waste regulations pursuant to N.J.A.C. 7:26-1.1(a)1 and N.J.A.C. 7:26A-1.4(a)1i.

Product Incorporation - Additionally, road cleanup materials, even those contaminated at higher levels of contamination, may be incorporated into structural products where the road cleanup materials are physically bound, or permanently entrained, such as into asphalt, concrete, structural building materials (such as block and brick) or other similar structural products. All requirements for the product's manufacture and use must be met. Case-by-case Departmental authorization is required for these uses only at a contamination level above non-residential SRS limits, except as outlined above for asphalt production.

10. Disposal: For information on disposal in accordance with N.J.A.C. 7:26 at a designated solid waste facility, contact the appropriate county solid waste management official for the designated solid waste district facility, to determine if the district has such a facility for ID 10 waste. A list of county solid waste officials is available at the department's web site.

VII. RESPONSIBILITY & DISCLAIMER:

It is the responsibility of the generator of the road cleanup material to properly manage and characterize/classify the road cleanup material and to determine if road cleanup materials are contaminated.

Disclaimer: This guidance is offered without prejudice and shall not affect any ongoing or future enforcement actions that the Department or any other agency may take against any person for past or future activities. This guidance shall not relieve any person from obtaining any and all permits and authorizations required from any Federal, State, county or local agency and complying with all regulations and other requirements. The DEP reserves the right to require or conduct testing. Should road cleanup material be considered unsuitable by the DEP after the road cleanup material have been used/reused, the generator of the road cleanup material is responsible for their proper remediation, as well as for the remediation of all other media affected. Specifically, the DEP may take action if a more stringent SRS is adopted, the SRS's were improperly applied to a use application or other relevant requirements or criteria are developed. Use of road cleanup material shall not relieve any person from obtaining any and all permits required from any federal, state, county or local agency. This document does not grant permission to fill or alter floodplain areas, riparian lands, freshwater wetlands or surface water runoff conditions without the appropriate approvals.

APPENDIX III

Highway Agency Stormwater General Permit Post-Construction Program Design Checklist for Individual Projects

For each question, attach additional sheets as necessary

Highway Agency Information

Highway Agency: *Monmouth County Division of Highways*

NJPDES # : NJG0152234 PI ID #: 222751

Team Member: *Joseph Ettore, County Engineer*

Date: October 2018 Effective Date of Permit Authorization (EDPA): April 1, 2005

1. Location of Project

- a. Project Name _____
- b. Highway Agency Project Number (if applicable): _____
- c. Road Name(s) (if applicable): _____
- d. Municipality(ies): _____
- e. County(ies): _____

2. Description (type of project)

- a. New alignment, widening, bridge replacement, intersection improvement, or other (describe): _____
- b. Area of proposed disturbance: _____ acres (include disturbance for easements, on/off ramps, etc. that are part of the project)
- c. Area of proposed additional impervious surface: _____ acres (include proposed additional impervious surface for easements, on/off ramps, etc. that are part of the project)
- d. Discharges to (identify surface water body(ies)): _____

3. Related NJDEP Permits

How much (if any) of the project requires at least one NJDEP permit (stream encroachment permit; freshwater wetlands permit or transition area waiver; CAFRA, coastal wetlands, or waterfront development permit) granted under the following statutes?

Application Number (if available)

Flood Hazard Area Control Act, N.J.S.A. 58:16A-50 et seq. _____
Freshwater Wetlands Protection Act, N.J.S.A. 13:9B-1 et seq. _____
Coastal Area Facility Review Act, N.J.S.A. 13:19-1 et seq. _____
Waterfront and Harbor Facilities Act, N.J.S.A. 12:5-3 _____

Answer (check one): The entire project Part of the project None of the project

4. Compliance with NJDEP Design and Performance Standards (N.J.A.C. 7:8)

a. Nonstructural stormwater management strategies

To the maximum extent practicable, does the project meet the applicable erosion control, groundwater recharge, and stormwater runoff quantity and quality standards at N.J.A.C. 7:8-5.4 and 5.5 by incorporating nonstructural stormwater management strategies at N.J.A.C. 7:8-5.3 into the design? Y () N ()

Also see question #4.j in regard to the Low Impact Development Checklist.

b. Threatened and endangered species

Are the project's stormwater management measures designed to avoid adverse impacts of concentrated flow on habitat for threatened and endangered species as documented in the 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)? Y () N ()

c. Exemption for certain utility line and public pedestrian access projects

How much (if any) of the project is exempt under N.J.A.C. 7:8-5.2(d) from the groundwater recharge and stormwater runoff quantity and quality requirements at N.J.A.C. 7:8-5.4 and 5.5? Y () N () If "yes," check whichever of the following are applicable:

The entire project Part of the project None of the project

If you checked "The entire project" or "Part of the project," check whichever of the following are applicable:

Underground utility line Aboveground utility line Public pedestrian access

If you checked "The entire project," skip questions #4.d, #4.f, #4.g, and #4.h.

d. Waiver for certain roadway, railroad, and public pedestrian access projects

Are you claiming, for the enlargement (widening) of an existing public roadway or railroad or the construction or enlargement of a public pedestrian access, a waiver under N.J.A.C. 7:8-5.2(e) from strict compliance with the groundwater recharge and stormwater runoff quantity and quality requirements at N.J.A.C. 7:8-5.4 and 5.5? Y () N () If "yes":

- Check whichever of the following are applicable:
 Enlargement of existing public roadway or railroad Public pedestrian access

- Attach written documentation making the demonstration required under N.J.A.C. 7:8-5.2(e), unless “The entire project” or “Part of the project” is checked under question #3, and you have submitted or will submit this documentation to the NJDEP to obtain the related NJDEP permit(s).

- Check whether the waiver is for:

The entire project Part of the project None of the project

If you checked “The entire project,” skip questions #4.f, #4.g, and #4.h.

e. Erosion control

Is the project in its post-construction condition designed to meet the erosion control standards established under the Soil Erosion and Sediment Control Act, N.J.S.A. 4:24-39 et seq. and implementing rules? Y () N ()

Does the project have a soil erosion and sediment control plan certified under that Act and those rules? Y () N () If “no,” please explain: _____

f. Groundwater recharge

Under N.J.A.C. 7:8-5.4(a)2ii, how much (if any) of the project is outside the scope of the groundwater recharge requirement at N.J.A.C. 7:8-5.4(a)2i?

Answer (check one): The entire project Part of the project None of the project

If you checked “The entire project” or “Part of the project,” check whichever of the following are applicable:

Urban redevelopment area High pollutant loading area Industrial “source material”

If you checked “Part of the project” or “None of the project,” is the project designed to meet the groundwater recharge requirement at N.J.A.C. 7:8-5.4(a)2i? Y () N () Also see question 4.j.

Will there be recharge of any stormwater from high pollutant loading areas, or of industrial stormwater exposed to “source material”? Y () N ()

Is the project designed to avoid adverse hydraulic impacts on the groundwater table? Y () N ()

g. Stormwater runoff quantity

Will the post-construction stormwater runoff flow only into tidal waters where the increased volume of stormwater runoff will not increase flood damages below the point of discharge? Y () N ()

If “no,” is the project designed to meet the stormwater runoff quantity standard at N.J.A.C. 7:8-5.4(a)3? Y () N () Also see question 4.j.

h. Stormwater runoff quality

Is the project subject to the requirement at N.J.A.C. 7:8-5.5(a) for 80 percent total suspended solids (TSS) reduction? Y () N ()

If “yes,” is the project designed to meet this requirement? Y () N () Also see question 4.j.

If “no,” check whichever of the following are applicable:

Less than ¼ acre of additional impervious surface NJPDES-based exemption

Is the project designed to meet the nutrient reduction standard at N.J.A.C. 7:8-5.5(e)? Y () N ()

Are the project's stormwater management measures designed to prevent any increase in stormwater runoff to waters classified as FW1? Y () N () N/A () (N/A if there is no stormwater runoff from the project to FW1 waters)

Does the project propose any encroachment within a special water resources protection area established under N.J.A.C. 7:8-5.5(h) to protect Category One waters? Y () N () Also see question 4.j.

If "yes," has the NJDEP approved the proposed encroachment? Y () N () Please explain if the NJDEP has not approved the proposed encroachment:

i. Other special circumstances

Are there special circumstances besides those noted above (e.g., alternative design and performance standards recognized under N.J.A.C. 7:8-5.1(b), and hardship waivers under N.J.A.C. 7:13-4.8) that result in one or more of the design and performance standards at N.J.A.C. 7:8-5 not being applicable to all or part of the project? Y () N ()

If "yes," describe the circumstances and identify the standard(s) that are not applicable:

j. Calculations and stormwater engineering report

Was stormwater runoff calculated in accordance with N.J.A.C. 7:8-5.6? Y () N ()

Attach a stormwater engineering report that includes the following information (unless the Exception below applies):

- A copy of Parts 1, 3, and 4 of the Low Impact Development Checklist (see Appendix A of the New Jersey Stormwater Best Management Practices Manual)
- A copy of a USGS topographical map(s), 7.5 minute quadrangle series, showing the project location and its HUC-14 watershed(s), and indicating any special water resources protection area(s) established under N.J.A.C. 7:8-5.5(h)
- Proof that the applicable groundwater recharge and stormwater runoff quantity and quality standards at N.J.A.C. 7:8-5.4 and 5.5 (or applicable alternative standards recognized under N.J.A.C. 7:8-5.1(b)) are met. This proof shall include complete printouts of all calculations (including detention, retention, and infiltration calculations for all basins), and shall compare existing and proposed recharge and discharge rates. The proof shall clearly explain how the attached calculations demonstrate compliance with the applicable standards. If the requirement at N.J.A.C. 7:8-5.5(a) for 80 percent TSS reduction is applicable, the proof shall detail how TSS reduction is achieved.

Exception: If "The entire project" is checked under question #3, have you submitted or will you submit the above information to the NJDEP to obtain the related NJDEP permit(s)? Y () N ()

If "yes," it is not necessary to attach a stormwater engineering report.

k. Structural stormwater management

Is the project designed to meet the applicable standards for structural stormwater management measures at N.J.A.C. 7:8-5.7? Y () N ()

l. Maintenance

Has the design engineer prepared for the project the maintenance plan required by N.J.A.C. 7:8-5.8? Y () N ()

If "yes," attach the maintenance plan unless "The entire project" or "Part of the project" is checked under question #3, and you have submitted or will submit the maintenance plan for the entire project to the NJDEP to obtain the related NJDEP permit(s).

5. Compliance with NJDEP Design Standard for Storm Drain Inlets

Does the project include installation of any storm drain inlets? Y () N ()

If “yes,” is the project designed to comply with the standard set forth in Attachment C of the permit to control passage of solid and floatable materials? Y () N ()

Attach a list of any storm drain inlets in the project that have hydraulic performance exemptions.

Are you claiming any alternative device exemptions or historic place exemptions for any of the storm drain inlets in this project? Y () N () If “yes,” please explain:

APPENDIX IV

Resolution No. 06-45

RESOLUTION AUTHORIZING THE ADOPTION OF
A POLICY AND PROCEDURE FOR POST-CONSTRUCTION
STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND
REDEVELOPMENT IN MONMOUTH COUNTY HIGHWAY PROPERTY

Freeholder CLIFTON offered the following Resolution and

moved its adoption:

I. Purpose:

A resolution to establish minimum stormwater management requirements and controls for all new "major development," on Monmouth County property as defined in Section II. This mechanism accomplishes the following:

1. Adopts (and incorporates by reference) for such projects the applicable design and performance standards (including maintenance requirements) established under NJAC 7:8 for major development, and the storm drain inlet design standard in Attachment C: "Design standard - Storm Drain Inlets" of the NJDEP NJPDES Public Complex Stormwater General Permit (NJ0141879) and Highway Agency Stormwater General Permit (NJ0141887);
2. Requires that all such projects be designed to comply with these design and performance standards and this storm drain inlet design standard; and
3. Requires that Monmouth County's "Post-Construction Program Design Checklist for Individual Projects" be completed before each project's construction is approved.

II. Definitions:

For the purpose of this policy and procedure, the following terms, phrases, words and their derivations shall have the meanings stated herein unless their use in the text of this policy and procedure 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. County Highway – any highway or other thoroughfare operated by Monmouth County (including a maintenance facility or rest area for such a thoroughfare). For purposes of this policy and procedure a “highway or other thoroughfare” does not include:
 - 1. Any thoroughfare confined to the grounds of one or more buildings; or
 - 2. Any thoroughfare confined to a park or recreational area operated by Monmouth County.
- b. County - Monmouth County
- c. 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, NJSA 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, NJSA 4:1C-1 et seq.
- d. NJDEP – means the New Jersey Department of Environmental Protection.
- e. NJPDES – means the New Jersey Pollutant Discharge Elimination System.
- f. Impervious surface – means a surface that has been covered with a layer of material so that it is highly resistant to infiltration by water.
- g. 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.
- h. 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.
- i. 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 to eliminate illicit or illegal non-stormwater discharges into stormwater conveyances.

