



# **Stormwater Pollution Prevention Plan (SPPP)**

**Township of Middle  
Cape May County  
New Jersey**

April 2023  
Prepared By:



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A handwritten signature in black ink, appearing to read "Vincent C. Orlando", is written over a horizontal line.

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## **Introduction:**

The Township of Middle is a Tier A Municipality under the New Jersey Department of Environmental Protection (NJDEP) Stormwater Management Program. As a tier A municipality Middle Township is required to satisfy the appropriate water quality requirements of the New Jersey Pollutant Discharge Elimination System (NJPDES). The MS4 Tier A program is a yearly collection of data from the previous year to ensure each municipality is meeting water quality requirements.

The Stormwater Pollution Prevention plan (SPPP) is used to address stormwater quality issues related to proposed and existing development. The SPPP is a 15-part survey that outlines the requirements set forth by the NJPDES. The forms in the survey must be checked and updated every year to ensure that the municipality is complying with all requirements and if any changes have occurred in the program. Within the SPPP a detailed explanation of how each requirement is met and where important program information can be found on the municipality's website. It is vital the SPP be up to date every year and be accessible to the public, as well as all information within the SPPP.

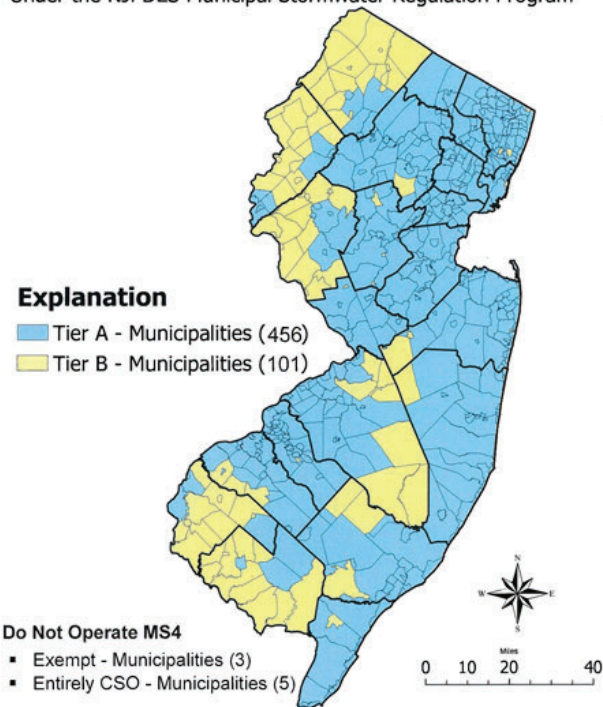
Within this report the most recent SPPP is provided as well as a multitude of information on how to promote safer habits and practices for the discharging of water and waste.

More information regarding the Tier A Municipal Stormwater permit can be found at the following website:  
[https://www.nj.gov/dep/dwq/tier\\_a.htm](https://www.nj.gov/dep/dwq/tier_a.htm)

More information on how you can help out can be found at the following website:  
[https://www.nj.gov/dep/dwq/msrp\\_outreach\\_material.htm](https://www.nj.gov/dep/dwq/msrp_outreach_material.htm)

### **Municipal Tier Assignments**

Under the NJPDES Municipal Stormwater Regulation Program



**New Jersey Tier Assignment Map**

# Stormwater Pollution Prevention Plan

Township of Middle

Cape May County

NJPDES#: NJG149250

Last Revised 4/27/2023



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## SPPP Form 1 – SPPP Team Members

All records must be available upon request by NJDEP.

<b>Stormwater Program Coordinator (SPC)</b>	
Print/Type Name and Title	<b>Robert Flynn</b>
Office Phone # and eMail	<b>609-465-8745, rflynn@middletownship.com</b>
Signature/Date	
<b>Individual(s) Responsible for Major Development Project Stormwater Management Review</b>	
Print/Type Name and Title	Post-Construction Stormwater management Coordinator, Vincent Orlando
Print/Type Name and Title	<b>Ordinance Coordinator, Kim Krauss</b>
Print/Type Name and Title	<b>Public Works Coordinator, Dave Maahs</b>
Print/Type Name and Title	<b>Employee Training Coordinator, Varvara Keun</b>
Print/Type Name and Title	<b>Sewer Administrator, Steve Mills</b>
<b>Other SPPP Team Members</b>	
Print/Type Name and Title	<b>Public Notice Coordinator, Robert Flynn</b>
Print/Type Name and Title	<b>Local Public Education Coordinator, Robert Flynn</b>
Print/Type Name and Title	
Print/Type Name and Title	

## SPPP Form 2 – Revision History

All records must be available upon request by NJDEP.

	Revision Date	SPC Initials	SPPP Form Changed	Reason for Revision
1.	1/1/2018		Yes	Initial Release
2.	4/27/2023		Yes	Revised per NJDEP Updates
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17.				
18.				
19.				
20.				

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

All records must be available upon request by NJDEP.

1. Website URL where the Stormwater Pollution Prevention Plan (SPPP) is posted online:	<a href="https://middletownship.com/departments/public-works/">https://middletownship.com/departments/public-works/</a>
2. Date of most current SPPP:	<b>Jan 1, 2018</b>
3. Website URL where the Municipal Stormwater Management Plan (MSWMP) is posted online:	<a href="https://ecode360.com/6687456">https://ecode360.com/6687456</a>
4. Date of most current MSWMP:	<b>Apr 5, 2021</b>
5. Physical location and/or website URL where associated municipal records of public notices, meeting dates, minutes, etc. are kept:	<a href="https://middletownship.com/departments/zoning-office/">https://middletownship.com/departments/zoning-office/</a> 10 South Boyd Street Cape May Court House, NJ 08210
6. Describe how the permittee complies with applicable state and local public notice requirements when providing for public participation in the development and implementation of a MS4 stormwater program:	<p>Middle Township provides public notice when required on the passage of ordinances and other issues pertaining to the SPP under open public meetings act NJSA 10:4-6 et seq. NJSA 40:49-1 and NJSA 40:55D-1 et seq. The township complies with all changes to the MS4 Stormwater Program as required.</p>

## SPPP Form 4 – Public Education and Outreach

All records must be available upon request by NJDEP.

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

For our annual distribution, the township mails the NJDEP brochure, along with our recycling pamphlet and yard water pickup schedule. This information is also available on our website (below), the county library, municipal building and public works building. During the annual Fall Harvest Festival in October the NJDEP brochures and other educational materials are on display for the open public. The township consistently complies with the NJDEP

<https://middletownship.com/departments/public-works/>

Public Works Shred Day is held twice a year and the information is given out at that time. Dates on website above.

Free Rabies Clinic at Public Works is held twice a year and information is also given out at that time.

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

The Township of Middle Section 233 gives information about illicit connections and penalties for any failure to comply.

<chrome-extension://efaidnbmnnnibpcajpcgclefindmkaj/https://www.middletownnj.org/DocumentCenter/View/2857/Illicit-Connection-to-Storm-Sewer-System-Ordinance>

Illegal dumping information can be found on the public works site. Other information regarding hazardous waste and helpful information can be found on the same page. (<https://middletownship.com/departments/public-works/>)

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

**Records can be found at Public Works Building**

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

All records must be available upon request by NJDEP.

<p>1. How does the municipality define 'major development'?</p>
<p>(1) An individual development, as well as multiple developments that individually or collectively result in:</p> <ul style="list-style-type: none"><li>(a) The disturbance of one or more acres of land since February 2, 2004;</li><li>(b) The creation of 1/4 acre or more of regulated impervious surface since February 2, 2004;</li><li>(c) The creation of 1/4 acre or more of regulated motor vehicle surface since March 2, 2021, or the effective date of this section, whichever is earlier; or</li><li>(d) A combination of (b) and (c) above that totals an area of 1/4 acre or more. The same surface shall not be counted twice when determining if the combination area equals 1/4 acre or more.</li></ul> <p>(2) "Major development" includes all developments that are part of a common plan of development or sale (for example, phased residential development) that collectively or individually meet any one or more of Subsection (1)(a), (b), (c) or (d) above. Projects undertaken by any government agency that otherwise meet the definition of "major development" but which do not require approval under the Municipal Land Use Law, N.J.S.A. 40:55D-1 et seq., are also considered "major development."</p>
<p>2. Does the municipality approach residential projects differently than it does for non-residential projects? If so, how?</p>
<p>The drainage and stormwater management section of Middle Township's ordinance is applicable to all site plans and subdivisions for non-residential major developments that require preliminary or final site plan or subdivision review. The ordinance is applicable to aspects of residential major developments that are not preempted by the Residential Site Improvement Standards at N.J.A.C. 5:21.</p>
<p>3. What process is in place to ensure that municipal projects meet the Stormwater Control Ordinance?</p>
<p>Middle Township's drainage and stormwater management design standards are set forth in section 218-73 of the Subdivision of Land and Site Plan Review Ordinance. The applicant's site development project shall be reviewed as a part of the subdivision or site plan review process by the municipal board or official from which municipal approval is sought. That municipal board or official shall consult the engineer retained by the Planning and/or Zoning Board (as appropriate) to determine if all of the checklist requirements have been satisfied and to determine if the project meets the standards set forth in the ordinance.</p>

<p>4. Describe the process for reviewing major development project applications for compliance with the Stormwater Control Ordinance (SCO) and Residential Site Improvement Standards (RSIS). Attach a flow chart if available.</p>	
<p>The drainage and stormwater management section of Middle Township's ordinance is applicable to all site plans and subdivisions for non-residential major developments that require preliminary or final site plan or subdivision review. The ordinance is applicable to aspects of residential major developments that are not preempted by the Residential Site Improvement Standards at N.J.A.C. 5:21.</p>	
<p>5. Does the Municipal Stormwater Management Plan include a mitigation plan?</p>	<p>No</p>
<p>6. What is the physical location of approved applications for major development projects, Major Development Summary Sheets (permit att. D), and mitigation plans?</p>	<p>The approved applications for major development projects are on file at the Zoning Office.</p>

## SPPP Form 6 – Ordinances

All records must be available upon request by NJDEP.

Ordinance permit cite IV.B.1.b.iii	Date of Adoption	Website URL	Was the DEP model ordinance adopted without change?	Entity responsible for enforcement
1. Pet Waste permit cite IV.B.5.a.i	07/18/05	<a href="https://ecode360.com/6684795?highlight=pet,pet%2">https://ecode360.com/6684795?highlight=pet,pet%2</a>	No	Middle Township Animal Cruelty Investigator
2. Wildlife Feeding permit cite IV.B.5.a.ii	07/18/05	<a href="https://ecode360.com/6688686?highlight=feed,feedi">https://ecode360.com/6688686?highlight=feed,feedi</a>	No	Code Enforcement / Police
3. Litter Control permit cite IV.B.5.a.iii	07/18/05	<a href="https://ecode360.com/15230159?highlight=littering&amp;">https://ecode360.com/15230159?highlight=littering&amp;</a>	No	Code Enforcement / Police
4. Improper Disposal of Waste permit cite IV.B.5.a.iv	09/07/89	<a href="https://ecode360.com/6684845?highlight=of,waste%20disposal&amp;searchId=31179217866290251#6684845">https://ecode360.com/6684845?highlight=of,waste%20disposal&amp;searchId=31179217866290251#6684845</a>	No	Code Enforcement / Police / Health Dept / Construction official
5. Containerized Yard Waste/ Yard Waste Collection Program permit cite IV.B.5.a.v	12/16/19 93	<a href="https://ecode360.com/6684847?highlight=collection,waste,waste%20collection&amp;searchId=31179278300068342#6684847">https://ecode360.com/6684847?highlight=collection,waste,waste%20collection&amp;searchId=31179278300068342#6684847</a>	No	Code Enforcement / Police / Health Dept / Construction official
6. Private Storm Drain Inlet Retrofitting permit cite IV.B.5.a.vi	09/03/201 4	<a href="https://ecode360.com/29201561?highlight=retrofitting&amp;searchId=31179312057712556#29201561">https://ecode360.com/29201561?highlight=retrofitting&amp;searchId=31179312057712556#29201561</a>		Code Enforcement / Planing & Zoning
7. Stormwater Control Ordinance permit cite IV.B.4.g and IV.B.5.a.vii	05/03/20 21	<a href="https://ecode360.com/6687531?highlight=stormwater&amp;searchId=31179354114565452#6687531">https://ecode360.com/6687531?highlight=stormwater&amp;searchId=31179354114565452#6687531</a>		Code Enforcement / Planing & Zoning
8. Illicit Connection Ordinance permit cite IV.B.5.a.vii and IV.B.6.d	01/28/20 05	<a href="chrome-extension://efaidnbmnnnibpcajpgclclefindmkaj/https://www.middletownnj.org/DocumentCenter/View/2857/Illicit-Connection-to-Storm-Sewer-System-Ordinance">chrome-extension://efaidnbmnnnibpcajpgclclefindmkaj/https://www.middletownnj.org/DocumentCenter/View/2857/Illicit-Connection-to-Storm-Sewer-System-Ordinance</a>		Police / Other township officials
9. Optional: Refuse Container/ Dumpster Ordinance permit cite IV.E.2	09/03/20 14	<a href="https://ecode360.com/29201483">https://ecode360.com/29201483</a>		Township of Middle
Indicate the location of records associated with ordinances and related enforcement actions:				
<a href="https://ecode360.com/6683594">https://ecode360.com/6683594</a>				
Penalties are outlined in the municipal coded under the associated section.				



## SPPP Form 7 – Street Sweeping

All records must be available upon request by NJDEP.

1. Provide a written description or attach a map indicating which streets are swept as required by the NJPDES permit. Describe the sweeping schedule and indicate if any of the streets are swept by another entity through a shared service arrangement.
Streets are swept in Middle Township throughout the entire year. 5 days a week trucks are cleaning the streets. each street is swept approximately 3 times a year.
2. Provide a written description or attach a map indicating which streets are swept that are NOT required to be swept by the NJPDES permit. Describe the sweeping schedule and indicate if any of the streets are swept by another entity through a shared service arrangement.
Streets are swept in Middle Township throughout the entire year. 5 days a week trucks are cleaning the streets. each street is swept approximately 3 times a year.
3. Does the municipality provide street sweeping services for other municipalities? If so, please describe the arrangements.
No
4. Indicate the location of records, including sweeping dates, areas swept, number of miles swept and total amount of wet tons collected each month. Note which records correspond to sweeping activities beyond what is required by the NJPDES permit, i.e., sweepings of streets within the municipality that are not required by permit to be swept or sweepings of streets outside of the municipality.
Public Works

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

All records must be available upon request by NJDEP.