III. General Standards:

- A. All New Development and Redevelopment Projects within Monmouth County property shall evaluate their respective applicability to the following:
1. Compliance with the applicable design and performance standards established under NJAC 7:8 for major development at Monmouth County, unless:
 - a. Those standards do not apply because of a variance or exemption granted in NJAC 7:8; or
 - b. Alternative standards are applicable under an area wide or Statewide Water Quality Management Plan adopted in accordance with NJAC 7:15.
 2. When applicable under NJAC 7:8, ensure adequate, long-term operation and maintenance of BMPs within Monmouth County. This can include, but may not be limited to, preparing a project maintenance plan in accordance with NJAC 7:8-5.8, where applicable.
 3. All new stormwater management measures which are created in part or as a result of compliance with NJAC 7:8 must be managed and maintained in accordance with the County's Public Complex Stormwater General Permit (NJ0141879) and Highway Agency Stormwater General Permit (NJ0141887).
 4. Compliance, where applicable with the standards set forth in Attachment C of the County's Public Complex Stormwater General Permit (NJ0141879) and Highway Agency Stormwater General Permit (NJ0141887) to control passage of solid and floatable materials through storm drainage inlets.
 5. Projects that do not require any Department permits (the term "permit," in this case, shall include transition area waivers under the Freshwater Wetlands Protection Act) under the Flood Hazard Area Control Act (NJSA 58:16A-50 et seq.), Freshwater Wetlands Protection Act (NJSA 13:9B-1 et seq.), Coastal Area Facility Review Act (NJSA 13:9-1 et seq.) or Waterfront and Harbor Facilities Act (NJSA 12:5-3) are not considered "new development or redevelopment projects" if construction began prior to the implementation deadline for this SBR,

or if the projects went to bid prior to the date on which the permittee received authorization under this permit.

B. Requirements for NJAC 7:8 applicable individual projects:

1. For all major development projects, the NJDEP "Post Construction Design Checklist for Individual Projects" must be completed prior to each new construction project approval.
2. These checklists have been included as Appendix A to this document.

IV. Penalties:

Any person who erects, constructs, alters, repairs, converts, maintains or uses any building, structure or land in violation of this policy shall be subject to a revocation of their construction contract, where applicable.

V. Effective Date:

This policy and procedure shall take effect immediately upon the approval and adoption by the Administration.

VI. Severability:

Where applicable, if the provisions of any section, subsection, paragraph, subdivision or clause of this policy and procedure 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 Resolution.

BE IT FURTHER RESOLVED that the Clerk of the Monmouth County Board of Chosen Freeholders forward a certified true copy of this Resolution to New Jersey Department of Environmental Protection.

Seconded by Freeholder BURRY and adopted on roll call by the following vote:

YES	NO	ABSTAIN	ABSENT
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Mrs. Burry	X
Mrs. Handlin	X
Mr. Narozanick	X
Mr. Clifton	X
Mr. Barham	X

CERTIFICATION

I HEREBY CERTIFY THE ABOVE TO BE A TRUE COPY OF A RESOLUTION ADOPTED BY THE BOARD OF CHOSEN FREEHOLDERS OF THE COUNTY OF MONMOUTH AT A MEETING HELD

Jan 12, 2006
Marcia Masnick
 CLERK

Highway Agency Stormwater General Permit Post-Construction Program Design Checklist for Individual Projects

For each question, attach additional sheets as necessary

Highway Agency Information	Highway Agency: _____ NJPDES # : NJG _____ PI ID #: _____ Team Member: _____ Date: _____ Effective Date of Permit Authorization (EDPA): _____
---------------------------------------	--

1. Location of Project

- a. Project Name _____
- b. Highway Agency Project Number (if applicable): _____
- c. Road Name(s) (if applicable): _____
- d. Municipality(ies): _____
- e. County(ies): _____

2. Description (type of project)

- a. New alignment, widening, bridge replacement, intersection improvement, or other (describe): _____
- b. Area of proposed disturbance: _____ acres (include disturbance for easements, on/off ramps, etc. that are part of the project)
- c. Area of proposed additional impervious surface: _____ acres (include proposed additional impervious surface for easements, on/off ramps, etc. that are part of the project)
- d. Discharges to (identify surface water body(ies)): _____

3. Related NJDEP Permits

How much (if any) of the project requires at least one NJDEP permit (stream encroachment permit; freshwater wetlands permit or transition area waiver; CAFRA, coastal wetlands, or waterfront development permit) granted under the following statutes?

Application Number (if available)

- Flood Hazard Area Control Act, N.J.S.A. 58:16A-50 et seq. _____
- Freshwater Wetlands Protection Act, N.J.S.A. 13:9B-1 et seq. _____
- Coastal Area Facility Review Act, N.J.S.A. 13:19-1 et seq. _____
- Waterfront and Harbor Facilities Act, N.J.S.A. 12:5-3 _____

Answer (check one): The entire project Part of the project None of the project

4. Compliance with NJDEP Design and Performance Standards (N.J.A.C. 7:8)

a. Nonstructural stormwater management strategies

To the maximum extent practicable, does the project meet the applicable erosion control, groundwater recharge, and stormwater runoff quantity and quality standards at N.J.A.C. 7:8-5.4 and 5.5 by incorporating nonstructural stormwater management strategies at N.J.A.C. 7:8-5.3 into the design? Y () N ()

Also see question #4.j in regard to the Low Impact Development Checklist.

b. Threatened and endangered species

Are the project's stormwater management measures designed to avoid adverse impacts of concentrated flow on habitat for threatened and endangered species as documented in the 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)? Y () N ()

c. Exemption for certain utility line and public pedestrian access projects

How much (if any) of the project is exempt under N.J.A.C. 7:8-5.2(d) from the groundwater recharge and stormwater runoff quantity and quality requirements at N.J.A.C. 7:8-5.4 and 5.5? Y () N () If "yes," check whichever of the following are applicable:

- The entire project Part of the project None of the project

If you checked "The entire project" or "Part of the project," check whichever of the following are applicable:

- Underground utility line Aboveground utility line Public pedestrian access

If you checked "The entire project," skip questions #4.d, #4.f, #4.g, and #4.h.

d. Waiver for certain roadway, railroad, and public pedestrian access projects

Are you claiming, for the enlargement (widening) of an existing public roadway or railroad or the construction or enlargement of a public pedestrian access, a waiver under N.J.A.C. 7:8-5.2(e) from strict compliance with the groundwater recharge and stormwater runoff quantity and quality requirements at N.J.A.C. 7:8-5.4 and 5.5? Y () N () If "yes":

- Check whichever of the following are applicable:
 - Enlargement of existing public roadway or railroad Public pedestrian access

- Attach written documentation making the demonstration required under N.J.A.C. 7:8-5.2(e), unless "The entire project" or "Part of the project" is checked under question #3, and you have submitted or will submit this documentation to the NJDEP to obtain the related NJDEP permit(s).

- Check whether the waiver is for:

The entire project Part of the project None of the project

If you checked "The entire project," skip questions #4.f, #4.g, and #4.h.

e. Erosion control

Is the project in its post-construction condition designed to meet the erosion control standards established under the Soil Erosion and Sediment Control Act, N.J.S.A. 4:24-39 et seq. and implementing rules? Y () N ()

Does the project have a soil erosion and sediment control plan certified under that Act and those rules? Y () N () If "no," please explain: _____

f. Groundwater recharge

Under N.J.A.C. 7:8-5.4(a)2ii, how much (if any) of the project is outside the scope of the groundwater recharge requirement at N.J.A.C. 7:8-5.4(a)2i?

Answer (check one): The entire project Part of the project None of the project

If you checked "The entire project" or "Part of the project," check whichever of the following are applicable:

Urban redevelopment area High pollutant loading area Industrial "source material"

If you checked "Part of the project" or "None of the project," is the project designed to meet the groundwater recharge requirement at N.J.A.C. 7:8-5.4(a)2i? Y () N () Also see question 4.j.

Will there be recharge of any stormwater from high pollutant loading areas, or of industrial stormwater exposed to "source material"? Y () N ()

Is the project designed to avoid adverse hydraulic impacts on the groundwater table? Y () N ()

g. Stormwater runoff quantity

Will the post-construction stormwater runoff flow only into tidal waters where the increased volume of stormwater runoff will not increase flood damages below the point of discharge? Y () N ()

If "no," is the project designed to meet the stormwater runoff quantity standard at N.J.A.C. 7:8-5.4(a)3? Y () N () Also see question 4.j.

h. Stormwater runoff quality

Is the project subject to the requirement at N.J.A.C. 7:8-5.5(a) for 80 percent total suspended solids (TSS) reduction? Y () N ()

If "yes," is the project designed to meet this requirement? Y () N () Also see question 4.j.

If "no," check whichever of the following are applicable:

Less than ¼ acre of additional impervious surface NJPDES-based exemption

Is the project designed to meet the nutrient reduction standard at N.J.A.C. 7:8-5.5(e)? Y () N ()

Are the project's stormwater management measures designed to prevent any increase in stormwater runoff to waters classified as FW1? Y () N () N/A () (N/A if there is no stormwater runoff from the project to FW1 waters)

Does the project propose any encroachment within a special water resources protection area established under N.J.A.C. 7:8-5.5(h) to protect Category One waters? Y () N () Also see question 4.j.

If "yes," has the NJDEP approved the proposed encroachment? Y () N () Please explain if the NJDEP has not approved the proposed encroachment:

i. Other special circumstances

Are there special circumstances besides those noted above (e.g., alternative design and performance standards recognized under N.J.A.C. 7:8-5.1(b), and hardship waivers under N.J.A.C. 7:13-4.8) that result in one or more of the design and performance standards at N.J.A.C. 7:8-5 not being applicable to all or part of the project? Y () N ()

If "yes," describe the circumstances and identify the standard(s) that are not applicable:

j. Calculations and stormwater engineering report

Was stormwater runoff calculated in accordance with N.J.A.C. 7:8-5.6? Y () N ()

Attach a stormwater engineering report that includes the following information (unless the Exception below applies):

- A copy of Parts 1, 3, and 4 of the Low Impact Development Checklist (see Appendix A of the New Jersey Stormwater Best Management Practices Manual)
- A copy of a USGS topographical map(s), 7.5 minute quadrangle series, showing the project location and its HUC-14 watershed(s), and indicating any special water resources protection area(s) established under N.J.A.C. 7:8-5.5(h)
- Proof that the applicable groundwater recharge and stormwater runoff quantity and quality standards at N.J.A.C. 7:8-5.4 and 5.5 (or applicable alternative standards recognized under N.J.A.C. 7:8-5.1(b)) are met. This proof shall include complete printouts of all calculations (including detention, retention, and infiltration calculations for all basins), and shall compare existing and proposed recharge and discharge rates. The proof shall clearly explain how the attached calculations demonstrate compliance with the applicable standards. If the requirement at N.J.A.C. 7:8-5.5(a) for 80 percent TSS reduction is applicable, the proof shall detail how TSS reduction is achieved.

Exception: If "The entire project" is checked under question #3, have you submitted or will you submit the above information to the NJDEP to obtain the related NJDEP permit(s)? Y () N ()

If "yes," it is not necessary to attach a stormwater engineering report.

k. Structural stormwater management

Is the project designed to meet the applicable standards for structural stormwater management measures at N.J.A.C. 7:8-5.7? Y () N ()

l. Maintenance

Has the design engineer prepared for the project the maintenance plan required by N.J.A.C. 7:8-5.8? Y () N ()

If "yes," attach the maintenance plan unless "The entire project" or "Part of the project" is checked under question #3, and you have submitted or will submit the maintenance plan for the entire project to the NJDEP to obtain the related NJDEP permit(s).

5. Compliance with NJDEP Design Standard for Storm Drain Inlets

Does the project include installation of any storm drain inlets? Y () N ()

If "yes," is the project designed to comply with the standard set forth in Attachment C of the permit to control passage of solid and floatable materials? Y () N ()

Attach a list of any storm drain inlets in the project that have hydraulic performance exemptions.

Are you claiming any alternative device exemptions or historic place exemptions for any of the storm drain inlets in this project? Y () N () If "yes," please explain:

Public Complex Stormwater General Permit Post-Construction Program Design Checklist for Individual Projects

For each question, attach additional sheets as necessary

Public Complex
Information

Public Complex:

NJPDES # : NJG ____ PI ID #:

Team Member:

Date ____ Effective Date of Permit Authorization (EDPA):

1. Location of Project

- a. Project Name
- b. Public Complex Project Number (if applicable):
- c. Municipality(ies):
- d. County(ies):

2. Description (type of project)

- a. Briefly describe (1) the purpose and intended use of the project, and (2) any pavement and/or structures to be erected or expanded:
- b. Area of proposed disturbance: ____ acres
- c. Area of proposed additional impervious surface: ____ acres
- d. Discharges to (identify surface water body(ies)):

3. Related NJDEP Permits

How much (if any) of the project requires at least one NJDEP permit (stream encroachment permit; freshwater wetlands permit or transition area waiver; CAFRA, coastal wetlands, or waterfront development permit) granted under the following statutes?