1. Describe the schedule for catch basin and storm drain inlet inspection, cleaning, and maintenance.
Annual inspections, cleaning, maintenance and reporting are completed by the Middle Township Public Works Department. Sample street sweeping logs attached.
2. List the locations of catch basins and storm drain inlets with recurring problems, i.e., flooding, accumulated debris, etc.
N/A
3. Describe what measures are taken to address issues for catch basins and storm drain inlets with recurring problems and how they are prioritized.
Inlets and catch basin inspections are annually inspected and cleaned. Any abnormalities or clogged inlets are cleaned.
4. Describe the inspection schedule and maintenance plan for storm drain inlet labels on storm drains that do not have permanent wording cast into the design.
All inlets are labeled as "no dumping drains to waterway". Any inlets found without the standard grate label is replaced with the appropriate casting.
5. Indicate the location of records of catch basin and storm drain inlet inspections and the wet tons of materials collected during catch basin and storm drain inlet cleanings.
Public Works

## SPPP Form 9 – Storm Drain Inlet Retrofitting

All records must be available upon request by NJDEP.

1. Describe the procedure for ensuring that municipally owned storm drain inlets are retrofitted.
For all roadway projects, inlets are inspected and labeled to be retrofitted if the casting is not an NJDOT bicycle safe grate stamped with "dump no waste drains to waterways"
2. Describe the inspection process to verify that appropriate retrofits are completed on municipally owned storm drain inlets.
Inspections for all municipal projects are conducted. Retrofitting with compliance to the MS4 permit are inspected.
3. Describe the procedure for ensuring that privately owned storm drain inlets are retrofitted.
<p>A Private Storm Drain Inlet Retrofitting ordinance is in place requiring the retrofitting of existing storm drain inlets which are in direct contact with repaving, repairing, reconstruction, or resurfacing or alterations of facilities on private property, to prevent the discharge of solids and floatables (such as plastic bottles, cans, food wrappers and other litter) to the municipal separate storm sewer system(s) operated by the Township of Middle so as to protect public health, safety and welfare, and to prescribe penalties for the failure to comply.</p> <p>No person in control of private property (except a residential lot with one single-family house) shall authorize the repaving, repairing (excluding the repair of individual potholes), resurfacing (including top coating or chip sealing with asphalt emulsion or a thin base of hot bitumen), reconstructing or altering any surface that is in direct contact with an existing storm drain inlet on that property unless the storm drain inlet either already meets the design standards to control passage of solid and floatable materials; or is retrofitted or replaced to meet the standard in § 213-4 prior to the completion of the project.</p> <p>Violations and penalties.</p> <p>Any person(s) who is found to be in violation of the provisions of this article shall be subject to a fine not to exceed a fine up to \$500 per offense for each storm drain inlet that is not retrofitted to meet the design standard.</p>
4. Describe the inspection process to verify that appropriate retrofits are completed on privately owned storm drain inlets.
Inspections for all private projects are conducted. Retrofitting with compliance to the MS4 permit are inspected.

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

All records must be available upon request by NJDEP.

<i>Complete separate forms for each municipal yard or ancillary operation location.</i>	
Address of municipal yard or ancillary operation: Public Works facility at 400 W Mechanic St CMCH, NJ 08210	
List all materials and machinery located at this location that are exposed to stormwater which could be a source of pollutant in a stormwater discharge:	
Raw materials –	All materials stored inside building
Intermediate products –	Road reconstruction milling
Final products –	none
Waste materials –	trash emptied weekly by contractor
By-products –	none
Machinery –	Trucks and various equipment
Fuel –	off road fuel only
Lubricants –	Oil for Motor Pool Operations
Solvents –	Serviced by outside vendor (parts cleaner)
Detergents related to municipal maintenance yard or ancillary operations –	
Other –	

<p>For each category below, describe the best management practices in place to ensure compliance with all requirements in permit Attachment E. If the activity in the category is not applicable for this location, indicate where it occurs.</p> <p>Indicate the location of inspection logs and tracking forms associated with this municipal yard or ancillary operation, including documentation of conditions requiring attention and remedial actions that have been taken or have been planned.</p>	
1. Fueling Operations	
	County for daily operations and off road fuel kept in yard
2. Vehicle Maintenance	
	in house and outside vendors
3. On-Site Equipment and Vehicle Washing	
	<i>See permit attachment E for certification and log forms for Underground Storage Tanks.</i>
	not permitted, except for sailing operations
4. Discharge of Stormwater from Secondary Containment	
	Not permitted.

5. Salt and De-Icing Material Storage and Handling
stored at county facility, pulled as necessary
6. Aggregate Material and Construction Debris Storage
Pavement millings stored at 400 W Mechanic to repair dirt or unpaved roads in the township
7. Street Sweepings, Catch Basin Clean Out and Other Material Storage
county facility
8. Yard Trimmings and Wood Waste Management Sites
Picked up curb side and taken to landfill or wood waste management site
9. Roadside Vegetation Management
cut during growing season

## SPPP Form 11 – Employee Training

All records must be available upon request by NJDEP.

<p><b>A. Municipal Employee Training:</b> Stormwater Program Coordinator (SPC) must ensure appropriate staff receive training on topics in the chart below as required due to job duties assigned within three months of commencement of duties and again on the frequency below. Indicate the location of associated training sign in sheets, dates, and agendas or description for each topic.</p>		
Topic	Frequency	Title of trainer or office to conduct training
1. Maintenance Yard Operations (including Ancillary Operations)	Every year	<b>Public Works Employee</b>
2. Stormwater Facility Maintenance	Every year	Public Works Employee
3. SPPP Training & Recordkeeping	Every year	Public Works Employee
4. Yard Waste Collection Program	Every 2 years	Public Works Employee
5. Street Sweeping	Every 2 years	Public Works Employee
6. Illicit Connection Elimination and Outfall Pipe Mapping	Every 2 years	<b>Public Works Employee</b>
7. Outfall Pipe Stream Scouring Detection and Control	Every 2 years	<b>Public Works Employee</b>
8. Waste Disposal Education	Every 2 years	Public Works Employee
9. Municipal Ordinances	Every 2 years	Public Works Employee
10. Construction Activity/Post-Construction Stormwater Management in New Development and Redevelopment	Every 2 years	Public Works Employee
<p><b>B. Municipal Board and Governing Body Members Training:</b> Required for individuals who review and approve applications for development and redevelopment projects in the municipality. This includes members of the planning and zoning boards, town council, and anyone else who votes on such projects. Training is in the form of online videos, posted at <a href="http://www.nj.gov/dep/stormwater/training.htm">www.nj.gov/dep/stormwater/training.htm</a>.</p> <p>Within 6 months of commencing duties, watch <i>Asking the Right Questions in Stormwater Review Training Tool</i>. Once per term thereafter, watch at least one of the online DEP videos in the series available under Post-Construction Stormwater Management. Indicate the location of records documenting the names, video titles, and dates completed for each board and governing body member.</p>		
<p><b>C. Stormwater Management Design Reviewer Training:</b> All design engineers, municipal engineers, and others who review the stormwater management design for development and redevelopment projects on behalf of the municipality must attend the first available class upon assignment as a reviewer and every five years thereafter. The course is a free, two-day training conducted by DEP staff. Training dates and locations are posted at <a href="http://www.nj.gov/dep/stormwater/training.htm">www.nj.gov/dep/stormwater/training.htm</a>. Indicate the location of the DEP certificate of completion for each reviewer.</p>		

## SPPP Form 12 – Outfall Pipes

All records must be available upon request by NJDEP.

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

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

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

May 5th 2015 an ordinance was introduced requiring all new plans to be submitted in electronic format to be imported into GIS.

Prior to this in 2009 all outfalls were mapped in GIS.

<http://viewer.myidv.com/Map/71332c32ecafa518/Middle-Twp-Utilities>

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

No instances of stream scouring have been noted in the past year.



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

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

Illicit discharge connection inspections are performed annually during the stormwater outfall pipe inspections. The Illicit Connection Inspection Report Forms are completed and kept with the SPPP. No illicit connections have been found this year, as we know.

## SPPP Form 13 – Stormwater Facilities Maintenance

All records must be available upon request by NJDEP.

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

A maintenance and inspection program for Middle Township owned stormwater basins has been implemented. All infiltration basin components expected to receive and trap debris and sediment are inspected for clogging and excessive debris and sediment accumulation at least four times a year, as well as after every storm exceeding one inch of rainfall. Such components may include bottoms, riprap or gabion aprons and inflow points. This applies to both surface and subsurface infiltration basins. Mowing of grass takes place once a month, inspections of vegetated areas are completed annually and inspections of bottom layers of infiltration basins is completed monthly or after a storm exceeding one inch of rainfall.

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

Owners of privately owned basins are notified each year.

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

### Public Works

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

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

## SPPP Form 14 – Total Maximum Daily Load Information

All records must be available upon request by NJDEP.

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

Polychlorinated Biphenyls (PCBs) for Zone 6 of the Delaware River  
Bidwell Ck(below Rt 47)-Dias to GoshenCk  
Bidwell Creek (above Rt 47)  
Dennis Creek (Jakes Landing Rd to Rt 47)  
Dennis Creek (below Jakes Landing Rd)  
Dias Creek  
Fishing Creek / Fishing Mill Stream  
Green Ck (Norburys Landng to Pierces Pt)  
Sluice Creek  
Shellfish-Impaired Waters in Watershed Management Area 16  
Bidwell Ditch-A  
Creesse Creek-A, Jenkins Sound-A  
Creesse Creek-A, Jenkins Sound-A, Richardson Sound-A, Richardson  
Delaware Bay-H  
Great Sound-A  
Great Sound-B, Stiles Sound-A  
arvis Sound-A, Jarvis Sound-B, Jsct Estuary  
Jarvis Sound-A, Jarvis Sound-B, Richardson Sound-B  
Jenkins Sound-A  
Jenkins Sound-A, Richardson Sound-A, Richardson Sound-C  
Jenkins Sound-A, Richardson Sound-C  
Richardson Sound-B  
Stiles Sound-A

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

The township uses the TMDLs where required

## SPPP Form 15 – Optional Measures

All records must be available upon request by NJDEP.

<p>1. Describe any Best Management Practice(s) the permittee has developed that extend beyond the requirements of the Tier A MS4 NJPDES permit that prevents or reduces water pollution.</p> <p>Stormwater Management measures are outlined in Section 218-73. All regulations are followed as written and either met or achieved.</p>
<p>2. Has the permittee adopted a Refuse Container/Dumpster Ordinance?</p>
<p>Yes, See chapter 129 of the Middle Code (<a href="https://ecode360.com/29201483">https://ecode360.com/29201483</a>)</p>



## State of New Jersey

PHILIP D. MURPHY  
*Governor*

DEPARTMENT OF ENVIRONMENTAL PROTECTION  
Mail Code - 501-02A

SHAWN M. LATOURETTE  
*Commissioner*

SHEILA Y. OLIVER  
*Lt. Governor*

Bureau of NJPDES Stormwater Permitting and Water Quality Management  
P.O. Box 420 – 501 E State St., 1<sup>st</sup> Flr.  
Trenton, NJ 08625-0420  
Phone: (609) 633-7021 / Fax: (609) 777-0432  
[http://www.state.nj.us/dep/dwq/bnpc\\_home.htm](http://www.state.nj.us/dep/dwq/bnpc_home.htm)

December 01, 2022

Re: R9 - Tier A Municipal Stormwater General Permit  
NJPDES: NJ0141852 PI ID #: 50577  
NJPDES Master General Permit Program Interest  
501 East State Street  
Trenton, NJ 08625

Dear Interested Party,

Enclosed is a **final** New Jersey Pollutant Discharge Elimination System (NJPDES) permit action identified above which has been issued in accordance with N.J.A.C. 7:14A. The Tier A Municipal Stormwater General Permit authorizes the discharge of stormwater from small municipal separate storm sewer systems (MS4). The permit was issued in response to USEPA's Phase II rules. The Tier A permit addresses stormwater quality issues related to both new and existing development.

A summary of the significant and relevant comments received on the draft action during the public comment period, the Department's responses, and an explanation of any changes from the draft action have been included in the Response to Comments document attached hereto as per N.J.A.C. 7:14A-15.16.

The final Tier A MS4 NJPDES permit and supporting documents are also posted at [https://www.nj.gov/dep/dwq/tier\\_a.htm](https://www.nj.gov/dep/dwq/tier_a.htm). Questions or comments regarding the final action should be addressed to Dan Kuti at [Daniel.Kuti@dep.nj.gov](mailto:Daniel.Kuti@dep.nj.gov).

Sincerely,

Gabriel Mahon, Bureau Chief  
Bureau of NJPDES Stormwater Permitting and Water Quality Management

Enclosures

c: Permit Authorization  
Response to Comments Document  
Final Permit Document



# NEW JERSEY POLLUTANT DISCHARGE ELIMINATION SYSTEM

The New Jersey Department of Environmental Protection hereby grants you a NJPDES permit for the facility/activity named in this document. This permit is the regulatory mechanism used by the Department to help ensure your discharge will not harm the environment. By complying with the terms and conditions specified, you are assuming an important role in protecting New Jersey's valuable water resources. Your acceptance of this permit is an agreement to conform with all of its provisions when constructing, installing, modifying, or operating any facility for the collection, treatment, or discharge of pollutants to waters of the state. If you have any questions about this document, please feel free to contact the Department representative listed in the permit cover letter. Your cooperation in helping us protect and safeguard our state's environment is appreciated.

**Permit Number: NJ0141852**

**Final: Stormwater Discharge Master General Permit Renewal**

**Permittee:**

NJPDES Master General Permit  
Program Interest Group R9  
501 East State Street  
Trenton, NJ 08625

**Co-Permittee:**

**Property Owner:**

NJPDES Master General Permit  
Program Interest Group R9  
501 East State Street  
Trenton, NJ 08625

**Location Of Activity:**

NJPDES Master General Permit  
Program Interest Group R9  
501 East State Street  
Trenton, NJ 08625

Authorization(s) Covered Under This Approval	Issuance Date	Effective Date	Expiration Date
R9 - Tier A MS4 Permit (GP)	12/01/2022	01/01/2023	12/31/2027

**By Authority of:  
Commissioner's Office**

**Gabriel Mahon, Bureau Chief  
Bureau of NJPDES Stormwater Permitting and Water Quality Management**

(Terms, conditions and provisions attached hereto)

## PART I GENERAL REQUIREMENTS: NJPDES

### A. General Requirements of all NJPDES Permits

#### 1. Requirements Incorporated by Reference

- a. The permittee shall comply with all conditions set forth in this permit and with all the applicable requirements incorporated into this permit by reference. The permittee is required to comply with the regulations, including those cited in paragraphs b. through e. following, which are in effect as of the effective date of the final permit.
- b. General Conditions
  - Penalties for Violations N.J.A.C. 7:14-8.1 et seq.
  - Incorporation by Reference N.J.A.C. 7:14A-2.3
  - Toxic Pollutants N.J.A.C. 7:14A-6.2(a)4i
  - Duty to Comply N.J.A.C. 7:14A-6.2(a)1 & 4
  - Duty to Mitigate N.J.A.C. 7:14A-6.2(a)5 & 11
  - Inspection and Entry N.J.A.C. 7:14A-2.11(e)
  - Enforcement Action N.J.A.C. 7:14A-2.9
  - Duty to Reapply N.J.A.C. 7:14A-4.2(e)3
  - Signatory Requirements for Applications and Reports N.J.A.C. 7:14A-4.9
  - Effect of Permit/Other Laws N.J.A.C. 7:14A-6.2(a)6 & 7 & 2.9(c)
  - Severability N.J.A.C. 7:14A-2.2
  - Administrative Continuation of Permits N.J.A.C. 7:14A-2.8
  - Permit Actions N.J.A.C. 7:14A-2.7(c)
  - Reopener Clause N.J.A.C. 7:14A-6.2(a)10
  - Permit Duration and Renewal N.J.A.C. 7:14A-2.7(a) & (b)
  - Consolidation of Permit Process N.J.A.C. 7:14A-15.5
  - Confidentiality N.J.A.C. 7:14A-18.2 & 2.11(g)
  - Fee Schedule N.J.A.C. 7:14A-3.1
  - Treatment Works Approval N.J.A.C. 7:14A-22 & 23
- c. Operation And Maintenance
  - Need to Halt or Reduce not a Defense N.J.A.C. 7:14A-2.9(b)
  - Proper Operation and Maintenance N.J.A.C. 7:14A-6.12
- d. Monitoring And Records
  - Monitoring N.J.A.C. 7:14A-6.5
  - Recordkeeping N.J.A.C. 7:14A-6.6
  - Signatory Requirements for Monitoring Reports N.J.A.C. 7:14A-6.9
- e. Reporting Requirements
  - Planned Changes N.J.A.C. 7:14A-6.7
  - Reporting of Monitoring Results N.J.A.C. 7:14A-6.8
  - Noncompliance Reporting
    - Hotline/Two Hour & Twenty-four Hour Reporting N.J.A.C. 7:14A-6.10 & 6.8(h)
    - Written Reporting N.J.A.C. 7:14A-6.10(e) & (f) & 6.8(h)
  - Duty to Provide Information N.J.A.C. 7:14A-2.11, 6.2(a)14 & 18.1
  - Schedules of Compliance N.J.A.C. 7:14A-6.4
  - Transfer N.J.A.C. 7:14A-6.2(a)8 & 16.2

## **PART II**

### **GENERAL REQUIREMENTS: DISCHARGE CATEGORIES**

#### **A. Additional Requirements Incorporated by Reference**

##### **1. Additional Requirements**

- a. In addition to the requirements in Part I of this permit, the permittee is required to comply with the following requirements which are in effect as of the effective date of the final permit.
  - i. The Stormwater Management rules at N.J.A.C. 7:8.
  - ii. Conditions for General Permits at N.J.A.C. 7:14A-6.13.
  - iii. Additional Conditions applicable to UIC permits at N.J.A.C. 7:14A-8.9, UIC Corrective Action (N.J.A.C. 7:14A-8.11) and UIC Operating Criteria (N.J.A.C. 7:14A-8.16).
  - iv. Conditions for reopening and modification of small MS4 permits at N.J.A.C. 7:14A-16.4(b)21 and N.J.A.C. 7:14A-25.7(b).
  - v. Requirements for Discharges to Ground Water at N.J.A.C. 7:14A-7.
  - vi. National Pollutant Discharge Elimination System (NPDES) Electronic Reporting rule at 40 CFR Part 127.

#### **B. General Conditions**

##### **1. Notification of Non-Compliance**

- a. The permittee shall notify the Department of any non-compliance when required by N.J.A.C. 7:14A-6.10 by contacting the DEP Hotline at 1-877-WARN-DEP.

##### **2. Discharge of Pollutants**

- a. For discharges authorized by this permit, the permittee 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 this NJPDES permit or listed and quantified in the RFA shall not constitute a violation of the permit.

##### **3. Standard Reporting Requirements – Electronic Reporting of NJPDES Information**

- a. The following documents and reports shall be electronically submitted via the Department's designated electronic submission service:
  - i. General permit authorization requests (i.e., RFAs);
  - ii. General permit termination/revocation requests; and



iii. Municipal separate storm sewer system (MS4) program reports (see Part IV.K).

#### **4. Other Regulatory Requirements**

- a. Permit conditions remain in effect and enforceable until and unless the permit is modified, renewed, or revoked by the Department.
- b. The issuance of this permit shall not be considered as a waiver of any applicable federal, State, or local rules, regulations, and ordinances.
- c. 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, N.J.A.C. 7:50 (the Pinelands rules), N.J.A.C. 7:1-E (Discharges of Petroleum and other Hazardous Substances), regulations concerning threatened and endangered species and their designated critical habitat, and 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.
- d. While the permittee is required to comply with applicable operation and maintenance requirements of N.J.A.C. 7:14A-6.12(a), the permittee is exempt from the operations and maintenance manual requirements of N.J.A.C. 7:14A-6.12(c). This exemption applies only to discharges authorized under this permit and does not alter the operation and maintenance requirements for municipally or privately-owned stormwater facilities specified in this permit or N.J.A.C. 7:8.

### **C. Eligibility**

#### **1. Permit Scope**

- a. This permit applies to all municipalities assigned to Tier A under N.J.A.C. 7:14A-25.3(a)1.
- b. This permit applies to the owner or operator of the Municipal Separate Storm Sewer System (MS4) meaning the permittee. The owner or operator is responsible for ensuring compliance with this permit.

#### **2. Authorized Discharges**

- a. Authorized Stormwater Discharges – Except as provided in Part II.C.3 below, this permit authorizes all new and existing stormwater discharges to surface water and groundwater from:
  - i. Small MS4s (as defined at N.J.A.C. 7:14A-1.2) owned or operated by the permittee; and
  - ii. Municipal maintenance yards and other ancillary operations, excluding wood waste recycling and leaf composting operations, owned or operated by the permittee. (See definition of “municipal maintenance yards and other ancillary operations” in Part IV, Notes and Definitions).
- b. Authorized Non-Stormwater Discharges – Except as identified in Part II.C.3.e below, the following new and existing non-stormwater discharges from small MS4s owned or operated

by the permittee and from municipal maintenance yards and other ancillary operations owned or operated by the permittee are authorized under this permit:

- i. Potable water line flushing and discharges from potable water sources, excluding the discharge of filter backwash and first flush water from potable well development/redevelopment activities utilizing chemicals in accordance with N.J.A.C. 7:9D. The volume of first flush water, which is a minimum of three times the volume of the well water column, shall be handled and disposed of properly;
- 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; and industrial refrigerant condensate);
- iv. Irrigation water (including landscape and lawn watering runoff);
- v. Flows from springs, riparian habitats, wetlands, water reservoir discharges and diverted stream flows;
- vi. Residential car washing water; and dechlorinated swimming pool discharges from single family residential homes;
- vii. Sidewalk, driveway, and street wash water;
- viii. Flows from firefighting activities including the washing of fire fighting vehicles;
- ix. Flows from clean water rinsing of beach maintenance equipment immediately following use and only if the equipment is used for its intended purpose;
- x. Flows from clean water rinsing of equipment and vehicles used in the application of salt and de-icing materials. Prior to rinsing, all equipment shall be cleaned using dry methods such as shoveling and sweeping. Recovered materials are to be returned to storage or properly discarded; and
- xi. Rinsing of equipment in Part II.C.2.b.ix and x, above is limited to exterior, undercarriage, and exposed parts and does not apply to engines or other enclosed machinery.

### **3. 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 except as otherwise specifically provided in this permit:
  - i. Types of facilities that the permittee might operate and that are considered to be engaging in “industrial activity” include but are not limited to certain: 1) landfills; 2) transportation facilities (including certain local passenger transit and air transportation facilities); 3) facilities handling domestic sewage or sewage sludge; 4) steam electric power generating facilities; and 5) facilities processing and/or composting recyclable materials as defined in N.J.A.C. 7:26A (Recycling Rules) including wood waste recycling and leaf composting facilities; and

- ii. Any permittee 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 this permit does not qualify as an RFA for such a discharge.
- b. This permit does not authorize “stormwater discharges associated with construction activity” as described in N.J.A.C. 7:14A-24.10(a) which is defined as the discharge to surface water of stormwater from construction activity that disturbs at least one acre:
  - i. Any permittee that operates a construction site with such a discharge shall submit a separate RFA under NJPDES Permit No. NJ0088323 (General Stormwater Permit Construction Activity, see [www.nj.gov/dep/dwq/5g3.htm](http://www.nj.gov/dep/dwq/5g3.htm)), or an application for an individual permit for that discharge (see [www.nj.gov/dep/dwq/bnpc\\_home.htm](http://www.nj.gov/dep/dwq/bnpc_home.htm)). An RFA submitted for this permit does not qualify as an RFA for such a discharge (see Part IV.B.3).
- c. This permit does not authorize any stormwater discharge that is authorized under another NJPDES permit. The permittee does not have to implement measures contained in this NJPDES permit for stormwater discharges at facilities owned or operated by that permittee 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 Water Quality Management Plan.
- e. This permit does not authorize stormwater discharges listed in Part II.C.2.b above that are determined to be a significant contributor of pollutants to or from the MS4, which must be addressed as an illicit connection as specified in Part IV.G.3 of this permit, or as an improper disposal of waste.

#### **4. Exclusions**

- a. Any owner, operator, and/or discharger authorized by this general permit may request to be excluded from the coverage of the general NJPDES permit by applying for an individual permit. The owner, operator, and/or discharger shall submit an application in accordance with N.J.A.C. 7:14A-4, with reasons supporting the request, to the NJDEP. The request shall be processed under N.J.A.C. 7:14A-15, 16 and 17. The request shall be granted by the issuance of an individual permit if the reasons cited by the owner, operator and/or discharger are adequate to support the request.
- b. An owner, operator, and/or discharger excluded from this general NJPDES permit solely because of an existing individual permit may request that the individual permit be revoked or modified, as appropriate, and that the discharge be authorized by the general NJPDES permit. Upon revocation or modification of the individual permit, the permittee shall be authorized under the general permit.

## **D. Administrative Process**

### **1. Automatic Renewal of Authorizations**

- a. Upon reissuance of this general permit, existing authorizations shall be automatically renewed as provided by N.J.A.C. 7:14A-6.13(d)9 and 25.4(a)3 using the information provided in the permittee's most recently submitted RFA.

## **2. Notification of Changes**

- a. The permittee shall provide an updated RFA to the Department within 90 days of the effective date of a renewed authorization under this general permit if any information in its most recently submitted RFA is no longer true, accurate, and/or complete.
- b. The permittee shall notify the Department of any changes of its Municipal Stormwater Program Coordinator information as specified in Part IV.A.1.e.

## **3. Requests for Authorization**

- a. A single RFA is required for the entire eligible discharge from the small MS4 owned or operated by, and located within, a single municipality. Multiple RFAs are not required for multiple municipal operations (e.g., municipally owned and operated maintenance yards or other ancillary operations), however these municipal operations shall be included in the RFA as applicable.
- b. An RFA under this general permit shall include the following: A completed Checklist and Request for MS4 Stormwater Permits (located at [https://nj.gov/dep/dwg/forms\\_storm.htm](https://nj.gov/dep/dwg/forms_storm.htm)) and any other information as required by the Department.
- c. Upon receipt of an RFA the Department may, in accordance with N.J.A.C. 7:14A-6.13, do one of the following:
  - i. Issue notification of authorization under this permit;
  - 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.
- d. The Department may notify a person that the discharge is authorized by a general permit, even if the person has not submitted an RFA. A person so notified may nonetheless request an individual permit under C.4 above.

## **PART III**

### **Recordkeeping and Reporting**

The permittee shall keep records necessary to document the status of compliance with the conditions of this permit. The requirement to keep records and to submit an Annual Report and Certification is found at Part IV.J and K of this permit, respectively.

## **PART IV**

### **SPECIFIC REQUIREMENTS: NARRATIVE**

#### **Notes and Definitions**

#### **A. Footnotes**

##### **1. Acronyms**

- a. Stormwater acronyms included in this permit are as follows:
  - i. "BMP" - Best Management Practice
  - ii. "CFR" - Code of Federal Regulations
  - iii. "EDPA" - Effective Date of Permit Authorization
  - iv. "GI" - Green Infrastructure
  - v. "MMY" – Municipal Maintenance Yard
  - vi. "MS4" - Municipal Separate Storm Sewer System
  - vii. "MSWMP" - Municipal Stormwater Management Plan
  - viii. "MSRP" - Municipal Stormwater Regulation Program
  - ix. "MTD" - Manufactured Treatment Device
  - x. "N.J.A.C." - New Jersey Administrative Code
  - xi. "NJPDES" - New Jersey Pollutant Discharge Elimination System
  - xii. "N.J.S.A." - New Jersey Statutes Annotated
  - xiii. "RSIS" - Residential Site Improvement Standards
  - xiv. "SPC" – Stormwater Program Coordinator
  - xv. "SPPP" - Stormwater Pollution Prevention Plan
  - xvi. "TMDL" - Total Maximum Daily Load

##### **2. Internal Cross References**

- a. For the purposes of this permit:
  - i. References to Part IV Notes and Definitions are preceded with the words "Notes and Definitions" (e.g., Notes and Definitions Part IV.A.1 refers to Acronyms).
  - ii. References to Part IV Tier A MS4 NJPDES Permit are not preceded by descriptive text (e.g., Part IV.A.1 refers to Stormwater Program Requirements).