Application Number (if available)

- Flood Hazard Area Control Act, N.J.S.A. 58:16A-50 et seq.
- Freshwater Wetlands Protection Act, N.J.S.A. 13:9B-1 et seq.
- Coastal Area Facility Review Act, N.J.S.A. 13:19-1 et seq.
- Waterfront and Harbor Facilities Act, N.J.S.A. 12:5-3

Answer (check one): The entire project Part of the project None of the project

4. Compliance with NJDEP Design and Performance Standards (N.J.A.C. 7:8)

a. Nonstructural stormwater management strategies

To the maximum extent practicable, does the project meet the applicable erosion control, groundwater recharge, and stormwater runoff quantity and quality standards at N.J.A.C. 7:8-5.4 and 5.5 by incorporating nonstructural stormwater management strategies at N.J.A.C. 7:8-5.3 into the design? Y () N ()

Also see question #4.j in regard to the Low Impact Development Checklist.

b. Threatened and endangered species

Are the project's stormwater management measures designed to avoid adverse impacts of concentrated flow on habitat for threatened and endangered species as documented in the 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)? Y () N ()

c. Exemption for certain utility line and public pedestrian access projects

How much (if any) of the project is exempt under N.J.A.C. 7:8-5.2(d) from the groundwater recharge and stormwater runoff quantity and quality requirements at N.J.A.C. 7:8-5.4 and 5.5? Y () N () If "yes," check whichever of the following are applicable:

The entire project Part of the project None of the project

If you checked "The entire project" or "Part of the project," check whichever of the following are applicable:

Underground utility line Aboveground utility line Public pedestrian access

If you checked "The entire project," skip questions #4.d, #4.f, #4.g, and #4.h.

d. Waiver for certain roadway, railroad, and public pedestrian access projects

Are you claiming, for the enlargement (widening) of an existing public roadway or railroad or the construction or enlargement of a public pedestrian access, a waiver under N.J.A.C. 7:8-5.2(e) from strict compliance with the groundwater recharge and stormwater runoff quantity and quality requirements at N.J.A.C. 7:8-5.4 and 5.5? Y () N () If "yes":

- Check whichever of the following are applicable:

Enlargement of existing public roadway or railroad Public pedestrian access

- Attach written documentation making the demonstration required under N.J.A.C. 7:8-5.2(e), unless "The entire project" or "Part of the project" is checked under question #3, and you have submitted or will submit this documentation to the NJDEP to obtain the related NJDEP permit(s).

- Check whether the waiver is for:

The entire project Part of the project None of the project

If you checked "The entire project," skip questions #4.f, #4.g, and #4.h.

e. Erosion control

Is the project in its post-construction condition designed to meet the erosion control standards established under the Soil Erosion and Sediment Control Act, N.J.S.A. 4:24-39 et seq. And implementing rules? Y () N ()

Does the project have a soil erosion and sediment control plan certified under that Act and those rules? Y () N () If "no," please explain:

f. Groundwater recharge

Under N.J.A.C. 7:8-5.4(a)2ii, how much (if any) of the project is outside the scope of the groundwater recharge requirement at N.J.A.C. 7:8-5.4(a)2i?

Answer (check one): The entire project Part of the project None of the project

If you checked "The entire project" or "Part of the project," check whichever of the following are applicable:

Urban redevelopment area High pollutant loading area Industrial "source material"

If you checked "Part of the project" or "None of the project," is the project designed to meet the groundwater recharge requirement at N.J.A.C. 7:8-5.4(a)2i? Y () N () Also see question 4.j.

Will there be recharge of any stormwater from high pollutant loading areas, or of industrial stormwater exposed to "source material"? Y () N ()

Is the project designed to avoid adverse hydraulic impacts on the groundwater table? Y () N ()

g. Stormwater runoff quantity

Will the post-construction stormwater runoff flow only into tidal waters where the increased volume of stormwater runoff will not increase flood damages below the point of discharge? Y () N ()

If "no," is the project designed to meet the stormwater runoff quantity standard at N.J.A.C. 7:8-5.4(a)3? Y () N () Also see question 4.j.

h. Stormwater runoff quality

Is the project subject to the requirement at N.J.A.C. 7:8-5.5(a) for 80 percent total suspended solids (TSS) reduction? Y () N ()

If "yes," is the project designed to meet this requirement? Y () N () Also see question 4.j.

If "no," check whichever of the following are applicable:

Less than ¼ acre of additional impervious surface NJPDES-based exemption

Is the project designed to meet the nutrient reduction standard at N.J.A.C. 7:8-5.5(e)? Y () N ()

Are the project's stormwater management measures designed to prevent any increase in stormwater runoff to waters classified as FW1? Y () N () N/A () (N/A if there is no stormwater runoff from the project to FW1 waters)

Does the project propose any encroachment within a special water resources protection area established under N.J.A.C. 7:8-5.5(h) to protect Category One waters? Y () N () Also see question 4.j.

If "yes," has the NJDEP approved the proposed encroachment? Y () N () Please explain if the NJDEP has not approved the proposed encroachment:

i. Other special circumstances

Are there special circumstances besides those noted above (e.g., alternative design and performance standards recognized under N.J.A.C. 7:8-5.1(b), and hardship waivers under N.J.A.C. 7:13-4.8) that result in one or more of the design and performance standards at N.J.A.C. 7:8-5 not being applicable to all or part of the project? Y () N ()

If "yes," describe the circumstances and identify the standard(s) that are not applicable:

j. Calculations and stormwater engineering report

Was stormwater runoff calculated in accordance with N.J.A.C. 7:8-5.6? Y () N ()

Attach a stormwater engineering report that includes the following information (unless the Exception below applies):

- A copy of Parts 1, 3, and 4 of the Low Impact Development Checklist (see Appendix A of the New Jersey Stormwater Best Management Practices Manual)
- A copy of a USGS topographical map(s), 7.5 minute quadrangle series, showing the project location and its HUC-14 watershed(s), and indicating any special water resources protection area(s) established under N.J.A.C. 7:8-5.5(h)
- Proof that the applicable groundwater recharge and stormwater runoff quantity and quality standards at N.J.A.C. 7:8-5.4 and 5.5 (or applicable alternative standards recognized under N.J.A.C. 7:8-5.1(b)) are met. This proof shall include complete printouts of all calculations (including detention, retention, and infiltration calculations for all basins), and shall compare existing and proposed recharge and discharge rates. The proof shall clearly explain how the attached calculations demonstrate compliance with the applicable standards. If the requirement at N.J.A.C. 7:8-5.5(a) for 80 percent TSS reduction is applicable, the proof shall detail how TSS reduction is achieved.

Exception: If "The entire project" is checked under question #3, have you submitted or will you submit the above information to the NJDEP to obtain the related NJDEP permit(s)? Y () N ()

If "yes," it is not necessary to attach a stormwater engineering report.

k. Structural stormwater management

Is the project designed to meet the applicable standards for structural stormwater management measures at N.J.A.C. 7:8-5.7? Y () N ()

l. Maintenance

Has the design engineer prepared for the project the maintenance plan required by N.J.A.C. 7:8-5.8? Y () N ()

If "yes," attach the maintenance plan unless "The entire project" or "Part of the project" is checked under question #3, and you have submitted or will submit the maintenance plan for the entire project to the NJDEP to obtain the related NJDEP permit(s).

5. Compliance with NJDEP Design Standard for Storm Drain Inlets

Does the project include installation of any storm drain inlets? Y () N ()

If "yes," is the project designed to comply with the standard set forth in Attachment C of the permit to control passage of solid and floatable materials? Y () N ()

Attach a list of any storm drain inlets in the project that have hydraulic performance exemptions.

Are you claiming any alternative device exemptions or historic place exemptions for any of the storm drain inlets in this project? Y () N () If "yes," please explain:

Resolution No. 06-46

RESOLUTION AUTHORIZING THE ADOPTION OF
A POLICY AND PROCEDURE TO PROHIBIT THE FEEDING OF UNCONFINED
WILDLIFE ON MONMOUTH COUNTY HIGHWAY PROPERTY

Freeholder BURRY offered the following Resolution and

moved its adoption:

I. Purpose:

A policy and procedure to prohibit the feeding of unconfined wildlife, on any and all property owned or operated by Monmouth County for County highways, so as to protect public health, safety and welfare, and to prescribe penalties for failure to comply.

II. Definitions:

For the purpose of this policy and procedure, the following terms, phrases, words and their derivations shall have the meanings stated herein unless their use in the text of this policy and procedure 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. County Highway – any highway or other thoroughfare operated by Monmouth County (including a maintenance facility or rest area for such a thoroughfare). For purposes of this policy and procedure a “highway or other thoroughfare” does not include:
 1. Any thoroughfare confined to the grounds of one or more buildings; or
 2. Any thoroughfare confined to a park or recreational area operated by Monmouth County.
- b. 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.
- c. Person – any individual, corporation, company, partnership, firm, association, or political subdivision of this State subject to County jurisdiction.

- d. Wildlife - all animals that are neither human nor domesticated.

III. Prohibited Conduct:

No person shall feed, on any property owned or operated by Monmouth County for a County highway, any unconfined wildlife.

IV. Enforcement:

- a. The provisions of this policy and procedure shall be enforceable by any local or State police officer.
- b. Any person found to be in violation of this Resolution shall be ordered to cease the feeding immediately.

V. Violations and Penalties:

Any person(s) who is found to be in violation of the provisions of this policy and procedure shall be subject to a fine not to exceed \$1,000.00.

BE IT FURTHER RESOLVED that the Clerk of the Monmouth County Board of Chosen Freeholders forward a certified true copy of this Resolution to New Jersey Department of Environmental Protection.

Seconded by Freeholder NAROZANICK and adopted on roll call by the following vote:

	YES	NO	ABSTAIN	ABSENT
Mrs. Burry	X			
Mrs. Handlin	X			
Mr. Narozanick	X			
Mr. Clifton	X			
Mr. Barham	X			

CERTIFICATION

I HEREBY CERTIFY THE ABOVE TO BE A TRUE COPY OF A RESOLUTION ADOPTED BY THE BOARD OF CHOSEN FREEHOLDERS OF THE COUNTY OF MONMOUTH AT A MEETING HELD

Jan 12, 20 06
Marcia Maxwell
CLERK

Resolution No. 06-47

RESOLUTION AUTHORIZING THE ADOPTION OF
A POLICY AND PROCEDURE TO PROHIBIT THE IMPROPER
DISPOSAL OF WASTE INTO STORM SEWERS AT COUNTY HIGHWAYS

Freeholder NAROZANICK offered the following Resolution and

moved its adoption:

I. Purpose:

A policy and procedure to prohibit any and all spilling, dumping or disposal, by Monmouth County and its employees, of materials other than stormwater to the municipal separate storm sewer system (MS4) at County highways, so as to protect public health, safety and welfare, and to prescribe penalties for the failure to comply.

II. Definitions:

For the purpose of this policy and procedure, the following terms, phrases, words, and their derivations shall have the meanings stated herein unless their use in the text of this policy and procedure 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. County Highway – any highway or other thoroughfare operated by Monmouth County (including a maintenance facility or rest area for such a thoroughfare). For purposes of this policy and procedure, a "highway or other thoroughfare" does not include:
 1. Any thoroughfare confined to the grounds of one or more buildings; or
 2. Any thoroughfare confined to a park or recreational area operated by Monmouth County.

- b. 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 Monmouth County or other public body, and is designed and used for collecting and conveying stormwater.

- 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.

III. Prohibited Conduct:

Monmouth County and its employees are prohibited from:

- a. Spilling, dumping, or disposing of materials other than stormwater to the municipal separate storm sewer system located at County highways.
- b. Spilling, dumping, or disposing of materials other than stormwater in such a manner as to cause the discharge of pollutants to the municipal separate storm sewer system located at County highways.

IV. Exceptions

- 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:
 1. Beach maintenance equipment immediately following their use for their intended purposes; and
 2. 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 in the above situations is limited to exterior, undercarriage, and exposed parts and does not apply to engines or other enclosed machinery.

V. Penalties:

Any Monmouth County officer or employee who continues to be in violation of the provisions of this policy and procedure, after being duly notified, shall be subject to removal, suspension, demotion or other disciplinary action.

BE IT FURTHER RESOLVED that the Clerk of the Monmouth County Board of Chosen Freeholders forward a certified true copy of this Resolution to New Jersey Department of Environmental Protection.

Seconded by Freeholder **HANDLIN** and adopted on roll call by the following vote:

	YES	NO	ABSTAIN	ABSENT
Mrs. Burry	X			
Mrs. Handlin	X			
Mr. Narozanick	X			
Mr. Clifton	X			
Mr. Barham	X			

CERTIFICATION

I HEREBY CERTIFY THE ABOVE TO BE A TRUE COPY OF A RESOLUTION ADOPTED BY THE BOARD OF CHOSEN FREEHOLDERS OF THE COUNTY OF MONMOUTH AT A MEETING HELD

Jan 12, 2006
Maureen Masnick
CLERK

Resolution No. 06-48

RESOLUTION AUTHORIZING THE ADOPTION
OF A POLICY AND PROCEDURE TO PROHIBIT
LITTERING AT ANY COMPLEX OR PROPERTY
OWNED OR OPERATED BY MONMOUTH COUNTY

Freeholder HANDLIN offered the following Resolution and

moved its adoption:

I. Purpose:

A policy and procedure to prohibit littering at any complex or property owned or operated by Monmouth County, so as to protect public health, safety and welfare, and to prescribe penalties for the failure to comply.

II. Definitions:

For the purpose of this policy and procedure, the following terms, phrases, words and their derivations shall have the meanings stated herein unless their use in the text of this policy and procedure 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 whose conduct at complexes or property owned or operated by Monmouth County.

III. Prohibited Conduct:

No person shall throw, drop, discard or otherwise place any litter of any nature upon Monmouth County property other than in a litter receptacle, or having done so to allow such litter to remain.

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

IV. Violations and Penalties:

Any person(s) who is found to be in violation of the provisions of this policy and procedure shall be subject to a fine not to exceed \$1,000.00.

BE IT FURTHER RESOLVED that the Clerk of the Monmouth County Board of Chosen Freeholders forward a certified true copy of this Resolution to New Jersey Department of Environmental Protection.

Seconded by Freeholder CLIFTON and adopted on roll call by the following vote:

	YES	NO	ABSTAIN	ABSENT
Mrs. Burry	X			
Mrs. Handlin	X			
Mr. Narozanick	X			
Mr. Clifton	X			
Mr. Barham	X			

CERTIFICATION

I HEREBY CERTIFY THE ABOVE TO BE A TRUE COPY OF A RESOLUTION ADOPTED BY THE BOARD OF CHOSEN FREEHOLDERS OF THE COUNTY OF MONMOUTH AT A MEETING HELD

Jan 12, 2006
Maria Maxwell
CLERK

Resolution No. 06-49

RESOLUTION AUTHORIZING THE ADOPTION OF
POLICY AND PROCEDURE TO PROHIBIT ILLICIT
CONNECTIONS TO STORM SEWERS ON COUNTY HIGHWAYS

Freeholder CLIFTON offered the following Resolution and
moved its adoption:

I. Purpose:

A policy and procedure to prohibit any and all illicit connections by Monmouth County to all MS4s of the municipal separate storm sewer system(s) operated by Monmouth County, so as to protect public health, safety and welfare, and to prescribe penalties for the failure to comply. This policy and procedure does not apply to any illicit connection which emanates from an entity other than Monmouth County.

II. Definitions:

For the purpose of this policy and procedure, the following terms, phrases, words, and their derivations shall have the meanings stated herein unless their use in the text of this policy and procedure 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. Most of 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. County Highway – any highway or other thoroughfare operated by Monmouth County (including a maintenance facility or rest area for such a thoroughfare). For purposes of this policy and procedure a "highway or other thoroughfare" does not include:
 1. Any thoroughfare confined to the grounds of one or more buildings; or

2. Any thoroughfare confined to a park or recreational area operated by Monmouth County.
- b. Domestic sewage - waste and wastewater from humans or household operations.
 - c. 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 Monmouth County, unless that discharge is authorized under a NJPDES permit other than the Public Complex Stormwater General Permit (NJPDES Permit Number NJ0141879). Non-physical connections may include, but are not limited to, leaks, flows, or overflows into the municipal separate storm sewer system.
 - d. 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)).
 - e. 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 Monmouth County or other public body, and is designed and used for collecting and conveying stormwater.
 - f. 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
 - g. 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 algacides, or biocides to control fouling of equipment such as heat exchangers, and/or corrosion inhibitors.
 - 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.

III. Prohibited Conduct:

Monmouth County and its officers, staff, agents, other employees, contractors, and students shall not discharge or cause to be discharged, through an illicit connection to the municipal separate

storm sewer system operated by Monmouth County, any domestic sewage, non-contact cooling water, process wastewater, or other industrial waste (other than stormwater).

IV. Penalties:

Any Monmouth County officer or employee who continues to be in violation of the provisions of this policy and procedure, after being duly notified, shall be subject to removal, suspension, demotion or other disciplinary action.

BE IT FURTHER RESOLVED that the Clerk of the Monmouth County Board of Chosen Freeholders forward a certified true copy of this Resolution to New Jersey Department of Environmental Protection.

Seconded by Freeholder BURRY and adopted on roll call by the following vote:

	<u>YES</u>	NO	ABSTAIN	ABSENT
Mrs. Burry	X			
Mrs. Handlin	X			
Mr. Narozanick	X			
Mr. Clifton	X			
Mr. Barham	X			

CERTIFICATION

I HEREBY CERTIFY THE ABOVE TO BE A TRUE COPY OF A RESOLUTION ADOPTED BY THE BOARD OF CHOSEN FREEHOLDERS OF THE COUNTY OF MONMOUTH AT A MEETING HELD

Jan 12, 2006
Marcia Masnick
CLERK

MONMOUTH COUNTY BOARD OF CHOSEN FREEHOLDERS

Freeholder Meeting Venue:

Date: Oct 28, 2010 - 7:00 PM

Location: Hall of Records
 Freeholders' Meeting Room
 1 East Main Street
 Freehold, NJ 07728

Agenda: Resolution authorizing the adoption of a policy and procedure requiring dumpsters and other refuse containers that are outdoors or exposed to storm water to be covered at all times to prohibit the spilling, dumping, leaking or otherwise discharge of liquids, semi-liquids or solids from the containers into storm sewers on County Highways.

Official Document #	Res# 2010-0848						
Meeting Date	10/28/2010						
Introduced Date	10/28/2010						
Adopted Date	10/28/2010						
Agenda Item	15						
FREEHOLDER	PRES.	ABS.	MOVE	SEC	AYE	NAY	ABST.
Curley	<			<	<		
Mallet	<				<		
D'Amico	<		<		<		
Clifton	<				<		
Burry	<				<		

County Counsel

RESOLUTION AUTHORIZING THE ADOPTION OF A POLICY AND PROCEDURE
REQUIRING DUMPSTERS AND OTHER REFUSE CONTAINERS THAT ARE
OUTDOORS OR EXPOSED TO STORM WATER TO BE COVERED AT ALL TIMES
TO PROHIBIT THE SPILLING, DUMPING, LEAKING OR OTHERWISE
DISCHARGE OF LIQUIDS, SEMI-LIQUIDS OR SOLIDS FROM THE
CONTAINERS INTO STORM SEWERS ON COUNTY HIGHWAYS.

Section I. Purpose:

A policy and procedure requiring dumpsters and other refuse containers that are outdoors or exposed to stormwater to be covered at all times and prohibiting the spilling, dumping, leaking, or otherwise discharge of liquids, semi-liquids or solids from the containers to the municipal separate storm sewer system(s) at County Highways and/or the waters of the State so as to protect public health, safety and welfare, and to prescribe penalties for the failure to comply. This policy and procedure does not apply to any dumpster and other refuse container which is owned/controlled by any entity/person other than the County of Monmouth.

Section II. Definitions:

For the purpose of this policy and procedure, 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) County Highway-any highway or other thoroughfare operated by Monmouth County (including a maintenance facility or rest area for such a thoroughfare). For purposes of this policy and procedure a "highway or other thoroughfare" does not include:

1. Any thoroughfare confined to the grounds of one or more buildings or:
2. Any thoroughfare confined to a park or recreational area operated by Monmouth County.

Introduced on: October 28, 2010
Adopted on: October 28, 2010
Official Resolution#: 2010-0848

- b) County-Monmouth County
- c) 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 Monmouth County 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.
- d) Person - any individual, corporation, company, partnership, firm, association, or political subdivision of this State subject to municipal jurisdiction.
- e) Refuse container - any waste container that a person controls whether owned, leased, or operated, including dumpsters, trash cans, garbage pails, and plastic trash bags.
- f) Stormwater - means 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.
- g) 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 III. Prohibited Conduct:

Monmouth County and its officers, staff, agents, other employees, contractors and students shall ensure that any County controlled dumpsters or refuse containers whether owned, leased, or operated is covered at all times and shall prevent refuse from spilling out or overflowing on County highways.

Monmouth County and its officers, staff, agents, other employees, contractors and students shall ensure that any

Introduced on: October 28, 2010
Adopted on: October 28, 2010
Official Resolution#: 2010-0848

County controlled dumpster or refuse container does not leak or otherwise discharge liquids, semi-liquids or solids to the municipal separate storm sewer system(s) on County highways.

SECTION IV. Exceptions to Prohibition:

- a. Permitted temporary demolition containers
- b. Litter receptacles (other than dumpsters or other bulk containers)
- c. Individual homeowner trash and recycling containers
- d. Refuse containers at facilities authorized to discharge stormwater under a valid NJPDES permit
- e. Large bulky items (e.g., furniture, bound carpet and padding, white goods placed curbside for pickup)

SECTION V. Penalties:

Any Monmouth County officer or employee, who continues to be in violation of the provisions of this policy and procedure, after being duly notified, shall be subject to removal, suspension, demotion or other disciplinary action.

SECTION VI. Severability:

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

SECTION VII. Effective date:

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

BE IT FURTHER RESOLVED that the Clerk forward a certified true copy of this resolution to the New Jersey Department of Environmental Protection and John Tobia, Director of Public Works and Engineering.

Introduced on: October 28, 2010
Adopted on: October 28, 2010
Official Resolution#: 2010-0848

APPENDIX V

Jellyfish™ Filter System Inspection and Maintenance Information

Jellyfish™ Inspection and Maintenance

Regular inspection and maintenance are proven, cost-effective ways to maximize water resource protection for all stormwater pollution control practices, and are required to insure proper functioning of the Jellyfish filter system. Inspection of the Jellyfish filter system is easily performed from the surface, while proper maintenance requires a combination of procedures conducted from the surface and with worker entry into the structure. The Jellyfish filter system's patent pending technology has no moving parts, keeping the process simple.

Please refer to the following information and guidelines before conducting inspection and maintenance activities.

When is inspection needed?

- Post-construction inspection is required prior to putting the Jellyfish filter system into service.
- Routine inspections are recommended during the first year of operation to accurately assess the sediment and floatable pollutant accumulation, and to ensure that the automatic backwash feature is functioning properly.
- Specifically for New Jersey installations, regulations require all BMPs to be inspected a minimum four times per year and after every storm with greater than one inch of rainfall.
- Inspection frequency in subsequent years is based on the maintenance plan developed in the first year.
- Inspections should also be performed immediately after an oil, fuel or other chemical spill.

When is maintenance service needed?

- For optimum performance, the unit should be cleaned out once the sediment depth reaches 12 inches of accumulation. Generally, the minimum cleaning frequency is once annually, although the frequency can be based on historical inspection results.
- Filter cartridges should be cleaned and re-commissioned, or replaced, every 12 months or when the automatic backwash feature no longer functions, whichever occurs first. The automatic backwash function will be disabled if the filter cartridges become saturated with sediment. This saturated condition is indicated if the backwash pool contains more than 3 inches depth of water after 12 or more hours of dry weather have elapsed since the most recent rainfall/runoff event.
- The unit should be cleaned out immediately after an oil, fuel or chemical spill.

What conditions can compromise the Jellyfish filter system's performance?

- If sediment accumulates beyond 12 inches in depth, filter cartridge life and sediment removal efficiency may be reduced.
- If filter cartridges become saturated with sediment, the system may not provide filtration treatment at the designed water quality flow rate, and unfiltered water may bypass the filter cartridges.
- If an oil spill(s) exceeds the oil capacity of the system, subsequent spills may not be captured and may cause fouling of the filter cartridges.
- If debris clogs the inlet of the system, removal efficiency of sediment, hydrocarbons, and gross pollutants may be reduced.
- If a downstream blockage occurs, a backwater condition may occur in the system and removal efficiency of sediment, hydrocarbons, and gross pollutants may be reduced.

What training is required?

The Jellyfish filter system is inspected and maintained by professional vacuum cleaning service providers with experience in the maintenance of underground tanks, sewers and catch basins. Since some of the maintenance procedures require manned entry into the Jellyfish structure, only professional maintenance service providers trained in confined space entry procedures should enter the vessel. Service provider companies typically have personnel who are trained and certified in confined space entry procedures according to local, state, and federal standards.

For typical inspection and maintenance activities, no specific supplemental training is required for the Jellyfish filter system. Information provided in this document or the Jellyfish Filter System Operation and Maintenance Manual (provided to the system owner) contains sufficient guidance to maintain the system properly.

What equipment is typically required for inspection?

- Manhole access cover lifting tool
- Oil dipstick or sampling tool
- Sediment probe
- Flashlight
- Camera
- Data log
- Safety cones and caution tape
- Hard hat, safety shoes, safety glasses, and chemical-resistant gloves

How is the Jellyfish filter system inspected?