##### **3. MS4 Tier A Permit Resources**

- a. The MS4 Tier A webpage ([www.nj.gov/dep/dwq/tier\\_a.htm](http://www.nj.gov/dep/dwq/tier_a.htm)) has links to guidance and related stormwater resources including, but not limited to, the following:
  - i. Tier A Permit and Supporting Documents;

- ii. Tier A Guidance Document;
  - iii. SPPP Template;
  - iv. Model Ordinances;
  - v. Sample MSWMP;
  - vi. Outfall Inspection, Illicit Connection Inspection, and Stream Scouring Forms;
  - vii. Annual Report Online Submittal Links and Tutorials;
  - viii. MS4 Case Manager List;
  - ix. Stormwater Coordinator Contact Update Form;
  - x. Total Maximum Daily Load (TMDL) Look-up Tool;
  - xi. Snow Removal and Disposal Policy;
  - xii. Stormwater Training;
  - xiii. Clean Water NJ;
  - xiv. Outreach Materials;
  - xv. MSRP Archive; and
  - xvi. MS4 Mapping and Inventory Assistance.
- b. Stormwater Management website ([www.njstormwater.org/](http://www.njstormwater.org/)) and related documents:
- i. Stormwater Management Rules N.J.A.C. 7:8;
  - ii. Stormwater management information and training tools;
  - iii. New Jersey Stormwater Best Management Manual; and
  - iv. Green Infrastructure and related links.
- c. Construction Site Stormwater Runoff: [www.nj.gov/dep/dwq/5g3.htm](http://www.nj.gov/dep/dwq/5g3.htm)
- d. Clean Communities, a statewide litter abatement program: [www.njclean.org](http://www.njclean.org)
- 4. EPA Resources for Guidance Relating to MS4 Issues**
- a. EPA's MS4 website and related links:  
[www.epa.gov/npdes/stormwater-discharges-municipal-sources](http://www.epa.gov/npdes/stormwater-discharges-municipal-sources)
- b. EPA's National Menu of Stormwater Best Management Practices:  
[www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater](http://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater)
- c. EPA's guidance for Green Infrastructure: [www.epa.gov/green-infrastructure](http://www.epa.gov/green-infrastructure)
- d. EPA's Trash Free Waters resource page: [www.epa.gov/trash-free-waters](http://www.epa.gov/trash-free-waters)
- e. Illicit Discharge Detection and Elimination Guidance:  
[https://www3.epa.gov/npdes/pubs/idde\\_manualwithappendices.pdf](https://www3.epa.gov/npdes/pubs/idde_manualwithappendices.pdf)

## B. Definitions

### 1. Definitions

- a. All words and terms used in this permit shall have meanings as defined in the "Regulations Concerning the New Jersey Pollutant Discharge Elimination System" (N.J.A.C. 7:14A), unless otherwise stated or unless the context clearly requires a different meaning.
  - i. "Catch Basin" means a cistern, vault, chamber or well that is typically built along a street and below an inlet grate as part of the storm sewer system that is designed to capture and retain sediment, debris, and pollutants so those particles do not pass on to the stormwater sewer system.
  - ii. "Effective Date of Permit Authorization" means the date the permittee's authorization to discharge under this permit becomes effective. This date may be found on the permittee's Authorization to Discharge page.
  - iii. "Existing permittee" means a permittee that held an authorization to discharge under the Tier A MS4 permit the day before the effective date of this permit.
  - iv. "Green infrastructure" (N.J.A.C. 7:8) means a stormwater management measure that manages stormwater close to its source by: 1. Treating stormwater runoff through infiltration into subsoil; 2. Treating stormwater runoff through filtration by vegetation or soil; or 3. Storing stormwater runoff for reuse.
  - v. "Ground water discharge point" means the lowest invert elevation of any stormwater facility where stormwater discharges into the surficial ground water aquifer.
  - vi. "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 that system): 1. Domestic sewage; 2. Non-contact cooling water, process wastewater, or other industrial waste (other than stormwater); or 3. Any category of non-stormwater discharges that a permittee for the MS4 identifies as a source or significant contributor of pollutants pursuant to 40 C.F.R. 122.26(d)(2)(iv)(B)(1) or 122.34(b)(3)(iii).
  - vii. "Maintenance plan" means a maintenance plan pursuant to N.J.A.C. 7:8-5.2(b) and 5.8 prepared by the design engineer for the stormwater management measures incorporated into the design of a major development.
  - viii. "Major Development" means a "major development as defined in N.J.A.C. 7:8



- ix. "Manufactured treatment device" means a pre-fabricated stormwater treatment structure utilizing settling, filtration, absorptive/adsorptive materials, vortex separation, vegetative components, and/or other appropriate technology to remove pollutants from stormwater runoff.
- x. "MS4 interconnection" means any point at which an MS4 flows into or from another MS4.
- xi. "Municipal maintenance yard and ancillary operation" means a municipally owned or operated maintenance and storage yard, including but not limited to, fleet or maintenance shop with outdoor storage areas, impound yard, permanent and mobile fueling location, salt/sand storage location, and snow disposal area.
- xii. "Municipal separate storm sewer" (or MS4 conveyance) means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains) as defined in more detail at N.J.A.C. 7:14A-1.2.
- xiii. "Municipality" means a municipality as defined in the Municipal Land Use Law at N.J.S.A. 40:55D-5, that is, any city, borough, town, township, or village.
- xiv. "New permittee" means a permittee that obtains its first authorization to discharge under this permit on or after the effective date of this permit.
- xv. "Outfall" means any point source which discharges directly to waters of the United States and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels or other conveyances which connect segments of the same stream or other waters of the United States and are used to convey waters of the United States.
- xvi. "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 (new structures require a door or other means of sealing the access way from wind driven rainfall).

A fabric frame structure is a permanent structure if it meets the following specifications:

1. Concrete blocks, jersey barriers or other similar material shall be placed around the interior of the structure to protect the side walls during loading and unloading of de-icing materials;
2. The design shall prevent stormwater run-on and run through, and the fabric cannot leak;
3. The structure shall be erected on an impermeable slab;
4. The structure cannot be open sided; and
5. The structure shall have a roll up door or other means of sealing the access way from wind driven rainfall.

- xvii. "Point source" means any discernible, confined, and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel, or other floating craft, from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture.
- xviii. "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:
  - 1. Owned or operated by municipalities described under N.J.A.C. 7:14A-25.1(b);
  - 2. 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;
  - 3. 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
  - 4. 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.
- xix. "Solid and floatable materials" means sediment, debris, trash, and other floating, suspended, or settleable solids.
- xx. "Storm drain inlet" means the point of entry into the storm sewer system.
- xxi. "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.
- xxii. "Stormwater facility" means stormwater infrastructure including, but not limited to, catch basins, infiltration basins, detention basins, green infrastructure, filter strips, riparian buffers, infiltration trenches, sand filters, constructed wetlands, wet basins, bioretention systems, low flow bypasses, and stormwater conveyances.
- xxiii. "Stormwater management measure" (N.J.A.C. 7:8-1.2) means any practice, technology, process, program, or other method intended to control or reduce stormwater runoff and associated pollutants, or to induce or control the infiltration or groundwater recharge of stormwater or to eliminate illicit or illegal non-stormwater discharges into stormwater conveyances.
- xxiv. "Stream scouring" means the erosion or removal of streambed or bank material by the physical action of flowing water and the sediment that it carries.

- xxv. “Total maximum daily load” or “TMDL” means a total maximum daily load formally established pursuant to Section 7 of the Water Quality Planning Act (N.J.S.A. 58:11A-7) and Section 303(d) of the Clean Water Act, 33 U.S.C. §§12512 et seq. A TMDL is the sum of individual wasteload allocations for point sources, load allocations for nonpoint sources of pollution, other sources such as tributaries or adjacent segments, and allocations to a reserve or margin of safety for an individual pollutant.
- xxvi. “Wasteload allocation” means the portion of a receiving water’s total maximum daily load for a specific pollutant that is allocated to one of its existing or future point sources of pollution. WLAs constitute a type of water quality-based effluent limitation.
- xxvii. “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.
- xxviii. "Wood waste" means source separated whole trees, tree trunks, tree parts, tree stumps, brush, and lumber (non-chemically treated, glued, dyed, or painted).
- xxix. "Yard trimmings" (N.J.A.C. 7:26A-1.3) means grass clippings, leaves, wood chips from tree parts, and brush.
- xxx. "Yard waste" means loose leaves and grass clippings.

## **Tier A Municipal Stormwater General Permit**

### **A. Stormwater Management Program**

#### **1. Stormwater Program Requirements**

- a. The permittee shall develop, update, implement and enforce an MS4 stormwater program. A primary objective of the MS4 stormwater program shall be to implement best management practices and other measures that are designed to reduce the discharge of pollutants from the permittee's MS4, municipal maintenance yards and other ancillary operations, to the maximum extent practicable pursuant to N.J.A.C. 7:14A-25.6(a)1 and 40 CFR 122.34(a), to protect water quality, and to satisfy the applicable water quality requirements of the Clean Water Act.
- b. The permittee shall modify and update its MS4 stormwater program (including applicable plans and ordinances) to conform with applicable new legislation or new or amended regulations. Such modification and update shall be completed and effective within 12 months of written notification by the Department of the need for modification and update.
- c. The permittee shall develop, update, implement and maintain a written Stormwater Pollution Prevention Plan (SPPP) that documents the permittee's MS4 stormwater program and describes the measures necessary for compliance with all permit conditions.
- d. A principal executive officer or a ranking elected official shall designate a duly authorized Stormwater Program Coordinator (SPC) who has the knowledge to manage the implementation and compliance of the permittee's MS4 stormwater program and shall be responsible for the following:
  - i. Coordinating the permittee's implementation of its MS4 stormwater program, permit conditions, and SPPP;
  - ii. Signing and dating the SPPP; and
  - iii. The completion and submittal of the Municipal Stormwater Regulation Program (MSRP) Annual Report, consistent with Part IV.K.
- e. The permittee shall notify the Department of any designated SPC change within thirty (30) days of the change through the completion of a NJPDES Contact Information Update Form, which can be found on the MS4 Tier A webpage, or through the online MSRP Annual Report submission. See Part IV.K.
- f. The MS4 stormwater program and the SPPP shall be consistent with the Municipal Stormwater Management Plan (MSWMP). The MSWMP is also a component of the municipal master plan (N.J.S.A. 40:55D-94) and 28b(5). The MSWMP describes the municipality's strategy, structure, and process for addressing stormwater runoff from new development and redevelopment to ensure compliance with the Stormwater Management

rules (N.J.A.C. 7:8). This strategy, structure and process also constitutes much of the post construction stormwater management program in this permit. See Part IV.B.4.

## 2. Stormwater Pollution Prevention Plan (SPPP) Requirements

- a. The permittee shall include in the SPPP, at a minimum, information that:
  - i. Identifies the person designated as the SPC per Part IV.A.1.d above, and the members of the SPPP Team, which is comprised of the person(s) responsible for implementing or coordinating the stormwater program activities;
  - ii. Describes the measures the permittee has established to ensure compliance with all components of this permit with details regarding how each element of the stormwater program is implemented. The permittee shall tailor their SPPP to describe the specific measures applicable to their municipality;
  - iii. Identifies each individual municipal maintenance yard and ancillary operation, including the site-specific details of each yard or ancillary operation. At a minimum, the SPPP for permittees with multiple yards must include individual forms for each yard or ancillary operation, as well as any other site specific SPPP Forms for each yard or ancillary operation, where applicable;
  - iv. Documents all shared or contracted services as allowed under Part IV.A.3, below;
  - v. Notes the location of all records/documentation required by this permit; and
  - vi. Reflects the measurable goals, implementation schedules, recordkeeping, and other requirements of this permit.
- b. The permittee's SPPP shall be submitted electronically to the Department by Existing Permittees on or before EDPA + 6 months and by New Permittees on or before EDPA + 12 months. The SPPP shall also be posted on the permittee's dedicated stormwater webpage (See Part IV.B.2).
- c. The permittee shall review the SPPP at least annually and update it as often as necessary to reflect changes related to the permittee's MS4 stormwater program. Any amendments to the SPPP:
  - i. Shall continue to meet the requirements of this permit;
  - ii. Shall be incorporated into the SPPP and recorded on the SPPP revisions page;
  - iii. Shall be signed and dated by the SPC; and
  - iv. Shall be submitted electronically to the Department within thirty (30) days of the amendments.

- d. The permittee shall amend the SPPP to adequately address any deficiencies identified by the Department within thirty (30) days of notice, unless otherwise specified by the Department.

### **3. Implementation of SPPP Conditions through Shared or Contracted Services**

- a. The permittee may rely on another entity (e.g., governmental, stormwater utility, private, or nonprofit organization such as a watershed association) to satisfy one or more of the permit conditions, or component thereof, through the implementation of best management practices or control measures, provided that:
  - i. The other entity implements best management practice(s), control measure(s), or component(s) thereof, which are at least as stringent and as frequent as the corresponding permit requirement;
  - ii. The other entity agrees in writing or is required by law to implement the measure(s), or component(s) thereof, in such a manner that complies with the permit on the permittee's behalf; and
  - iii. The permittee specifies in its SPPP (1) which permit conditions will be implemented by another entity and (2) the name of the responsible entity.
- b. The permittee is responsible for compliance with this permit if the other entity fails to implement the measure(s) or component(s), thereof.

## **B. Minimum Standards for Public Involvement and Participation Including Public Notice**

### **1. Public Involvement and Participation Including Public Notice**

- a. The permittee shall comply with applicable State and local public notice requirements when providing for public participation in the development and implementation of the MS4 stormwater program. Requirements include, but are not limited to:
  - i. The Open Public Meetings Act ("Sunshine Law," N.J.S.A. 10:4-6 et seq.);
  - ii. Statutory procedures for the enactment of ordinances (N.J.S.A. 40:49-2); and
  - iii. The Municipal Land Use Law concerning the adoption or amendment of the MSWMP (N.J.S.A. 40:55D-13, 28 and 94), and the review of applications for development (N.J.S.A. 40:55D-12).
- b. The permittee shall maintain records necessary to demonstrate compliance with the public participation requirements of a, above.
- c. All permittees shall comply with this requirement on EDPA.