- The Jellyfish filter system can be inspected from the surface through the standard surface manhole access cover or custom doors.
- Sediment and oil depth inspections are performed with a sediment probe and oil dipstick. Sediment and oil depth are measured through the 30-inch diameter maintenance access pipe.

- Visual inspection for floatable pollutant accumulation such as litter and hydrocarbons is also performed by shining a flashlight into the 30-inch diameter maintenance access pipe.
- Visual inspection of the backwash pool (6-inch high kidney-shaped or oval-shaped weir) should also be performed to check for standing water in the pool. If at least 12 hours of dry weather have elapsed since the most recent rainfall/runoff event and the backwash pool contains more than 3 inches of water, this condition indicates that the filter cartridges are saturated with sediment and should be cleaned or replaced.
- Inspections also involve a visual inspection of the internal components of the system for obvious damage.

What equipment is typically required for maintenance?

- Vacuum truck equipped with water hose and jet nozzle
- Small pump and tubing for oil removal, if necessary
- Manhole access cover lifting tool
- Oil dipstick or sampling tool
- Sediment probe
- Flashlight
- Camera
- Data log
- Safety cones and caution tape
- Hard hats, safety shoes, safety glasses, chemical-resistant gloves, and hearing protection for service providers
- Gas analyzer, respiratory gear, and safety harness for specially trained personnel if confined space entry is required
- Replacement cartridges are required if manual cleaning and re-commissioning of existing cartridges is not possible or adequate to restore proper system function.

How is the Jellyfish filter system maintained?

- The Jellyfish filter system can be maintained through the standard surface manhole access cover. All access covers should be removed to provide additional light and ventilation. If custom doors were installed instead of frames and covers, open all doors
- Insert the oil dipstick or sampling tool into the 30-inch diameter maintenance access pipe. If oil is present, pump off the oil layer into separate containment using a small pump and tubing. Some maintenance service providers may elect to use the vacuum hose if the oil amount is small.
- Maintenance cleaning of accumulated floatable litter and sediment is performed with a vacuum hose inserted through the 30-inch diameter maintenance access pipe.
- Using the vacuum hose, decant the water from the lower chamber to the sanitary sewer, if permitted by the local regulating authority, or into a separate containment tank.

- Remove the sludge from the bottom of the unit using the vacuum hose.
- For larger Jellyfish systems, (8-ft, 10-ft, 12-ft diameter), complete sediment removal may be facilitated by inserting a water hose with jet nozzle through a hole in the cartridge deck where a filter cartridge has been removed. Use the water jet to break up sediment on the bottom of vessel that is farthest from the 30-inch diameter maintenance access pipe. Rinse this sediment toward the maintenance access pipe for easy vacuum removal.
- To access the cartridge deck for manual cleaning or replacement of filter cartridges, descend the ladder that is built into structure's sidewall, observing all precautions for safe and proper confined space entry. Note that the cartridge deck may be slippery. Care should be taken to avoid stepping directly onto the cartridge heads or onto the backwash pool weir.
- A manual backwash of the cartridges is recommended to remove a high percentage of accumulated sediment from the filtration tentacles and extend the service life of the cartridges. A cartridge adapter pipe (12-inch diameter x 2-foot length threaded plastic pipe) may be purchased from Imbrium Systems that allows each cartridge to be selectively backwashed using a 2-inch diameter water hose that is supplied with water from either (a) the previously decanted water stored in a tractor truck compartment; (b) clean water from a separate water truck delivered to the site; or (c) water from a nearby fire hydrant or other clean water source.
- Manual backwash procedure: Twist the threaded orifice plate on the cartridge head counter-clockwise to remove the plate and expose the tentacle holes. With the threaded orifice plate removed, screw in the threaded cartridge adapter pipe over the exposed tentacle holes. Insert the 2-inch diameter water hose into the adapter pipe and commence full water flow by opening the ball valve on the end of the hose. Direct the water flow uniformly across the tentacle holes using a sweeping motion for one full minute, then close the ball valve. Remove the adapter pipe and re-install the orifice plate to secure the cartridge.
- Inspection of cartridge after manual backwashing: After manually backwashing the first cartridge, a visual inspection of the filtration tentacles is recommended. With the orifice plate removed, lift the cartridge (using the lifting bolts in the cartridge head) so that most or all of the filtration tentacle bundle is exposed. If upon visual inspection the degree or nature of any remaining sediment accumulation on the tentacles shows that the manual backwash was not effective, provisions must be made to replace all the spent cartridges with new cartridges as soon as possible. To re-commission a cleaned and regenerated cartridge, or to install a new cartridge, place the cartridge into the cartridge hole and re-install the orifice plate to secure the cartridge.
- New cartridges are lightweight (less than 20 pounds), and can be easily lowered down to a worker on the cartridge deck. Care should be taken not to bend or otherwise damage the tentacles during the handling and installation procedures.
- For maximum safety, it is recommended that each spent cartridge be removed and replaced one at a time, such that there is never more than one cartridge hole exposed. Removable cartridge hole cover plates can be purchased from Imbrium

Systems if required.

- Remove spent cartridges from the vessel.
- After cartridge service has been completed, the backwash water may be removed by vacuum hose.
- Re-fill the lower chamber with water where required by the local jurisdiction.

What is required for proper disposal?

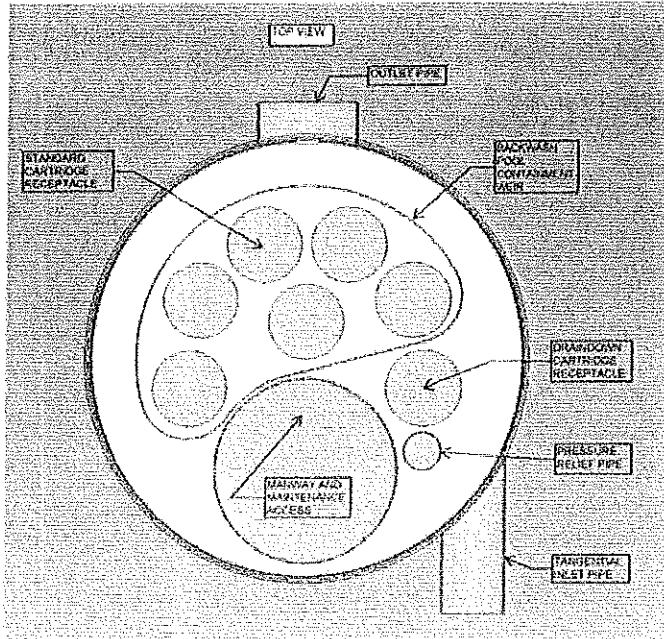
- Disposal requirements for recovered pollutants and spent filter cartridges may vary depending on local guidelines. In most areas the sediment and spent filter cartridges, once dewatered, can be disposed of in a sanitary landfill. It is not anticipated that the sediment would be classified as hazardous waste.

What about oil spills?

- Petroleum-based pollutants captured by the Jellyfish filter system (oil/chemical/fuel spills) should be removed and disposed of by a licensed waste management company.
- Although the Jellyfish filter system captures virtually all free oil, a sheen at the outlet **does not** mean the unit isn't working. A rainbow or sheen can be visible at oil concentrations of less than 10 mg/L (ppm).

What factors affect the costs involved with inspection/maintenance?

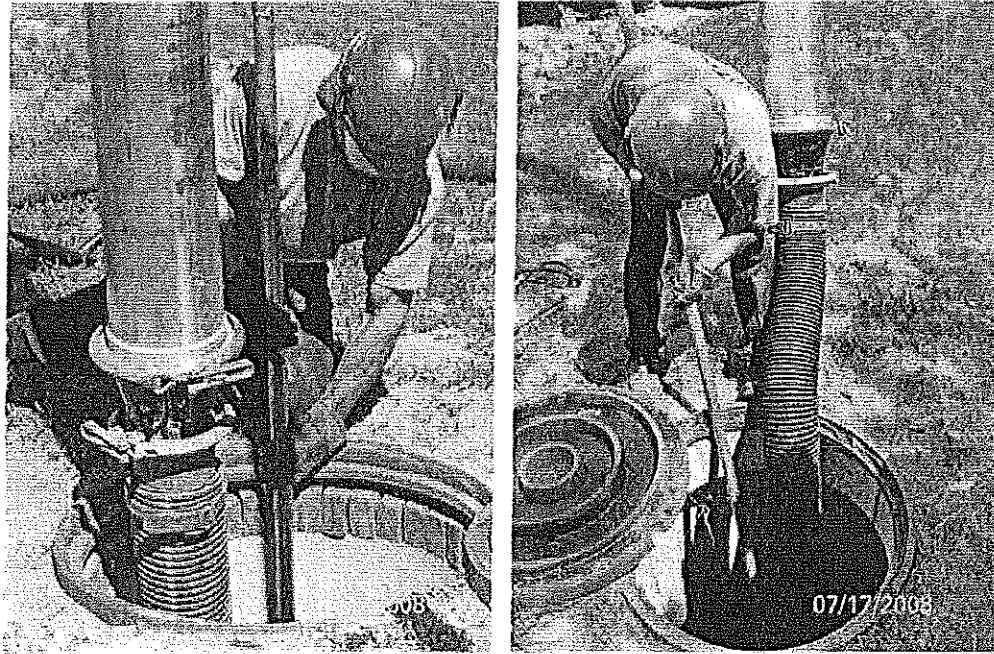
- Inspection and maintenance costs are based on unit size, cartridge count, sediment/oil/hazardous material loads, transportation distances, tipping fees, disposal requirements and other local regulations. Maintenance costs are anticipated to be substantially lower in instances where dirty cartridges are manually cleaned and re-commissioned rather than replaced with new cartridges.



Lightweight Jellyfish filter cartridges are easily inserted into and removed from the cartridge deck by hand. The top view schematic (above right) and top view photo (below right) depict the 6-ft diameter system. Note the 6 standard cartridges enclosed by the kidney-shaped backwash pool weir. A single draindown cartridge is located outside the weir.



The depth of sediment and oil can be measured from the surface by using a sediment probe or dipstick tube equipped with a ball check valve and inserted through the 30-inch maintenance access pipe. This large port provides convenient access for inspection and vacuum removal of water and pollutants.



A maintenance worker stationed on the surface uses a vacuum hose to evacuate water, sediment, and debris from the system.

The benefits of regular inspection and maintenance are many -- from ensuring maximum operation efficiency, to keeping maintenance costs low, to the continued protection of natural waterways -- and provide the key to the Jellyfish filter system's long and effective service life.

Ordering Replacement Parts

Jellyfish filter cartridges, cartridge hole cover plates, cartridge adaptor pipes (for manual backwashing), and other system components can be ordered by contacting:

Imbrium Systems Corporation
1-888-279-8826
www.imbriumsystems.com

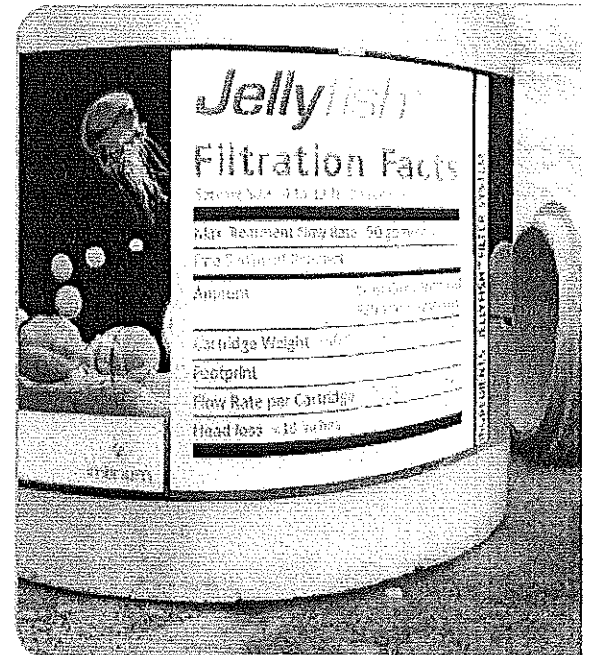
(revised 10-15-08)

Jellyfish™

The Smart Choice in Stormwater Filtration

Jellyfish™ fine sediment filter system

Jellyfish is a remarkably compact filter that uses filtration tentacles to trap over 85% fine sediment, and allows three times the flow capacity with just one-third the footprint and one-fifth the weight of conventional filters.