## **2. Municipal Stormwater Webpage**

- a. The permittee shall develop and maintain a dedicated stormwater webpage on its municipal website (see example stormwater webpage at [www.nj.gov/dep/dwq/msrp\\_outreach\\_material.htm](http://www.nj.gov/dep/dwq/msrp_outreach_material.htm)). This webpage shall at a minimum, make elements of the permittee's MS4 stormwater program available to the public by providing links to the latest version of each of the following:
  - i. Stormwater Pollution Prevention Plan (SPPP) (excluding inspection logs and other recordkeeping documents);
  - ii. Municipal Stormwater Management Plan (MSWMP);
  - iii. Stormwater Control Ordinance (SCO);
  - iv. Pet Waste Ordinance;
  - v. Wildlife Feeding Ordinance;
  - vi. Litter Control Ordinance;
  - vii. Improper Disposal of Waste Ordinance;
  - viii. Containerized Yard Waste/Yard Waste Collection Program Ordinances;
  - ix. Private Storm Drain Inlet Retrofitting Ordinance;
  - x. Illicit Connection Ordinance;
  - xi. Tree Removal/Replacement Ordinance (due on or before EDPA + 12 months as per Part IV.F);
  - xii. Privately-Owned Salt Storage Ordinance (due on or before EDPA + 12 months as per Part IV.F);
  - xiii. MS4 Outfall Pipe Map;
  - xiv. MS4 Infrastructure Map (due on or before EDPA + 36 months as per Part IV.G); and
  - xv. Watershed Improvement Plan (due in accordance with the phases identified in Part IV.H).
- b. The permittee shall develop a dedicated stormwater webpage on its municipal website that contains links to the minimum elements in a. above on or before EDPA + 3 months for

existing permittees, and EDPA + 12 months for new permittees, unless a later date is specified above.

## **C. Minimum Standards for Local Public Education and Outreach**

### **1. Local Public Education and Outreach**

- a. The permittee shall implement a Public Education and Outreach Program that focuses on educational and pollution prevention activities about the impacts of stormwater discharges on surface water and ground water and involves the public in reducing pollutants in stormwater and mitigating flow. The permittee shall:
  - i. Annually conduct activities that total at least 12 points and include activities from at least three of the five categories as set forth in Attachment A;
  - ii. At a minimum, at least one of the activities shall involve educating businesses and the general public of hazards associated with illicit connections and improper disposal of waste; and
  - iii. Keep records necessary to demonstrate compliance, including date of activities and any other relevant documentation.
- b. All permittees shall comply with this requirement on EDPA.

## **D. Minimum Standards for Construction Site Stormwater Runoff**

### **1. Construction Site Stormwater Runoff**

- a. Construction site stormwater runoff activities are authorized under a separate NJPDES permit, which is typically the Construction Activity NJPDES Stormwater General Permit No. NJ0088323 pursuant to N.J.A.C. 7:14A-25.6(b)2, or an individual permit pursuant to N.J.A.C. 7:14A-24.7(a)2. See Part II.C.3.b and [www.nj.gov/dep/dwq/5g3.htm](http://www.nj.gov/dep/dwq/5g3.htm).
- b. Pursuant to N.J.A.C. 7:14A-25.7(b), the permittee is not required to reference construction site stormwater runoff control in its SPPP.
- c. All permittees shall comply with this requirement on EDPA.

## **E. Minimum Standards for Post Construction Stormwater Management in New Development and Redevelopment**

### **1. Stormwater Management Program to Address Post Construction Stormwater Management in New Development and Redevelopment**



- a. The permittee shall develop, update, implement and enforce its stormwater management program to address post construction stormwater runoff in new development and redevelopment and to ensure compliance with the Stormwater Management rules at N.J.A.C. 7:8.
- b. The post construction stormwater management program established by the permittee shall address stormwater runoff from “major development” as defined in the Stormwater Management rules at N.J.A.C. 7:8 unless any additional development is defined as “major development” by the permittee’s Stormwater Control Ordinance.
- c. The post construction stormwater management program established by the permittee shall require compliance with the applicable design, performance and maintenance standards established under N.J.A.C. 7:8 for “major development”.
- d. The permittee shall review and analyze development plans for compliance with N.J.A.C. 7:8 and the permittee’s SCO or RSIS as applicable, even if a permit is required by the Department for the same or similar activity (e.g., a Land Use permit).
- e. The permittee shall ensure that “major development” projects are constructed in accordance with the approved development plans.
- f. The permittee’s review engineer for compliance with N.J.A.C. 7:8 shall be independent from the design engineer, shall not have been involved in the design of the development plans, and shall have completed the Department’s Stormwater Management Design Review Course within the last 5 years, and the Stormwater Management Rule Amendment Training if required, as per Part IV.F.8 and 9
- g. The permittee shall ensure that the post construction stormwater management program requires that any residential development and redevelopment projects that are subject to the Residential Site Improvement Standards (RSIS) for stormwater management (N.J.A.C. 5:21-7) comply with those standards, including any exception, waiver, or special area standard that was approved under N.J.A.C. 5:21.
- h. The permittee shall include each approved major development on the Major Development Project List and submit the Major Development Project List to the Department annually with the MSRP Annual Report.
- i. The Stormwater Management rules (N.J.A.C. 7:8) and the Residential Site Improvement Standards for stormwater management (N.J.A.C. 5:21-7), independently and as implemented in this permit, apply to all areas of the municipality.
- j. All permittees shall comply with this requirement on EDPA.

## **2. Municipal Stormwater Management Plan (MSWMP)**

- a. The permittee shall adopt, amend, and implement a written MSWMP, pursuant to N.J.A.C. 7:8, to describe the framework of the permittee's strategy, structure, and process for its post construction stormwater management program according to the following:
  - i. Conduct a re-examination of its MSWMP as part of the re-examination of its municipal master plan in accordance with N.J.A.C. 7:8-4.3(c) and (d), at least every 10 years, or more often as necessary to reflect changes related to the permittee's stormwater management program (e.g., if required due to amendments to the Stormwater Management rules at N.J.A.C. 7:8);
  - ii. Submit the adopted MSWMP to the county review agency for review and approval at least 20 days prior to public hearing pursuant to the requirements at N.J.A.C. 7:8-4.4. This includes MSWMP re-examinations without change;
  - iii. Electronically submit the county approved MSWMP and any amendments to the Department within thirty (30) days of the effective date of the plan;
  - iv. Post the county approved MSWMP and any amendments on the permittee's website (see Part IV.B.2) within thirty (30) days of the effective date of the plan; and
  - v. The date on the MSWMP shall reflect the most recent re-examination/revision date approved by the county review agency.

### **3. Municipal Stormwater Control Ordinance (SCO)**

- a. The permittee shall develop, adopt, amend, implement, and enforce a municipal SCO (see example at [www.nj.gov/dep/dwq/example\\_ordinance.htm](http://www.nj.gov/dep/dwq/example_ordinance.htm)) in accordance with N.J.A.C. 7:8, which shall, at a minimum:
  - i. Control aspects of residential development and redevelopment projects that are not pre-empted by the RSIS;
  - ii. Control stormwater from non-residential development and redevelopment projects, in accordance with the requirements at N.J.A.C. 7:8; and
  - iii. Set forth special area standards approved by the Site Improvement Advisory Board for residential development or redevelopment projects under N.J.A.C. 5:21-3.5.
- b. Additional requirements of the SCO include:
  - i. Submit SCO to permittee's county planning board for approval.
  - ii. If all or part of the municipality is located within the Pinelands, the SCO for that portion of the municipality must follow the Pinelands model SCO and be approved by the Pinelands Commission.

#### **4. Mitigation Plan**

- a. The permittee shall only grant a variance from the design and performance standards for stormwater management measures if the permittee has a mitigation plan included in an approved MSWMP and SCO(s) which meets the following requirements:
  - i. The mitigation plan shall identify measures that are necessary to offset the deficit created by granting the variance. The mitigation plan must satisfy the criteria in the Stormwater Management rules at N.J.A.C. 7:8-4.2(c)11 and 4.6. (See Chapter 3 of the NJ Stormwater BMP Manual at <https://www.njstormwater.org> for guidance); and
  - ii. The permittee submits, within (30) days after approving a variance, a written report to the county review agency and to the Department via email ([dwq-bnpsc-stormwatermanagement@dep.nj.gov](mailto:dwq-bnpsc-stormwatermanagement@dep.nj.gov)) describing the variance and the required mitigation in accordance with N.J.A.C. 7:8-4.6(a)3.

### **F. Minimum Standards for Pollution Prevention / Good Housekeeping for Municipal Operators**

#### **1. Community-wide Ordinances**

- a. The permittee shall adopt and enforce the following community-wide ordinances (New Permittee: shall adopt and enforce the following community-wide ordinances on or before EDPA + 12 months):
  - i. Pet Waste Ordinance: The permittee shall adopt and enforce an ordinance that requires pet owners or their keepers to immediately and properly dispose of their pet's solid waste deposited on any property, public or private, not owned or possessed by that person. Information on the Pet Waste Ordinance, the website address where it can be located, and the benefits of proper disposal of pet solid waste shall be distributed with pet licenses;
  - ii. Wildlife Feeding Ordinance: The permittee shall adopt and enforce an ordinance that prohibits the feeding of any wildlife (e.g., Canada Geese) in any public park or on any other property owned or operated by the permittee. Exclusions include wildlife confined in zoos, parks, or rehabilitation centers as well the following unconfined animals: (1) wildlife at environmental education centers; (2) feral cats as part of an approved Trap-Neuter-Release program; and (3) other kinds of unconfined animals, if any, that the ordinance specifically lists and excludes for reasons set forth in the ordinance;
  - iii. Litter Control Ordinance: The permittee shall adopt and enforce a litter ordinance or enforce the existing State litter statute at N.J.S.A 13:1E-99.3;
  - iv. Improper Disposal of Waste Ordinance: The permittee shall adopt and enforce an ordinance prohibiting the improper spilling, dumping, or disposal of materials other than

stormwater into the MS4 system excluding those discharges as allowable under Part II.C.2.b;

- v. **Yard Waste Ordinance:** The permittee shall adopt and enforce one of the following yard waste ordinances: 1) An ordinance that prohibits placing non-containerized yard wastes (defined as leaves and/or grass clippings) into the street; or 2) An ordinance that prohibits placing non-containerized yard waste at the curb or along the street within 10 feet of any storm drain inlet and no sooner than seven (7) days prior to a scheduled and announced collection. The frequency of yard waste pickups shall be determined at the discretion of the permittee but shall be part of a set yard waste collection schedule which is noticed to all municipal residents and businesses; and
  - vi. **Private Storm Drain Inlet Retrofitting Ordinance:** The permittee shall adopt and enforce an ordinance requiring the retrofitting of existing storm drain inlets on private property to meet the standard in Attachment B (Design Standard for Storm Drain Inlets). Specifically, this ordinance: 1) shall apply to storm drain inlets, on property not owned or operated by the Permittee (e.g., condominium associations), that are in direct contact (i.e., contiguous) to repaving; repairing (excluding individual pothole repair); resurfacing (including top coating or chip sealing with asphalt emulsion or a thin base of hot bitumen); and reconstruction or alteration of facilities; and 2) shall not apply to a residential lot with one single family house.
- b. The permittee shall adopt and enforce the following community-wide ordinances on or before EDPA + 12 months:
- i. **Privately-Owned Salt Storage Ordinance:** Adopt and enforce an ordinance requiring that piles of salt and other solid (granular) de-icing materials which are not stored in a permanent structure be covered by tarping when not in use and secured in a way to prevent its exposure to rain, snow, or stormwater run-on; and
  - ii. **Tree Removal/Replacement Ordinance:** Adopt and enforce an ordinance to control tree removal and replacement to reduce stormwater runoff and pollutants, and to promote infiltration of rainwater into the soil.
- c. Additional ordinance requirements of this permit are found at Part IV.E.3 (Stormwater Control Ordinance) above and Part IV.G.3.c (Illicit Connection Ordinance) below.
- d. **Optional Privately-Owned Refuse Container/Dumpster Ordinance:** Permittees have the option of adopting and enforcing an ordinance requiring privately-owned dumpsters and other refuse containers that are outdoors or exposed to stormwater to be covered at all times. This ordinance is not intended for litter receptacles; individual homeowner trash and recycling containers; containers that hold large bulky items (e.g., furniture, bound carpet, and padding); permitted temporary demolition containers; and refuse containers at industrial facilities authorized to discharge stormwater under a valid NJPDES permit.

- i. This ordinance serves to prevent the spilling, dumping, leaking, or otherwise discharge of liquids, semi-liquids, or solids from refuse containers.
  - ii. Discharges of liquids, semi-liquids, or solids from these dumpsters or refuse containers into the MS4, or the surface or ground waters of the state, are illegal discharges not authorized under this permit and must be reported to the NJDEP Hotline at 1-877-WARNDEP (1-877-927-6337).
- e. Model ordinances can be found at [www.nj.gov/dep/dwq/example\\_ordinance.htm](http://www.nj.gov/dep/dwq/example_ordinance.htm).

## **2. Community-wide Measures**

- a. The permittee shall develop and implement the following community-wide pollution prevention measures, and good housekeeping measures to control solid and floatable materials, which shall be described in the written SPPP:
  - i. Triannual Street Sweeping: The permittee shall sweep, at a minimum of once every four months, or more frequently as necessary to eliminate recurring problems, all segments of concrete and/ or asphalt roads that are owned or operated by the permittee and have storm drain inlets that discharge to surface water. Sweeping is not required for gravel, dirt, or tar and chip roads. Existing Permittees shall continue with the current street sweeping schedule until the new triannual sweeping program is implemented on or before EDPA + 36 months. New Permittees shall begin this sweeping program on or before EDPA + 36 months.
  - ii. Annual Street Sweeping: The permittee shall sweep, at a minimum of once per year, or more frequently as necessary to eliminate recurring problems, all segments of roads that are owned or operated by the permittee, that do not have storm drain inlets, that discharge to surface water. Existing Permittees shall continue with the current street sweeping schedule until the new annual sweeping program is implemented on or before EDPA + 36 months. New Permittees shall begin this sweeping program on or before EDPA + 36 months
  - iii. Storm Drain Inlet Labeling: The permittee shall label all permittee owned or operated storm drain inlets that do not have permanent wording cast into the structure of the inlet to indicate that it empties directly into a local waterway. This applies to inlets that are located along sidewalks that are adjacent to municipal streets, and within plazas, parking areas, maintenance yards or other ancillary activities that are operated by the permittee. The permittee shall maintain records of which inlets have been labeled. Existing Tier A permittees and new Tier A permittees shall implement this requirement upon EDPA.
  - iv. Storm Drain Inlet Retrofitting: The permittee shall comply with the standards set forth in Attachment B (Design Standards for Storm Drain Inlets) of this permit to control passage of solid and floatable materials through storm drain inlets installed by

the permittee. The permittee shall retrofit all permittee owned or operated storm drain inlets with the standards set forth in Attachment B on or before EDPA + 59 months.