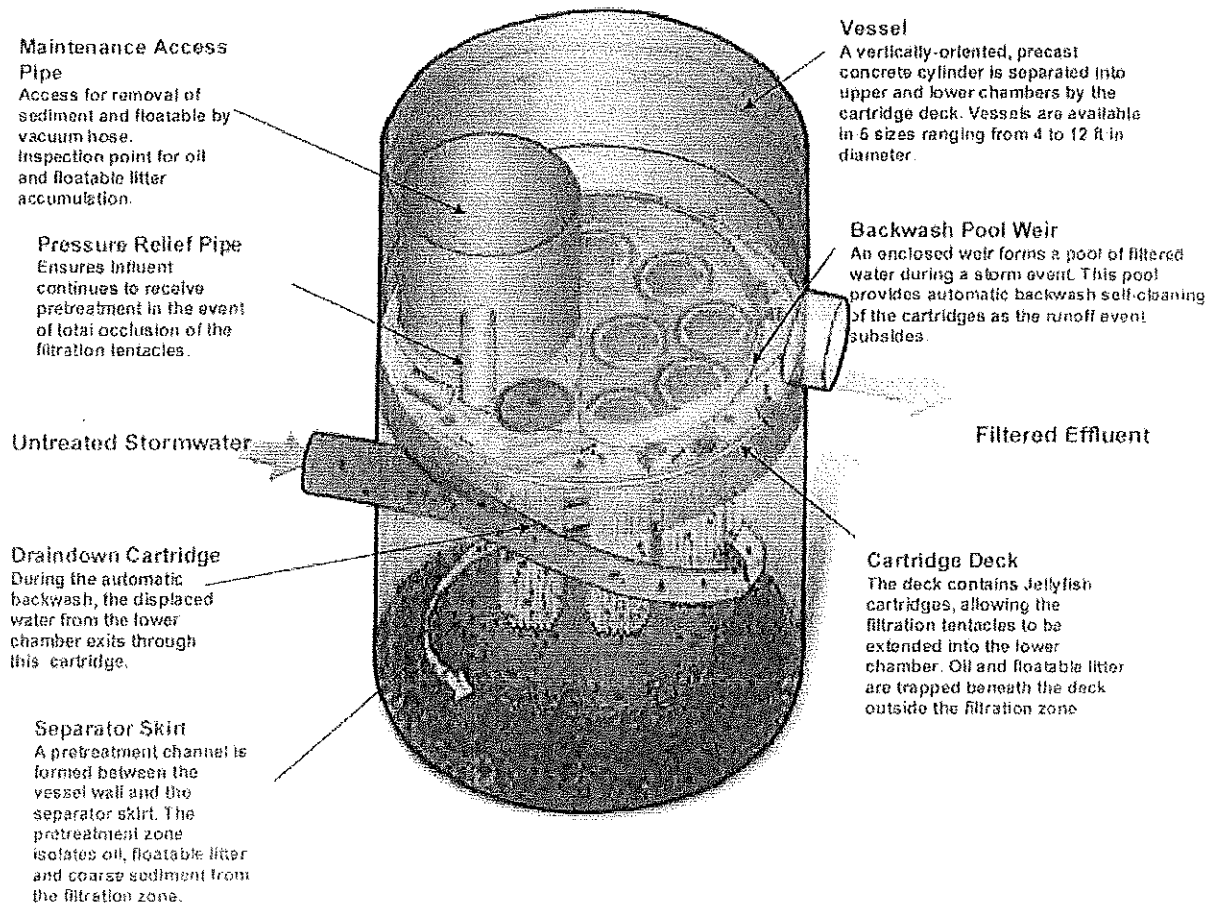
Superior Performance, Flexibility and Ease of Maintenance

- Unique filtration tentacles provide a high treatment surface area in a small footprint
- Removes greater than 85% fine sediment (Sil-Co-Sil 106™) and high levels of pollutants that adsorb to fine sediment at flow rates up to 50 gpm per cartridge
- Available as a single structure with integrated pretreatment for oil, floatable litter, and coarse sediment or as a filtration-only structure that uses an upstream pretreatment measure such as the Stormceptor® system
- Lightweight backwashable Jellyfish cartridges are easy to maintain compared to traditional heavy granular media filter cartridges
- Designed to meet your site's specific water quality objectives

System schematic and component functions

Below is a schematic of the Jellyfish filter system with key components identified and their functions briefly described (6-ft diameter system is depicted).

Jellyfish™ Filter System



The Jellyfish filter system has no moving parts to wear out and therefore maintenance activities are generally focused on pollutant removal and filter cartridge service.

Vortechs[®] Guide Operation, Design, Performance and Maintenance



Vortechs®

The Vortechs system is a high-performance hydrodynamic separator that effectively removes finer sediment (e.g. 50-microns (μm), oil, and floating and sinking debris). The swirl concentration operation and flow controls work together to minimize turbulence and provide stable storage of captured pollutants. Precast models can treat peak design flows up to 30-cfs (850-L/s); cast-in-place models handle even greater flows. A typical system is sized to provide a specific removal efficiency of a predefined particle size distribution (PSD).

Operation Overview

Stormwater enters the swirl chamber inducing a gentle swirling flow pattern and enhancing gravitational separation. Sinking pollutants stay in the swirl chamber while floatables are stopped at the baffle wall. Vortechs systems are usually sized to efficiently treat the frequently occurring runoff events and are primarily controlled by the low flow control orifice. This orifice effectively reduces inflow velocity and turbulence by inducing a slight backwater that is appropriate to the site.

During larger storms, the water level rises above the low flow control orifice and begins to flow through the high flow control. Any layer of floating pollutants is elevated above the invert of the Floatables Baffle Wall, preventing release. Swirling action increases in relation to the storm intensity, while sediment pile remains stable. When the storm drain is flowing at peak capacity, the water surface in the system approaches the top of the high flow control. The Vortechs system will be sized large enough so that previously captured pollutants are retained in the system, even during these infrequent events.

As a storm subsides, treated runoff decants out of the Vortechs system at a controlled rate, restoring the water level to a dry-weather level equal to the invert of the inlet pipe. The low water level facilitates easier inspection and cleaning, and significantly reduces maintenance costs by reducing pump-out volume.

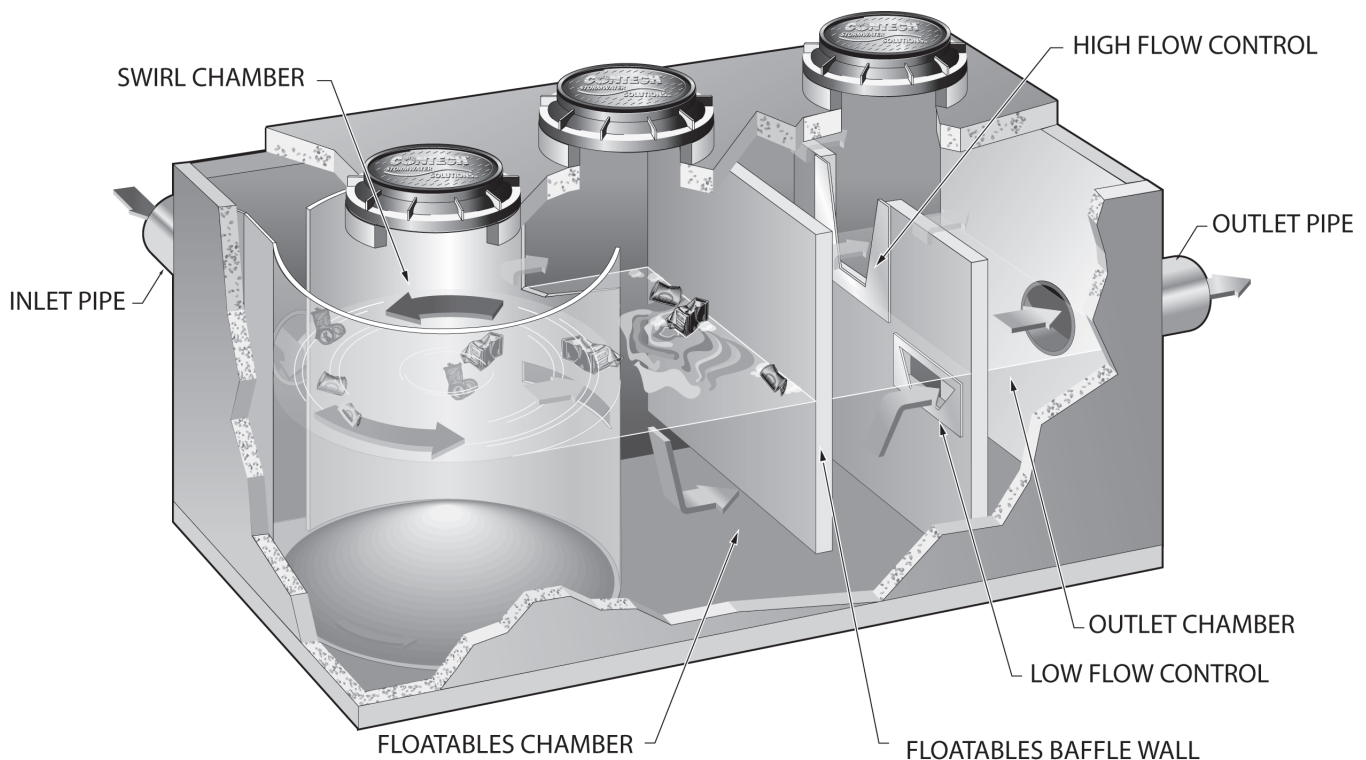
Design Basics

Each Vortechs system is custom designed based on site size, site runoff coefficient, regional precipitation intensity distribution, and anticipated pollutant characteristics. There are two primary methods of sizing a Vortechs system. The first is to determine which model size provides the desired removal efficiency at a given flow for a defined particle size or PSD. The second and more in depth method is the summation of Rational Rainfall Method™ which uses a summation process described below in detail and is used when a specific removal efficiency of the net annual sediment load is required.

Typically Vortechs systems are designed to achieve an 80% annual solids load reduction based on lab generated performance curves for either 50- μm particles, or a particle gradation found in typical urban runoff (see performance section of this manual for more information).

The Rational Rainfall Method™

Differences in local climate, topography and scale make every site hydraulically unique. It is important to take these factors into consideration when estimating the long-term performance of any stormwater treatment system. The Rational Rainfall Method combines site-specific information with laboratory generated performance data, and local historical precipitation records to estimate removal efficiencies as accurately as possible.



Short duration rain gauge records from across the United States and Canada were analyzed to determine the percent of the total annual rainfall that fell at a range of intensities. US stations' depths were totaled every 15 minutes or hourly and recorded in 0.01-inch increments. Depths were recorded hourly with 1-mm resolution at Canadian stations. One trend was consistent at all sites; the vast majority of precipitation fell at low intensities and high intensity storms contributed relatively little to the total annual depth.

These intensities, along with the total drainage area and runoff coefficient for each specific site, are translated into flow rates using the Rational Rainfall Method. Since most sites are relatively small and highly impervious, the Rational Rainfall Method is appropriate. Based on the runoff flow rates calculated for each intensity, operating rates within a proposed Vortechs system are determined. Performance efficiency curve determined from full scale laboratory tests on defined sediment PSDs is applied to calculate solids removal efficiency. The relative removal efficiency at each operating rate is added to produce a net annual pollutant removal efficiency estimate.

Once a system size is established, the internal elements of the system are designed based on information provided by the site engineer. Flow control sizes and shapes, sump depth, oil spill storage capacity, sediment storage volume and inlet and outlet orientation are determined for each system. In addition, bypass weir calculations are made for off-line systems.

Flow Control Calculations

Low Flow Control

The low flow control, or orifice, is typically sized to submerge the inlet pipe when the Vortechs system is operating at 20% of its treatment capacity. The orifice is typically a Cippoletti shaped aperture defined by its flat crest and sides which incline outwardly at a slope of 1 horizontal to 4 vertical.

$$Q_{\text{orifice}} = C_d \cdot A \cdot \sqrt{2gh}$$

Where:

Q_{orifice} = flow through orifice, cfs (L/s)

C_d = orifice coefficient of discharge = 0.56 (based on lab tests)

A = orifice flow area, ft² (m²) (calculated by orifice geometry)

h = design head, ft (m) (equal to the inlet pipe diameter)

g = acceleration due to gravity (32.2-ft/s² (9.81-m/s²))

The minimum orifice crest length is 3-in (76-mm) and the minimum orifice height is 4-in (102-mm). If flow must be restricted beyond what can be provided by this size aperture, a Fluidic-Amp™ HydroBrake flow control will be used. The HydroBrake allows the minimum flow constriction to remain at 3-in (76-mm) or greater while further reducing flow due to its unique throttling action.

High Flow Control

The high flow control, or weir, is sized to pass the peak system capacity minus the peak orifice flow when the water surface elevation is at the top of the weir. This flow control is also a Cippoletti type weir.

The weir flow control is sized by solving for the crest length and head in the following equation:

$$Q_{\text{weir}} = C_d \cdot L \cdot (h)^{3/2}$$

Where:

Q_{weir} = flow through weir, cfs (L/s)

C_d = Cippoletti weir coefficient = 3.37 (based on lab testing)

h = available head, ft (m) (height of weir)

L = design weir crest length, ft (m)

Bypass Calculations

In most all cases, pollutant removal goals can be met without treating peak flow rates and it is most feasible to use a smaller Vortechs system configured with an external bypass. In such cases, a bypass design is recommended by Contech Engineered Solutions for each off-line system. To calculate the bypass capacity, first subtract the system's treatment capacity from the peak conveyance capacity of the collection system (minimum of 10-year recurrence interval). The result is the flow rate that must be bypassed to avoid surcharging the Vortechs system. Then use the following arrangement of the Francis formula to calculate the depth of flow over the bypass weir.

$$H = (Q_{\text{bypass}} / (C_d \cdot L))^{2/3}$$

Where:

H = depth of flow over bypass weir crest, ft (m)

Q_{bypass} = required bypass flow, cfs (L/s)

C_d = discharge coefficient = 3.3 for rectangular weir

L = length of bypass weir crest, ft

The bypass weir crest elevation is then calculated to be the elevation at the top of the Cippoletti weir minus the depth of flow.