- v. Storm Drain Installation: The permittee shall not install storm drains that do not include a catch basin or other BMP designed for solids collection in areas which drain to surface waters and that do not have any other downstream BMPS prior to the surface water discharge. Storm drains installed on bridges or culverts are exempt from this requirement. Existing Tier A permittees and new Tier A permittees shall implement this requirement upon EDPA.
- vi. Herbicide Application Management: The permittee shall restrict the application of herbicides to prevent herbicides from being washed into the waters of the State and to prevent erosion caused by de-vegetation. At a minimum, the permittee shall: (1) not apply herbicides on or adjacent to storm drain inlets, or on steeply sloping ground; (2) only apply herbicides along curb lines and unobstructed shoulders that contain unwanted vegetation; and (3) only apply herbicides within a 2-foot radius around structures where overgrowth presents a safety hazard and where it is unsafe to mow. Existing Tier A permittees and new Tier A permittees shall implement this requirement upon EDPA.
- vii. Excess De-Icing Material Management: The permittee shall remove, within 72 hours after the end of the storm event, conditions permitting, piles of excess salt and de-icing materials that have been deposited during spreading operations (e.g., piles resulting from accidental spillage or when spreading equipment is started or stopped) on all streets and parking areas owned or operated by the permittee. Excess de-icing material removed from streets and parking areas may be returned to storage or properly managed if unsuitable for reuse. Existing Tier A permittees and new Tier A permittees shall implement this requirement upon EDPA.
- viii. Roadside Vegetative Waste Management: The permittee shall ensure the proper pickup, handling, storage and disposal of wood waste and yard trimmings generated by the permittee. Wood waste and yard trimmings shall be managed to minimize the impact of vegetative maintenance activities on stormwater discharge quality and shall be prohibited from being blown or deposited into storm drain inlets and stormwater facilities. Existing Tier A permittees and new Tier A permittees shall implement this requirement upon EDPA.
- ix. Roadside Erosion Control: The permittee shall develop a program to detect and repair erosion along the roads owned or operated by the permittee and to inspect and maintain the stability of shoulders, embankments, ditches, and soils along these roads to ensure that they are not eroding and contributing to the sedimentation of receiving waters or stormwater infrastructure. Inspections of municipal roads shall occur at least once per year, and any repairs shall be completed as soon as practicable, but no later than 90 days from discovery, unless the Department is notified with an alternative schedule of completion, and be made in accordance with Standards for Soil Erosion and Sediment Control in New Jersey, N.J.A.C. 2:90-1, as applicable.

Existing Tier A permittees and new Tier A permittees shall implement this requirement upon EDPA + 12 months.

- x. The permittee shall maintain a log sufficient to demonstrate compliance with this section. Example Maintenance Logs and Inspection Records forms are available at [www.njstormwater.org](http://www.njstormwater.org).

### **3. Inspection and Maintenance of Stormwater Facilities Owned or Operated by the Permittee**

- a. The permittee shall develop, update, and implement a program to ensure adequate long-term cleaning, operation, and maintenance of all municipally owned or operated stormwater facilities, which includes but is not limited to:
  - i. Storm Drain Inlet Inspection: The permittee shall inspect, at a minimum of once per year, all storm drain inlets that it owns or operates;
  - ii. Storm Drain Inlet Cleaning and Maintenance: The permittee shall develop, update, and implement a storm drain inlet cleaning and maintenance program. The program shall establish the conditions under which a storm drain inlet must be cleaned, and maintenance performed. Cleaning and maintenance shall be conducted, at a minimum, as frequently as necessary to ensure that sediment, trash, or other debris is removed as necessary to restrict it from entering the waters of the State; to eliminate recurring problems; and maintain proper function;
  - iii. Catch Basin Inspection: The permittee shall inspect all catch basins that it owns or operates. At a minimum, permittees shall inspect a minimum of 20% of the total per year, rotating the schedule in such a way that all catch basins are inspected at least once every five years on approximately the same frequency;
  - iv. Catch Basin Cleaning: The permittee shall develop, update, and implement a catch basin cleaning and maintenance program. The program shall establish when a catch basin must be cleaned and maintained and include procedures for cleaning and maintenance. Cleaning and maintenance shall be implemented as frequently as necessary to ensure, at a minimum, that sediment, trash, or other debris is removed as necessary to control it from entering the waters of the State; to eliminate recurring problems; and maintain proper function. For guidance related to catch basin cleaning, refer to the EPA Catch Basin Technology Overview and Assessment found at: (<https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockkey=300002QL.TXT> );
  - v. MS4 Conveyance Inspection and Cleaning: The permittee shall develop, update, and implement a MS4 conveyance inspection, cleaning, and maintenance program. The program shall establish when the MS4 conveyance must be cleaned and maintained to ensure proper function and operation;
  - vi. Stormwater Infrastructure Inspection (excluding i. – v. above and outfalls): The permittee shall inspect all stormwater infrastructure that it owns or operates pursuant to approved



maintenance plans. If there are no approved maintenance plans for certain stormwater infrastructure, the permittee shall inspect that infrastructure at least 4 times annually, and after each rainstorm exceeding 1 inch of total rainfall, unless the NJ Stormwater BMP Manual recommends a less frequent schedule;

- vii. Stormwater Infrastructure Maintenance (excluding i. – v. above and outfalls): The permittee shall perform maintenance pursuant to approved maintenance plans, or more frequently as needed, to ensure the proper function and operation. See [www.njstormwater.org](http://www.njstormwater.org); for maintenance guidance;
- viii. The permittee shall maintain a log sufficient to demonstrate compliance with this section, including but not limited to the type of stormwater facility; location information of the facility with geographic coordinates; name of inspector; date of inspection; observations of the structural integrity; history of complaints; evidence of current or previous flooding; any preventative and corrective maintenance performed; and any additional information or findings. Example Maintenance Logs and Inspection Records forms are available at [www.njstormwater.org](http://www.njstormwater.org) under the maintenance guidance link;
- ix. If stormwater facilities are found not to be functioning properly, corrective maintenance and repairs shall be completed as soon as practicable, but no later than 90 days from discovery, unless another timeframe is authorized by the Department. The permittee shall prioritize these activities based upon environmental, health and safety concerns; and
- x. The permittee shall certify in the MSRP Annual Report whether or not municipally owned or operated stormwater facilities have been inspected, are properly maintained, and are properly functioning.
- xi. Existing Tier A permittees and new Tier A permittees shall implement this requirement upon EDPA.

#### **4. Inspection and Maintenance of Stormwater Facilities Not Owned or Operated by the Permittee**

- a. The permittee shall develop, update, implement and enforce a program to ensure adequate long-term cleaning, operation and maintenance of stormwater facilities not owned or operated by the permittee, not subject to the conditions of another NJPDES stormwater permit and which were constructed after February 7, 1984.
- b. The permittee shall ensure that stormwater facilities not owned or operated by the permittee are inspected and maintained pursuant to approved maintenance plans, or more frequently as needed to ensure the proper function and operation of the stormwater facility, but at a frequency of not less than once per year.
- c. The permittee shall ensure that proper maintenance includes cleaning and removal of solid and floatable materials, including trash/litter, excess leaves or grass clippings, branches, logs, any other debris, or excess growth. These materials have the potential to impede the proper



- function and/or restrict flow causing flooding or excessive discharge velocity or may be discharged to the receiving waters. The permittee may require the owners or operators of these facilities to take measures to prevent the accumulation, discharge, or other hazards caused by such debris in the stormwater facilities (e.g., catch basins along roads and parking areas, and detention basins).
- d. The permittee shall maintain a log sufficient to demonstrate compliance with this section, including but not limited to the actions taken by the permittee to enforce compliance with the long-term cleaning, operation, and maintenance program; the stormwater facility that was the subject of the action; location information of the facility with geographic coordinates; the name and title of person responsible for enforcement; the date of the action; and the findings. Example Maintenance Logs and Inspection Records forms are available at [www.njstormwater.org](http://www.njstormwater.org) under the maintenance guidance link;
  - e. The permittee shall maintain copies of all maintenance plans, as defined in Notes and Definitions, Part IV.B.1.a.vi, of this permit, for stormwater facilities approved by the municipality. The permittee shall provide copies of these maintenance plans to the Department upon request.
  - f. Existing Tier A permittees and new Tier A permittees shall implement this requirement upon EDPA.

## **5. Municipal Maintenance Yards and Other Ancillary Operations**

- a. Documenting Best Management Practices at all MMYs: The permittee shall implement Best Management Practices (BMPs) at each individual municipal maintenance yard (MMY) and ancillary operation owned or operated by the permittee. Each MMY and ancillary operation shall be identified by its own form in the SPPP which shall include a description of the site-specific activities and associated BMPs. Existing Tier A permittees shall implement this requirement upon EDPA. New Tier A permittees shall implement this requirement upon EDPA + 12 months.
- b. Site Inspections: The permittee shall inspect the entire site, including the site periphery, monthly (under both dry and wet conditions, when possible), and identify conditions that would contribute to stormwater contamination, illicit discharges, or negative impacts to the permittee's MS4. The permittee shall maintain a log sufficient to demonstrate compliance with this section, including but not limited to dates and times of the inspections; the name of the person conducting the inspection; and conditions requiring attention and remedial actions taken for all activities occurring. This log must be kept on-site, with a copy kept with the SPPP and made available to the Department upon request. Existing Tier A permittees shall implement this requirement upon EDPA. New Tier A permittees shall implement this requirement upon EDPA + 12 months.
- c. Inventory List: The permittee shall maintain a list of all materials and machinery 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, lubricants, solvents, and detergents. Materials or machinery that are stored in a permanent structure and therefore not exposed to stormwater do not need to be included. Existing Tier A permittees shall implement this requirement upon EDPA. New Tier A permittees shall implement this requirement upon EDPA + 12 months.
- d. **Container Labels:** The permittee shall properly label all containers. Labels shall be legible, clean, and visible. Containers shall be kept in good condition, protected from damage and spillage, and tightly closed when not in use. When practical, store containers indoors. If indoor storage is not practical, containers may be stored outside if covered and placed on spill platforms or clean pallets. An area that is graded and/or bermed to prevent run-through of stormwater may be used in place of spill platforms or clean pallets. Outdoor storage locations shall be regularly maintained. Existing Tier A permittees shall implement this requirement upon EDPA. Existing Tier A permittees shall implement this requirement upon EDPA. New Tier A permittees shall implement this requirement upon EDPA + 12 months.
  - e. **Spill Kits:** The permittee shall conduct cleanups of spills of liquids or dry materials immediately after discovery. Spills that are suspected to be a threat to human health or the environment shall be immediately reported to the NJDEP Hotline at 1-877-WARNDEP (1-877-927-6337). All spills shall be cleaned using dry cleaning methods only. Clean up spills with a dry, absorbent material (i.e., kitty litter, sawdust, etc.) and sweep the rest of the area. Dispose of collected waste properly. Store clean-up materials, spill kits and drip pans near all liquid transfer areas, protected from rainfall. Existing Tier A permittees shall implement this requirement upon EDPA. New Tier A permittees shall implement this requirement upon EDPA + 12 months.
  - f. **Bulk Liquid Storage:** The permittee shall have secondary containment (e.g., spill containment dikes, double walled tanks, etc.) for all aboveground storage tanks containing bulk liquid (including but not limited to gasoline, diesel fuel, heating oil, hydraulic oil, used oil and liquid de-icing materials). The containment area must be impervious and be able to contain the volumetric capacity of at least 110% of the largest tank's capacity within the containment area. The containment area must be constructed so that no volume of bulk liquid can escape through drains, storm sewer systems, or to the surface waters or ground waters of the state. All accessory pipes, hoses, valves, and pumps must also be located within the containment area. It is recommended that the tank be protected to prevent stormwater from accumulating in the containment structure. Existing and new Tier A permittees shall implement this requirement by EDPA + 12 months.
  - g. **Fueling Operations:** The permittee shall establish, maintain, and implement standard BMPs to address vehicle fueling; receipt of bulk fuel deliveries; and inspection and maintenance of storage tanks, including the associated piping and fuel pumps. At a minimum, these include:
    - i. Place drip pans under all hose and pipe connections and other leak-prone areas during bulk transfer of fuels;
    - ii. Block storm sewer inlets, or contain tank trucks used for bulk transfer, with temporary berms or temporary absorbent booms during the transfer process. If temporary berms or

booms are being used instead of blocking the storm sewer inlets, all hose connection points associated with the transfer of fuel shall be within the temporarily bermed or boomed area during the loading/unloading of bulk fuels. A trained employee shall be present to supervise the bulk transfer of fuel;

- iii. Clearly post, in a prominent area of the facility, instructions for safe operation of fueling equipment that include all the following: “Topping off of vehicles, mobile fuel tanks, and storage tanks is strictly prohibited”; “Stay in view of fueling nozzle during dispensing”; and the contact information for the person(s) responsible for spill response; and
- iv. Immediately repair or replace any equipment, tanks, pumps, piping, and fuel dispensing equipment found to be leaking or in disrepair.
- v. Existing Tier A permittees shall implement this requirement upon EDPA. New Tier A permittees shall implement this requirement by EDPA + 12 months.
- h. Discharge of Stormwater from Secondary Containment: The permittee may discharge stormwater accumulated in a secondary containment area (e.g., fuel storage, de-icing solution storage, brine solution) provided a visual inspection is performed to ensure that the contents of aboveground storage tank have not come into 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 permittee shall rely on previous tank inspections to determine with some degree of certainty that the tank has not leaked. If the permittee cannot determine with reasonable certainty that the stormwater in the secondary containment area is uncontaminated, then the stormwater shall be hauled offsite for proper disposal. If the secondary containment area contains a valve, this valve shall remain closed at all times except as described above. Existing and new permittees shall implement this requirement upon EDPA.
- i. Vehicle/Equipment Maintenance and/or Repair: The permittee shall perform vehicle and equipment maintenance in a manner that prevents the exposure of pollutants to stormwater. Whenever possible, the permittee shall conduct vehicle and equipment maintenance and/or repair activities indoors. For projects that must be conducted outdoors, and that last more than one day, portable tents or covers shall be placed over the equipment being serviced when not being worked on, and drip pans shall be used at all times. Use designated areas away from storm drains or block storm drain inlets when vehicle and equipment maintenance is being conducted outdoors. Existing and new permittees shall implement this requirement upon EDPA.
- j. Wash Wastewater Containment: The permittee shall manage any equipment and vehicle washing activities so that there are no unpermitted discharges of wash wastewater to storm sewer inlets or to surface or ground waters of the State. A permittee that cannot discharge wash wastewater to a sanitary sewer may temporarily store wash wastewater in a containment structure prior to proper disposal under the following conditions:

- i. Structural Inspections: The containment structure(s) does not leak. Any underground tanks and associated piping shall be tested for integrity every three years using appropriate methods determined by “The List of Leak Detection Evaluations for Storage Tank Systems” created by the National Work Group on Leak Detection Evaluations, or as determined appropriate and certified by a professional engineer for the site-specific containment structure(s). For any cathodically protected containment system, provide a passing cathodic protection survey every three years;
- ii. Visual Inspections: Before each use, perform inspections of all visible portions of containment structures to ensure that they are structurally sound. Log dates of inspection; inspector's name, and conditions using the attached Underground Vehicle Wash Water Storage Tank Use Log or found at [https://www.nj.gov/dep/dwq/tier\\_a.htm](https://www.nj.gov/dep/dwq/tier_a.htm) . This visual inspection is not required if system design prevents such inspection;
- iii. Overfill Prevention: Operate containment structures to prevent overfilling resulting from normal or abnormal operations, malfunctions of equipment, and human error. Wash wastewater shall no longer be introduced when determined to be at 95% capacity. Record each measurement to the nearest ½ inch. See attached Underground Vehicle Wash Water Storage Tank Use Log or found at [https://www.nj.gov/dep/dwq/tier\\_a.htm](https://www.nj.gov/dep/dwq/tier_a.htm) ;
- iv. Leak Remediation: Containment structures shall be emptied and taken out of service immediately upon detection of deterioration that could result in a leak. Complete all necessary repairs to ensure structural integrity prior to placing the containment structure back into service. Any spills or suspected release of hazardous substances shall be immediately reported to the NJDEP Hotline (1-877-927-6337) followed by a site investigation in accordance with N.J.A.C. 7:26C and N.J.A.C 7:26E if the discharge is confirmed;
- v. Pump-outs(including clean-outs): All wash wastewater placed into storage must be disposed of in a legally permitted manner. Maintain a log of equipment and vehicle wash wastewater containment structure pump-outs (removes only water) and clean-outs (removes all water and sludge) including date and method of removal, mode of transportation (including name of hauler if applicable) and the location of disposal. See attached Underground Vehicle Wash Water Storage Tank Pump Out Log or found at [https://www.nj.gov/dep/dwq/tier\\_a.htm](https://www.nj.gov/dep/dwq/tier_a.htm);
- vi. Annual Engineer’s Certification: Containment structures shall be inspected annually by a NJ licensed professional engineer. The engineer shall certify the condition of all structures including wash pad, catch basin, sump, tank, piping, risers to detect deterioration in the walls, floors, joints, seams, pumps and pipe connections or other containment devices using the attached Engineer’s Certification of Annual Inspection of Equipment and Vehicle Wash Wastewater Containment Structure or found at [https://www.nj.gov/dep/dwq/tier\\_a.htm](https://www.nj.gov/dep/dwq/tier_a.htm) . This certification may be waived for self-contained systems on a case-by-case basis. Any such waiver would be issued in writing by the Department; and

- vii. Recordkeeping: Maintain all logs, inspection records, and certifications on-site. Such records shall be made available to the Department upon request.
- viii. Existing and new Tier A permittees shall implement this requirement upon EDPA.
- k. Salt and Other Granular De-icing Material Storage and Handling: The permittee shall store salt and other solid de-icing materials in a permanent structure and establish, maintain, and implement salt and de-icing material storage and handling BMPs. At a minimum, these include:
  - i. Preventing the exposure of stored salt and other granular de-icing material to rain, snow, or stormwater run-on. Stormwater runoff containing de-icing material from a material storage and handling area is not authorized for discharge under this permit;
  - ii. Preventing and/or minimizing spillage;
  - iii. Minimizing tracking of materials from loading and unloading operations, which shall be conducted during dry weather, when possible;
  - iv. Minimizing loader travel distance between storage area and spreading vehicle;
  - v. Sweeping (or clean using other dry cleaning methods), after loading and unloading, the areas surrounding the de-icing storage structure to eliminate the contact of de-icing materials with stormwater that were tracked away from storage areas. The permittee may reuse or properly discard materials collected during cleanup; and
  - vi. Restricting the temporary outdoor storage of salt and other granular de-icing materials. The temporary outdoor storage of salt and other granular de-icing materials is permitted only under the following conditions:
    - 1) A permanent structure is under construction, repair, or replacement;
    - 2) Stormwater run-on and de-icing material run-off is minimized;
    - 3) Materials in temporary storage are tarped when not in use;
    - 4) All the BMPs for de-icing materials in a permanent structure above are met; and
    - 5) Temporary outdoor storage shall not exceed 30 days unless otherwise approved in writing by the Department.
- vii. Existing Tier A permittees shall implement this requirement upon EDPA. New Tier A permittees shall implement this requirement by EDPA + 36 months.
- l. Aggregate Material, Wood Chips, and Finished Leaf Compost Storage: The permittee may store materials such as sand, gravel, stone, topsoil, wood chips, and finished leaf compost, provided these materials are:
  - i. Stored a minimum of 50 feet from surface water bodies, storm sewer inlets, and/or ditches or other stormwater conveyance channels;

- ii. Stored in a manner as to minimize stormwater run-on and pollutant run-off via surface grading, dikes and/or berms (which may include sandbags, hay bales and curbing, among others) or three-sided storage bays. Where possible, the open side of storage bays shall be situated on the upslope. The area in front of storage bays and adjacent to storage areas shall be swept clean after loading/unloading; and
- iii. Not being processed (i.e., composting, chipping, grinding, screening, and/or size reducing). The discharge of stormwater from the processing of these materials is not authorized under this permit. Facilities conducting processing activities shall contact the Industrial Stormwater Permitting Unit at [industrialstormwaterpermitting@dep.nj.gov](mailto:industrialstormwaterpermitting@dep.nj.gov) for information regarding obtaining the applicable stormwater permit.
- iv. Existing Tier A permittees shall implement this requirement upon EDPA. New Tier A permittees shall implement this requirement by EDPA + 6 months.
- m. Cold Patch Asphalt Storage: The permittee shall store cold patch asphalt in a permanent structure or on an impervious surface and covered with a waterproof material (i.e., tarpaulin or 10-mil plastic sheeting) and contained (e.g., contained by berms) to control leachate and stormwater run-on or run through. Existing and new Tier A permittees shall implement this requirement upon EDPA.
- n. Street Sweepings and Storm Sewer Clean-out Material Storage: The permittee shall store street sweepings, storm sewer and catch basin clean-out materials, stormwater basin clean-out materials and other similar materials on a temporary basis. These materials shall not include liquids, wastes which are removed from sanitary sewer systems, or material which constitutes hazardous waste in accordance with N.J.A.C. 7:26G. The materials placed into temporary storage must be, at a minimum:
  - i. Stored in leak-proof containers or on an impervious surface and covered with a waterproof material (i.e., tarpaulin or 10-mil plastic sheeting) and is contained (e.g., contained by berms) to control leachate and stormwater run-on or run-through; and
  - ii. Removed for disposal within six (6) months of placement into storage.
  - iii. Existing Tier A permittees shall implement this requirement upon EDPA. New Tier A permittees shall implement this requirement by EDPA + 6 months.
- o. Construction and Demolition Waste, Wood Waste, and Yard Trimmings Storage: The permittee may temporarily store construction and demolition waste, wood waste, and yard trimmings, provided these materials are:
  - i. Stored a minimum of 50 feet from surface water bodies, storm sewer inlets, and/or ditches or other stormwater conveyance channels;



- ii. Stored in a manner as to minimize stormwater run-on and pollutant run-off via surface grading, dikes and/or berms (which may include sandbags, hay bales and curbing, among others), or three-sided storage bays. Where possible, the open side of storage bays shall be situated on the upslope. The area in front of storage bays and adjacent to storage areas shall be swept clean after loading/unloading;
- iii. Removed within six (6) months of placement into storage; and
- iv. Not being processed (i.e., composting, chipping, grinding, screening, and or size reducing). The discharge of stormwater from the processing of these materials is not authorized under this permit. Facilities conducting processing activities shall contact the Industrial Stormwater Permitting Unit at [industrialstormwaterpermitting@dep.nj.gov](mailto:industrialstormwaterpermitting@dep.nj.gov) for information regarding obtaining the applicable stormwater permit.
- v. Existing Tier A permittees shall implement this requirement upon EDPA. New Tier A permittees shall implement this requirement by EDPA + 6 months.
- p. Scrap Tires: The permittee shall store scrap tires in a covered container or enclosure to prevent the exposure to stormwater. If a covered container or enclosure is not available, tires may be stored on an impervious surface and covered with a waterproof material (i.e., tarpaulin or 10-mil plastic sheeting). Existing and new Tier A permittees shall implement this requirement upon EDPA.
- q. Inoperable Vehicles or Equipment: The permittee may store inoperable vehicles and equipment provided measures are taken to prevent stormwater runoff of pollutants. Specifically, inoperable vehicles and equipment with intact bodies and exteriors capable of preventing the contact of stormwater with internal components and fluids capable of discharging pollutants and not leaking any fluids may be stored indefinitely. For those that have body damage, rust damage, missing body panels, or broken windows, such that the exterior is no longer impervious to precipitation must have portable tents or covers are placed over vehicles. If any inoperable vehicle is found to be leaking, drip pans must be utilized immediately, and that leak must be repaired or that fluid must be drained from the vehicle. For all inoperable vehicles and equipment in storage, the permittee must ensure that there are designated storage areas are sited away from storm drain inlets, and monthly inspections are conducted for leaks and filled drip pans, as noted in b. above. Existing and new Tier A permittees shall implement this requirement upon EDPA.
- r. Outdoor Refuse Containers and Dumpsters: The permittee shall ensure that dumpsters and refuse containers that are outdoors or exposed to stormwater, are covered at all times. This serves to prevent the spilling, dumping, leaking, or otherwise discharge of liquids, semi-liquids, or solids from the containers. Roll-offs and open-top waste containers used to collect and temporarily store municipal trash, garbage and non-recyclables must be kept tarped, or otherwise covered unless actively being filled or emptied. Clean roll-offs or other open top containers used to collect clean household recyclables (such as cans, bottles, or paper, but not including materials such as electronics) must be covered when not in use, at the end of each workday, and before any anticipated storm event. This measure is not intended for temporary

demolition containers (e.g., rubble or construction waste, and wood waste) or containers that hold large bulky items (e.g., furniture), provided they do not contain putrescible waste. Existing and new Tier A permittees shall implement this requirement upon EDPA.

#### **6. Stormwater Program Coordinator (SPC) Training**

- a. The permittee shall ensure that all individuals who serve as Stormwater Program Coordinators (SPC) complete mandatory Department training regarding their responsibilities to implement the stormwater program in their municipality.
- b. The Department will conduct this free training via an interactive webinar which shall be offered approximately twice each year.
- c. SPCs are required to attend this training within EDPA + 36 months and once per permit cycle thereafter.
- d. In the event of SPC turnover, the permittee shall comply with the conditions set forth in Part IV.A.1.e. and ensure that the new SPC attends the next available Department training session.
- e. Previous recordings of SPC training sessions will be posted on the MS4 Tier A webpage.

#### **7. Annual Employee Training**

- a. The permittee shall develop, update, and implement an employee training program that ensures duty-specific training of all individuals responsible for implementation of the stormwater program. Training shall describe the procedures necessary to ensure compliance with all permit conditions and shall include municipality-specific details described in the SPPP. Training shall be conducted within 3 months of commencement of duties and on an annual basis thereafter. Recipients include municipal board members, governing body members, shared contract service entities and municipal employees in public works, engineering, business administration, clerical, etc. Methods of training may include in-person group training sessions, e-Learning sessions, on-the-job/field training, and instructional videos. The permittee must document and maintain records of the training of each individual, indicating the participant's name/title, signatures, dates of training, agenda or topics discussed, and the instructor's name/title or video title/website link addresses. The location of these records shall be noted in the SPPP.
  - i. SPPP – The permittee shall provide training on the current SPPP and applicable recordkeeping requirements. See Part IV.A.2.
  - ii. Construction Site Stormwater Runoff – The permittee shall provide training regarding the need for applicable construction sites to obtain a Construction Site Stormwater Runoff general or individual permit authorization. See Part IV.D.
  - iii. Post-Construction Stormwater Management in New Development and Redevelopment – The permittee shall provide training on the requirements for Post-Construction Stormwater Management in New Development and Redevelopment. See Part IV.E.



- iv. Community-wide Ordinances – The permittee shall provide training on the community-wide ordinances including a review of the requirements, enforcement, and the repercussions of non-compliance. See Part IV.F.1.
- v. Community-wide Measures – The permittee shall provide training on the community-wide pollution prevention/good housekeeping measures. See Part IV.F.2.
- vi. Stormwater Facility Maintenance – The permittee shall provide training on the maintenance of inventoried stormwater facilities owned or operated by the municipality as well as those not owned or operated by the municipality. See Part IV.F. 3. and IV.F.4.
- vii. Municipal Maintenance Yard Operations and Other Ancillary Operations – The permittee shall provide training on implementing BMPs, good housekeeping measures, and conducting and documenting site inspections at municipally owned or operated Maintenance Yard Operations and Other Ancillary Operations. See Part IV.F.5.
- viii. MS4 Mapping – The permittee shall provide training on mapping MS4 infrastructure within the municipality. See Part IV.G.1.
- ix. Outfall Stream Scouring Detection and Control – The permittee shall provide training on how to inspect, identify, correct, and document outfall pipe stream scouring and contributing factors. See Part IV.G.2.
- x. Illicit Connection Elimination – The permittee shall provide training on how to inspect, identify, eliminate, and document the impacts associated with illicit connections and details of the program including investigation techniques, physical observations, and field sampling. See Part IV.G.3.
- xi. Watershed Improvement Plan – The permittee shall provide training on the requirements for developing a Watershed Improvement Plan. See Part IV.H.
- xii. This requirement applies at EDPA for all existing permittees. New permittees have 12 months to create their SPPP and shall conduct training immediately upon completion. As such, the requirement for new Tier A permittees is EDPA+12 months.