Hydraulic Capacity

In the event that the peak design flow from the site is exceeded, it is important that the Vortechs system is not a constriction to runoff leaving the site. Therefore, each system is designed with enough hydraulic capacity to pass the 100-year flow rate. It is important to note that at operating rates above 100-gpm/ft² (68-Lps/m²) of the swirl chamber area (peak treatment capacity), captured pollutants may be lost.

When the system is operating at peak hydraulic capacity, water will be flowing through the gap over the top of the flow control wall as well as the orifice and the weir.

Performance

Full Scale Laboratory Test Results

Laboratory testing was conducted on a full scale Vortechs model 2000. The 150- μm curve demonstrates the results of tests using particles that passed through a 60-mesh sieve and were retained on a 100-mesh sieve. The 50- μm curve is based on tests of particles passing through a 200-mesh sieve and retained on a 400-mesh sieve (38- μm). A gradation with an average particle size (d50) of 80- μm , containing particles ranging from 38–500- μm in diameter was used to represent typical stormwater solids. (Table 1)

Particle Size Distribution (μm)	Percentage of Sample Make-Up
<63	42%
63 - 75	4%
75 - 100	9%
100 - 150	7%
150 - 250	11%
>250	27%

Table 1: Particle gradation of typical urban runoff used for efficiency curve

As shown, the Vortechs system maintains positive total suspended solids (TSS), defined by the tested gradations, removal efficiencies over the full range of operating rates. This allows the system to effectively treat all runoff from large, infrequent design storms, as well as runoff from more frequent low-intensity storms.

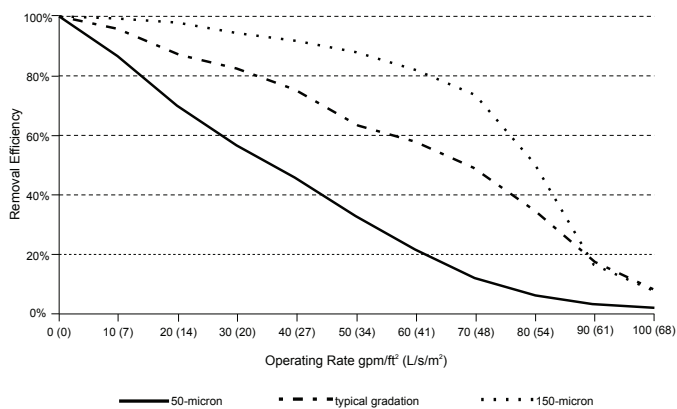


Figure 1: Vortechs model 2000 Removal Efficiencies

Typical Vortechs systems are designed to treat peak flows from 1.6-cfs (45-L/s) up to 30-cfs (850-L/s) online without the need for bypass. However, external bypasses can be configured to convey peak flows around the system if treatment capacity is exceeded. The system can also be configured to direct low flows from the last chamber of the system to polishing treatment when more stringent water quality standards are imposed. In all configurations, high removal efficiencies are achieved during the lower intensity storms, which constitute the majority of annual rainfall volume.

Full report available at www.conteches.com/vortechs.

Laboratory Testing

Full reports available at www.conteches.com/vortechs

Technical Bulletin 1: Removal Efficiencies for Selected Particle Gradations

Technical Bulletin 2: Particle Distribution of Sediments and the Effect on Heavy Metal Removal

Technical Bulletin 3: Sizing for Net Annual Sediment Removal

Technical Bulletin 3a: Determining Bypass Weir Elevation for Off-Line Systems

Technical Bulletin 4: Modeling Long Term Load Reduction: The Rational Rainfall Method

Technical Bulletin 5: Oil Removal Efficiency

Field Monitoring

Following are brief summaries of the field tests completed to date.

Full reports available at www.conteches.com/vortechs

DeLorme Mapping Company

Yarmouth, ME

Contech Engineered Solutions

Prior to this premier field test of the Vortechs system, Contech developed an extensive body of laboratory data to document total suspended solids (TSS) removal efficiency. Contech performed this field study in order to compare the performance predicted using laboratory data to the performance of a correctly sized system in the field.

The study site was the headquarters of DeLorme Mapping in Yarmouth, Maine. The building, driveway, parking lot and ancillary facilities were constructed in 1996. A Vortechs model 11000 was installed to treat runoff from the 300-space, 4-acre (1.62-ha) parking lot.

Testing Period	May 1999 to Dec 1999
# of Storms Sampled	20
Mean Influent Concentration	328-mg/L
Mean Effluent Concentration	60-mg/L
Removal Efficiency	82%

The main purpose of the DeLorme study was to verify that the sizing methodology developed from our full-scale laboratory testing was valid and an accurate means of predicting field performance. The results of the study confirmed our sizing methodology.

Village Marine Drainage

Lake George, NY

New York State Department of Environmental Conservation, Division of Water

The New York State DEC used funds obtained in a Section 319 grant to initiate a study of the effectiveness of the Vortechs system to remove sediment and other pollutants transported

by stormwater to Lake George, Lake George Village, New York. "Since the 1970s, when there was a rapid increase in the rate and concentration of development along the southwestern shores of Lake George, we have been concerned about the impact of stormwater discharges into the lake," said Tracy West, co-author of the study.

Testing Period	Feb 2000 to Dec 2000
# of Storms Sampled	13
Mean Influent Concentration	801-mg/L
Mean Effluent Concentration	105-mg/L
Removal Efficiency	88%

The study concluded that the Village and Town of Lake George should consider installing additional Vortechs systems in areas where sedimentation and erosion have been identified as non-point source pollution problems.

**Harding Township Rest Area
Harding Township, NJ
RTP Environmental Associates**

This third party evaluation was performed under a U.S. Environmental Protection Agency grant, administered by the New Jersey Department of Environmental Protection. A. Roger Greenway, principal of RTP Environmental Associates, Inc., conducted the study in conjunction with Thonet Associates, which assisted with data analysis and helped develop best management practices (BMP) recommendations.

The Vortechs model 4000 was sized to handle a 100-year storm from the 3 acre (1.21 ha) paved parking area at the Harding Rest Stop, located off the northbound lane of I-287 in Harding Township, New Jersey.

Testing Period	May 1999 to Nov 2000
# of Storms Sampled	5
Mean Influent Concentration (TSS)	493-mg/L
Mean Effluent Concentration (TSS)	35-mg/L
Removal Efficiency (TSS)	93%
Mean Influent Concentration (TPH)	16-mg/L
Mean Effluent Concentration (TPH)	5-mg/L
Removal Efficiency (TPH)	67%

The study concluded that truck rest stops and similar parking areas would benefit from installing stormwater treatment systems to mitigate the water quality impacts associated with stormwater runoff from these sites.

**Timothy Edwards Middle School
South Windsor, CT**

UCONN Department of Civil & Environmental Engineering

This study of the Vortechs system was published as a thesis by Susan Mary Board, as part of the requirements for a Master of Science degree from the University of Connecticut. Her objective was to determine how well the Vortechs system retained pollutants from parking lot runoff, including total suspended solids (TSS), nutrients, metals, and petroleum hydrocarbons.

A Vortechs model 5000 was installed in 1998 to treat runoff from the 82-space parking lot of Timothy Edwards Middle School. The entire watershed was approximately 2 acres (0.81 ha), and was 80% impervious.

Testing Period	Jul 2000 to Apr 2001
# of Storms Sampled	weekly composite samples taken
Mean Influent Concentration	324-mg/L
Mean Effluent Concentration	73-mg/L
Removal Efficiency	77%

Additionally, the Vortechs system was particularly effective in removing zinc (85%), lead (46%), copper (56%), phosphorus (67%) and nitrate (54%).

The study concluded that the Vortechs system significantly reduced effluent concentrations of many pollutants in stormwater runoff.



Maintenance

The Vortechs system should be inspected at regular intervals and maintained when necessary to ensure optimum performance. The rate at which the system collects pollutants will depend more heavily on site activities than the size of the unit, e.g., unstable soils or heavy winter sanding will cause the swirl chamber to fill more quickly but regular sweeping will slow accumulation.

Inspection

Inspection is the key to effective maintenance and is easily performed. Pollutant deposition and transport may vary from year to year and regular inspections will help ensure that the system is cleaned out at the appropriate time. Inspections should be performed twice per year (i.e. spring and fall) however more frequent inspections may be necessary in equipment washdown areas and in climates where winter sanding operations may lead to rapid accumulations. It is useful and often required as part of a permit to keep a record of each inspection. A simple inspection and maintenance log form for doing so is provided on the following page, and is also available on conteches.com.

The Vortechs system should be cleaned when inspection reveals that the sediment depth has accumulated to within 12 to 18 inches (300 to 450 mm) of the dry-weather water surface elevation. This determination can be made by taking two measurements with a stadia rod or similar measuring device; one measurement from the manhole opening to the top of the sediment pile and the other from the manhole opening to the water surface. Note: To avoid underestimating the volume of sediment in the chamber, the measuring device must be carefully lowered to the top of the sediment pile. Finer, silty particles at the top of the pile typically offer less resistance to the end of the rod than larger particles toward the bottom of the pile.

Cleaning

Cleaning of the Vortechs system should be done during dry weather conditions when no flow is entering the system. Clean-out of the Vortechs system with a vacuum truck is generally the most effective and convenient method of excavating pollutants from the system. If such a truck is not available, a "clamshell" grab may be used, but it is difficult to remove all accumulated pollutants using a "clamshell".

In installations where the risk of petroleum spills is small, liquid contaminants may not accumulate as quickly as sediment. However, an oil or gasoline spill should be cleaned out immediately. Motor oil and other hydrocarbons that accumulate on a more routine basis should be removed when an appreciable layer has been captured. To remove these pollutants, it may be preferable to use adsorbent pads to solidify the oil since these pads are usually much easier to remove from the unit individually and less expensive to dispose of than the oil/water emulsion that may be created by vacuuming the oily layer. Floating trash can be netted out if you wish to separate it from the other pollutants.

Cleaning of a Vortechs system is typically done by inserting a vacuum hose into the swirl chamber and evacuating this chamber of water and pollutants. As water is evacuated, the water level outside of the swirl chamber will drop to a level roughly equal to the crest of the lower aperture of the swirl chamber.

Floating pollutants will decant into the swirl chamber as the water level is drawn down. This allows most floating material to be withdrawn from the same access point above the swirl chamber. Floating material that does not decant into the swirl chamber during draw down should be skimmed from the baffle chamber. Sediment may accumulate outside the swirl chamber. If this is the case, it may be necessary to pump out other chambers. It is advisable to check for sediment accumulation in all chambers during inspection and maintenance.

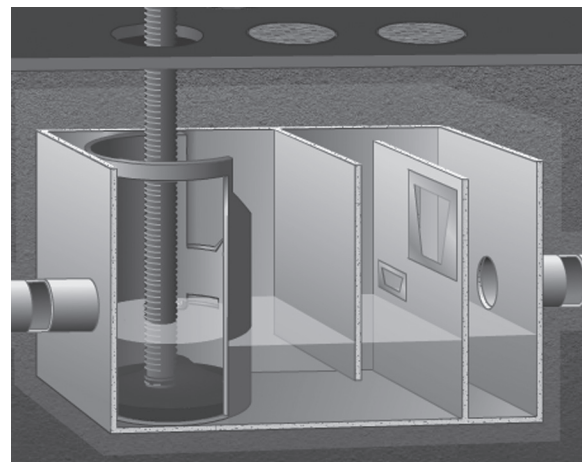
These maintenance recommendations apply to all Vortechs systems with the following exceptions:

1. It is strongly recommended that when cleaning systems larger than the Model 16000 the baffle chamber be drawn down to depth of three feet prior to beginning clean-out of the swirl chamber. Drawing down this chamber prior to the swirl chamber reduces adverse structural forces pushing upstream on the swirl chamber once that chamber is empty.
2. Entry into a Vortechs system is generally not required as cleaning can be done from the ground surface. However, if manned entry into a system is required the entire system should be evacuated of water prior to entry regardless of the system size.

Manhole covers should be securely seated following cleaning activities to prevent leakage of runoff into the system from above and also to ensure proper safety precautions. If anyone physically enters the unit, Confined Space Entry procedures need to be followed.

Disposal of all material removed from the Vortechs system should be done in accordance with local regulations. In many locations, disposal of evacuated sediments may be handled in the same manner as disposal of sediments removed from catch basins or deep sump manholes. Check your local regulations for specific requirements on disposal.

Contech has created a network of Certified Maintenance Providers (CCMP's) to provide maintenance on Vortechs systems. To find a CCMP in your area please visit www.conteches.com/maintenance.





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- Site-specific design support is available from our engineers.

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The product(s) described may be protected by one or more of the following US patents: 5,322,629; 5,624,576; 5,707,527; 5,759,415; 5,788,848; 5,985,157; 6,027,639; 6,350,374; 6,406,218; 6,641,720; 6,511,595; 6,649,048; 6,991,114; 6,998,038; 7,186,058; 7,296,692; 7,297,266; related foreign patents or other patents pending.

APPENDIX VI

Paging

No Errors

No Messages

MSRP ANNUAL REPORT - Highway Agency

Highway Agency MSRP Annual Report Summary

You have completed the Annual Report submittal process. You may print or save a copy of this submittal report for your records.

Service ID: 809810
 Facility Name: MONMOUTH CNTY
 Reporting Period: January 1, 2017 through December 31, 2017
 NJPDES Permit #: NJG0152234
 Activity ID: DST090001

Contacts

Name: JOHN TOBIA
 Title: DIRECTOR PW & ENGINEERING
 Contact Type: Stormwater Coordinator
 Organization Name: MONMOUTH CNTY DEPT PW & ENGINEERING
 Organization Type: County
 E-Mail: JOHN.TOBIA@CO.MONMOUTH.NJ.US
 Phone: (732) 683-8758 (Work Phone Number)
 (732) 462-1863 (Fax Number)
 Contact Address: 250 CENTER ST
 Freehold, New Jersey 07728

Uploaded Attachments

Attachment Name	Attachment Description	File Name
New Development Checklist		new_development_checklist_highway_agency - awarded in 2017.pdf
New Development Design Checkli		SR34 CR537 HA Post Construction Checklist - awarded in 2017.pdf
Found Illicit Connections		Found - Illicit Connections.pdf

Report Details - Part A

Highway Agency Information

Team member responsible for completing the report:	Jessica Kubida
Team member email address:	jessica.kubida@co.monmouth.nj.us

Stormwater Pollution Prevention Plan

1. Have you revised your Stormwater Pollution Prevention Plan to incorporate changes required by the renewal permit?	Yes
2. Date the SPPP was revised:	06/30/2014

Public Notice

1. Are you complying with applicable State and local public notice requirements when providing for public participation in the development and implementation of your stormwater program?	Yes
---	-----

Post-Construction Stormwater Management in New Development and Redevelopment

1. For major development on property that you own or operate, are you ensuring compliance with the applicable design and performance standards established under N.J.A.C. 7:8?	Yes
2. Are you ensuring adequate long-term operation and maintenance of stormwater BMPs on property that you own or operate?	Yes
3. For storm drain inlets that you install, are you complying with the standard set forth in Attachment C of the permit to control passage of solid and floatable materials?	Yes
4. Between January 1, 2017 and December 31, 2017 has your Highway Agency begun construction for any new development and/or redevelopment project that meets the definition of major development? If your Highway Agency has begun construction for any new development and/or redevelopment project that meets the definition of major development you must upload the New Development Project Summary Checklist.	Yes

Report Details - Part B

Local Public Education Program

1. Have you developed a Local Public Education Program?	Yes
2. Date the program was developed:	04/01/2005
3. Do you operate any rest areas or service areas?	No
4. Are you providing educational materials at rest areas and service areas?	

Storm Drain Inlet Labeling

1. Have you established a storm drain inlet labeling program?	Yes
2. Indicate the percentage or number of sectors labeled to date:	100%
3. Other Amount:	
4. Is your Highway Agency maintaining the labels (i.e. replacing and/or repainting)?	Yes

Improper Disposal of Waste

Have you adopted and are you enforcing a regulatory mechanism for:

1. Improper Disposal of Waste Control:	Yes
2. Date adopted:	01/12/2006
3. Illicit Connection Control:	Yes
4. Date adopted:	01/12/2006

5. Refuse Container/Dumpster Control:	Yes
6. Date adopted:	10/28/2010
7. Status of these regulatory mechanisms:	
8. Method(s) of enforcement (e.g., agency personnel disciplinary actions, additional signs, etc.):	Disciplinary action for agency personnel; potential fines for the general public.
9. Do you operate any rest areas and/or service areas?	No
10. Pet Waste Control:	
11. Date adopted:	
12. Wildlife Feeding Control:	
13. Date adopted:	
14. Status of these ordinances:	
15. Method(s) of enforcement (e.g., agency personnel disciplinary actions, additional signs, etc.):	

Litter Pick Up Program

1. Have you developed a Litter Pick Up Program?	Yes
2. Estimated number of days between January 1, 2017 and December 31, 2017 that litter pick ups were performed:	208
3. Estimated amount of materials collected:	23.46
4. Units:	Tons

MS4 Outfall Pipe Mapping

1. Have you completed the MS4 outfall pipes mapping?	Yes
2. Date completed:	08/15/2008
3. Number of outfall pipes within the Highway Agency:	649
4. Number of outfall pipes mapped:	649

Report Details - Part C

Illicit Connection Elimination Program

1. Have you completed an illicit connection inspection for all outfall pipes?	Yes
2. Total number of outfall pipes physically inspected during this reporting period:	0
3. Number of outfall pipes found to have an illicit connection during this reporting period:	0
4. Number of illicit connections eliminated during this reporting period: Please attach, in a format provided by the Department, a list of all outfalls found to have an illicit connection since the inception of the program. The list must include the outfall location, receiving water body, source of illicit connection and the date the illicit connection was eliminated.	1

Street Sweeping Program

1. Were all required streets swept?	Yes
2. What was the total number of miles swept?	3056

Please list the total amount of materials collected for each month since January 1, 2017, and indicate the unit of measurement used to report these materials.

3. Units:	Tons
4. January:	38
5. February:	51.8
6. March:	76
7. April:	242
8. May:	341
9. June:	246.5
10. July:	283
11. August:	156.4
12. September:	218.1
13. October:	235.6
14. November:	246.3
15. December:	129
16. Total (<i>The Total will be displayed in ton units. If you have selected cubic yards as your reporting unit of measurement, be aware that the total will be converted to tons, 1.053 cubic yards = 1 ton.</i>):	2263.7
17. If reporting zero (0) for a month above, please explain:	

Storm Drain Inlet Retrofitting

1. Were all storm drain inlets in direct contact with repaving, repairing, reconstruction or alterations retrofitted or replaced to meet the standard?	Yes
2. How many storm drain inlets were retrofitted?	149

Stormwater Facility Maintenance

Stormwater facilities include, but are not limited to, catch basins, detention basins, filter strips, riparian buffers, infiltration trenches, sand filters, constructed wetlands, wet basins, bioretention systems, low flow bypasses and stormwater conveyances. Please keep an inventory of stormwater facilities indicating type, function and location in a format provided by the Department onsite and available for inspection or upon request.

1. Have you developed a Stormwater Facility Maintenance Program?	Yes
--	-----

Stormwater Facilities

1. Were all stormwater facilities that you operate inspected?	Yes
2. Were any found to be in need of cleaning or repair in	Yes

order to function properly?	
3. Was the cleaning performed?	
4. Were repairs made?	Yes
5. Describe repair(s) or if repairs have not yet been made, provide a schedule for the repair(s):	If repairs were not immediately completed, it has been noted and placed on a prioritized list.

Catch Basins

1. Total number of catch basins that you operate:	6244
2. Total number of catch basins inspected:	6244
3. Total number of catch basins cleaned:	3217
4. Amount of materials removed from catch basins:	897.13
5. Units:	Cubic yards

Report Details - Part D

Outfall Pipe Stream Scouring Remediation

For all outfall pipes undergoing remediation through this program, please attach additional page(s) as necessary indicating the location of the outfall pipe (including the alphanumeric identifier), the repair start date and the repair complete date.

1. Have you developed a prioritized list of outfall pipes requiring outfall pipe stream scouring remediation?	Yes
---	-----

Roadside Vegetation Management

1. Have you developed a Roadside Vegetation Management Program?	Yes
2. Are you only applying herbicides, in a 2' radius, around structures where it is not practical to mow?	Yes
3. Is mulch stabilized after applications consistent with the Standards for Soil Erosion and Sediment Control in New Jersey?	N/A - we do not lay mulch

De-icing Material and Sand Storage

1. Do you have a permanent structure for de-icing material storage?	Yes
2. If sand is being stored outside, is it set back 50 feet from storm sewer inlets, ditches or other stormwater conveyance channels, and surface water bodies?	Yes

Fueling Operations

1. Are you implementing Standard Operating Procedures for vehicle fueling and receiving of bulk fuel deliveries at maintenance yard operations?	Yes
---	-----

Vehicle Maintenance

1. Are you implementing Standard Operating Procedures for vehicle maintenance and repair activities at maintenance yard operations?	Yes
---	-----

Good Housekeeping Practices

1. Are you implementing Good Housekeeping Practices for all materials or machinery listed in the Inventory Requirements for Highway Agency Maintenance Yard Operations (including maintenance activities and ancillary operations)?	Yes
---	-----

Equipment and Vehicle Washing

1. Has your Highway Agency implemented measures to properly handle the discharge of equipment and vehicle wash wastewater from your municipal maintenance yard operations?	Yes
2. Please indicate which option you implemented to eliminate the unpermitted discharge:	Installed a vehicle wash reclaim system
3. Date the management measure was implemented:	02/28/2009
4. What is your NJPDES permit number that authorizes the discharge of vehicle and equipment wash wastewater?	
5. Are you maintaining records of vehicle and equipment washing?	

Annual Employee Training

1. Did you conduct an annual employee training program for appropriate employees on appropriate topics (e.g., police officers trained on ordinances)?	Yes
2. List date(s) of employee training:	1/12/17, 1/16/17, 1/20/17, 2/2/17, 2/6/17, 2/7/17, 2/9/17, 2/14/17, 3/1/17

Report Details - Part E

Sharing of Responsibilities

Do you share services with another entity to satisfy a permit requirement?	No
--	----

For each of the following, indicate if you are relying on another entity to satisfy all or part of any permit requirements. Please provide additional information for any "Yes" answers in the provided Comments field.

1. Public notice:	
2. Comments:	
3. Comply with applicable design and performance standards for major development (post-construction):	
4. Comments:	
5. Long term operation and maintenance of BMPs (post-construction):	
6. Comments:	

7. Storm drain inlet design standard (post-construction):	
8. Comments:	
9. Local Public Education Program:	
10. Comments:	
11. Storm Drain Inlet Labeling Program:	
12. Comments:	
13. Pet waste regulatory mechanism:	
14. Comments:	
15. Litter regulatory mechanism:	
16. Comments:	
17. Improper disposal of waste regulatory mechanism:	
18. Comments:	
19. Wildlife feeding regulatory mechanism:	
20. Comments:	
21. Dumpster/refuse container regulatory mechanism:	
22. Comments:	
23. Outfall pipe mapping:	
24. Comments:	
25. Illicit connection elimination program:	
26. Comments:	
27. Street sweeping:	
28. Comments:	
29. Storm drain inlet retrofitting:	
30. Comments:	
31. Maintenance of stormwater facilities:	
32. Comments:	
33. Outfall pipe stream scouring:	
34. Comments:	
35. Roadside vegetation management:	
36. Comments:	
37. De-icing and sand storage:	
38. Comments:	
39. Fueling operations:	
40. Comments:	
41. Vehicle maintenance:	
42. Comments:	
43. Good Housekeeping:	
44. Comments:	

45. Vehicle and Equipment Washing:	
46. Comments:	
47. Employee Training:	
48. Comments:	

Incidents of Non-compliance

Based on the answers you provided above, the Department has identified the following possible permit compliance issues. Please complete the Incidents of Non-compliance section and identify steps being taken to correct these deficiencies.

1. Did your Highway Agency have any incidents of non-compliance?	No
2. Identify the steps being taken to remedy the noncompliance and to prevent such incidents from recurring. (If the text box is not large enough to complete this section, please provide your report as an attachment and upload it on the next screen. Please reference the attachment in the textbox.)	

Certification

Certifier: Jessica Kubida
 Certifier ID: MCPWE
 Challenge/Response Question: What is your favorite pet?
 Challenge/Response Answer: *****
 Certification PIN: *****
 Date/Time of Certification: 04/27/2018 14:28

"I certify under penalty of law that this Annual Report and Certification and all attached documents were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate this information. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering this information, the information in this Annual Report and Certification and all attached documents is, to the best of my knowledge and belief, true, accurate and complete.

"I certify that the municipality is in compliance with its stormwater program, Stormwater Pollution Prevention Plan (SPPP) and the NJPDES Highway Agency Municipal Stormwater General Permit No. NJG0152234 except for any incidents of non-compliance which are identified herein. For any incidents of non-compliance, the Annual Report identifies the steps being taken to remedy the non-compliance and to prevent such incidents from recurring.

"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."

Please note, no changes will be allowed to be made to this report upon its certification. If you need to correct or modify the report after certification, please contact your case manager at (609) 633-7021 so they may enable that function.

Jessica Kubida 04/27/2018
 General Date

Return