## **8. Stormwater Management Design Review (SWMDR) Training**

- a. The permittee shall ensure that all individuals that review and approve stormwater management designs for major development projects on behalf of the permittee for compliance with the Stormwater Management rules at N.J.A.C. 7:8 have completed this mandatory Department provided training. Information regarding this training can be found at [www.njstormwater.org/training.htm](http://www.njstormwater.org/training.htm).
- b. This SWMDR training course covers the rule's requirements, calculation methodologies, and how to review a major development. This training must be completed, at a minimum, once every five years.
- c. A list of the individuals that completed this training course is posted at [the above noted web page](#), including their five-year expiration date.

- d. Existing Tier A permittees shall implement this requirement upon EDPA. New Tier A permittees shall implement this condition within 12 months of EDPA.

#### **9. Stormwater Management Rule Amendment Training**

- a. Whenever the Stormwater Management rules at N.J.A.C. 7:8 are amended and the Department determines that training is warranted, the permittee shall ensure that all individuals that have completed the SWMDR course in Part IV.B.5.h above also complete this mandatory Department provided training. If training is required, the Department will issue email notification to Stormwater Program Coordinators and individuals listed on the Department's SWMDR certified list.
- b. Training must be completed no later than one year after the adoption of the amendments to the Stormwater Management rules at N.J.A.C. 7:8.

#### **10. Municipal Board and Governing Body Member Training**

- a. The permittee shall ensure that municipal board and governing body members complete the "Asking the Right Questions in Stormwater Review Training Tool" posted at [www.njstormwater.org/training.htm](http://www.njstormwater.org/training.htm). This training is required for planning board members, zoning board members, and governing body members who review and approve applications for development and redevelopment projects on behalf of the permittee.
- b. This training must be completed by current municipal board and governing body members and once per term of service thereafter, municipal board and governing body members must also review at least of one of the tools offered under Post-Construction Stormwater Management found at the website above.
- c. Existing Tier A permittees shall ensure their current municipal board and governing body members complete this training on or before EDPA. New Tier A permittees shall ensure their current municipal board and governing body members complete this training on or before EDPA + 6 months. All Tier A permittees shall ensure that any new member complete this training within six months of commencing duties.
- d. The permittee is required to maintain a list of the dates and names of training program participants in its SPPP.

### **G. Minimum Standards for MS4 Mapping, and Scouring, and Illicit Discharge Detection and Elimination**

#### **1. MS4 Mapping**

- a. The permittee shall develop, update, and maintain an MS4 Infrastructure Map that delineates the location of the following stormwater features that are owned or operated by the permittee, including their associated attributes noted in parentheses:

- i. MS4 outfalls (receiving surface water name, type of outfall);
  - ii. MS4 ground water discharge points (type);
  - iii. MS4 interconnections (type into/from, entity);
  - iv. Storm drain inlets (type, catch basin present, label present, retrofitted);
  - v. MS4 manholes;
  - vi. MS4 conveyance (type, direction of flow);
  - vii. MS4 pump stations;
  - viii. Stormwater facilities (type); and
  - ix. Property boundaries of maintenance yard(s) and other ancillary operations (type).
- b. The permittee shall ensure that the MS4 Infrastructure map be:
- i. Reviewed annually, or more frequently as necessary, and updated to include the location or attributes of any new or newly identified MS4 infrastructure;
  - ii. Posted on the permittee's stormwater webpage and included as a weblink within the SPPP;
  - iii. Submitted electronically to the Department as a georeferenced shapefile, geodatabase, or an AutoCAD file (with all other non-applicable data stripped out). If the DEP Mapping Application ([https://www.nj.gov/dep/dwq/msrp\\_map\\_aid.htm](https://www.nj.gov/dep/dwq/msrp_map_aid.htm)) is used, then no submittal is required as the data is automatically submitted to the Department via the mapping application; and
  - iv. Provided to the Department on or before EDPA + 36 months. Existing permittees: This time frame does not extend the deadline of December 21, 2020, for the submission of the MS4 outfall pipe map.

## **2. Stream Scouring**

- a. The permittee shall develop, update, and implement a program to detect, investigate and control any localized stream scouring from stormwater outfalls owned or operated by the permittee. This program shall be described in the written SPPP, as required in Part IV.A.2. See the Tier A Municipal Guidance document and the Department's Stream Scouring Investigation Recordkeeping Form at [https://www.nj.gov/dep/dwq/tier\\_a.htm](https://www.nj.gov/dep/dwq/tier_a.htm) for additional information.

b. The permittee shall, at a minimum:

- i. Inspect each MS4 outfall that discharges to a stream, and the surrounding area in the vicinity of the MS4 outfall, for localized scouring of the stream banks or bottom caused by the outfall. Each outfall shall be inspected at least once every five years, with a minimum of 20% of the total number of outfalls per year.
- ii. Inspect, within 30 days of identification, any new and/or newly identified outfalls as required in i. above for localized scouring of the stream banks or bottom caused by the outfall;
- iii. Investigate, within 30 days of receipt, all complaints and reports of stream scouring;
- iv. When localized stream scouring is detected, identify sources of stormwater that contribute to the scouring from the outfall within 3 months;
- v. Where identified sources are located on property owned or operated by the permittee, corrective action shall be taken by the permittee to reduce stormwater rate or volume when feasible;
- vi. Where identified sources are within the jurisdiction of the permittee, but not located on property owned or operated by the permittee, the permittee shall ensure that proper operation and maintenance of stormwater facilities is performed by the entity responsible for the facility as required in Part IV.F.4;
- vii. Prioritize, schedule and complete remediation of identified localized stream scouring as soon as possible, taking action based upon the requirements above. If not able to be completed within 12 months, a schedule for completion shall be submitted to the MS4 Case Manager before the 12 month deadline. (See [https://www.nj.gov/dep/dwq/msrp\\_managers.htm](https://www.nj.gov/dep/dwq/msrp_managers.htm)). This schedule of completion shall be maintained with updated information and provided to the MS4 Case Manager on a quarterly basis until completion as required in Part IV.F.3 and IV.F.4;
- viii. All stream scouring restoration 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) and the requirements for bank stabilization and channel restoration found at N.J.A.C. 7:13;
- ix. All associated maintenance or repairs to stormwater facilities shall be made in accordance with N.J.A.C 7:8. Any changes to stormwater facilities that were originally approved as part of a major development project must be reviewed for compliance with N.J.A.C. 7:8 and the permittee's SCO or RSIS as applicable, by a design review engineer who has completed the Department's Stormwater Design Review course;

- x. Maintain a log and document all investigations and actions taken sufficient to demonstrate compliance with this requirement. Outfall inspections shall include all information requested on the Department's Outfall Inspection Form. Documentation of stream scouring shall include all of the information requested on the Department's Stream Scouring Investigation Recordkeeping Form. (See [https://www.nj.gov/dep/dwq/tier\\_a.htm](https://www.nj.gov/dep/dwq/tier_a.htm)).
- xi. Existing Tier A permittees should already have this program in place, so compliance is required at EDPA. New Tier A permittees must create and implement this program by EDPA + 12 months.

### **3. Illicit Discharge Detection and Elimination**

- a. Illicit Discharge Detection and Elimination: The permittee shall develop, update, implement and enforce an ongoing Illicit Discharge Detection and Elimination Program. This program shall be described in the written SPPP, as required in Part IV.A.2. See the Tier A Municipal Guidance document and the Illicit Connection Inspection Report Form ([www.nj.gov/dep/dwq/tier\\_a\\_guidance.htm](http://www.nj.gov/dep/dwq/tier_a_guidance.htm)) and the USEPA Guidance document ([https://www3.epa.gov/npdes/pubs/idde\\_manualwithappendices.pdf](https://www3.epa.gov/npdes/pubs/idde_manualwithappendices.pdf)) for additional information.
- b. The permittee shall, at a minimum:
  - i. Conduct visual dry weather inspection of all outfalls owned or operated by the permittee at least once every five years, with a minimum of 20% of the total number of outfalls per year, to determine if dry weather flow (flow occurring 72 hours after a rain event) or other evidence of illicit discharge is present;
  - ii. Inspect, within 30 days of identification, any new and/or newly identified outfalls, as required in Part IV.G.1.b.i above, to determine if dry weather flow or other evidence of illicit discharge is present;
  - iii. Investigate, within 30 days of identification, dry weather flows discovered during routine inspection and maintenance of other elements of the MS4;
  - iv. Investigate, within 30 days of receipt, complaints and reports of illicit connections, including those from operating entities of interconnected MS4s;
  - v. Investigate, within 30 days, to determine the source if evidence of illicit discharge is found;
  - vi. Eliminate as soon as possible, but no later than within one year of discovery, non-stormwater discharges that are traced to their source and found to be illicit connections. If unable to eliminate a non-stormwater discharge within one year, the permittee must request an extension from the Department no later than thirty days before the end of the one-year timeframe; and

- vii. Document investigations and actions taken using the Department's Illicit Connection Inspection Report Form and attach this form to the MSRP Annual Report. (See [https://www.nj.gov/dep/dwq/tier\\_a.htm](https://www.nj.gov/dep/dwq/tier_a.htm)).
- c. The permittee shall adopt and enforce an ordinance that prohibits illicit connections to the MS4 owned or operated by the permittee (See [https://www.nj.gov/dep/dwq/example\\_ordinance.htm](https://www.nj.gov/dep/dwq/example_ordinance.htm) for a model ordinance).
- d. Existing Tier A permittees should already have this program in place, so compliance is required at EDPA. New Tier A permittees must create and implement this program by EDPA + 12 months.

## H. Watershed Improvement Plan

### 1. Requirements for the Watershed Improvement Plan

- a. The permittee shall develop a Watershed Improvement Plan in the three phases specified below that describes what actions the permittee will take to:
  - i. Improve water quality by reducing the contribution of pollutant parameters for all receiving waters within and bordering the town that have percent reductions listed for stormwater in the Total Maximum Daily Loads (see the TMDL Look-up Tool at <https://www.nj.gov/dep/dwq/msrp-tmdl-rh.htm>);
  - ii. Improve water quality by reducing the contribution of pollutant parameters for all receiving waters within and bordering the town that have water quality impairments as per the Department's Integrated Report.  
(See the 303(d) list portion of the Department's Integrated Report at [https://www.epa.gov/sites/default/files/2020-01/documents/2016\\_final\\_integrated\\_report\\_appendix\\_b.pdf](https://www.epa.gov/sites/default/files/2020-01/documents/2016_final_integrated_report_appendix_b.pdf)); and
  - iii. Reduce and/or eliminate stormwater flooding in the municipality, prioritizing the areas of flooding for corrective actions based on threat to human health and safety, environmental impacts, and frequency of occurrence.
- b. The permittee shall solicit input from stakeholders, including residents, business owners, owners of private stormwater facilities (as per b.xiii below), and other municipalities and/or dischargers to the subwatershed(s) to be involved in the Plan development process.
- c. The permittee shall conduct semi-annual public information sessions (in-person or virtual) beginning on or before EDPA + 36 months, throughout the development of the Plan. These sessions could be included on the agenda for town council (or equivalent) meetings.
- d. The permittee shall prepare and submit to the Department, on or before EDPA + 36 months, **the Watershed Inventory Report**, as the first step of the Watershed Improvement Plan,

which shall summarize and include an electronic map of the items listed below. The permittee may use any information available from the Department's GIS database at <https://gisdata-njdep.opendata.arcgis.com/> to assist with the preparation of this Report, except for items ii. through vi. For i., existing permittees shall use the outfall pipe map as the base map, which was required to be completed by the permittees by December 21, 2020.

- i. All stormwater outfalls owned/operated by the permittee;
  - ii. The drainage area for each outfall(s);
  - iii. The receiving waterbodies of those outfalls;
  - iv. The water quality classification of all receiving waterbody segments;
  - v. All stormwater interconnections from the municipality into another entities' storm or sanitary sewer system;
  - vi. The drainage area for each interconnection into another entities' storm or sanitary sewer system;
  - vii. All stormwater connection points into the municipality from another entities' storm sewer system;
  - viii. All storm drain inlets owned/operated by the permittee;
  - ix. Area associated with each TMDL for waters that lie within or bordering the municipality;
  - x. Area associated with each water quality impairment for waters that lie within or bordering the municipality;
  - xi. Overburdened communities;
  - xii. Impervious areas; and
  - xiii. The location and ownership of all stormwater outfalls and basins/infrastructure not owned/operated by the permittee.
- e. The permittee shall prepare and submit to the Department, on or before EDPA + 48 months, **the second phase Watershed Assessment Report**, which shall include, but not be limited to:
- i. An assessment of potential water quality improvement projects by sub-watershed and parameter;
  - ii. An estimate of the percent reduction in loading of the TMDL/impaired parameters due to project(s) in i. above;
  - iii. A summary of feedback from public information sessions;

- iv. An estimate of funding needs for each project, and identification of potential funding sources, including the New Jersey Water Bank (NJWB); the formation of an SWU, using 319 grants, FEMA BRIC grants; and
- v. An estimate of an implementation schedule.
- f. The permittee shall post the Watershed Assessment Report, along with an announcement of a 60-day comment period for formal public input on its municipal website.
- g. The permittee shall prepare and submit to the Department, on or before EDPA + 59 months, the **final Watershed Improvement Plan Report**, which shall include:
  - i. A summary of proposed locations and load reductions of water quality improvement projects, both public and private, to be implemented;
  - ii. A summary of the public comments received, and the changes made to the Final Plan;
  - iii. A summary of how the projects will be coordinated with other regulatory requirements, such as:
    - flood protection;
    - endangered habitat/species;
    - surface & ground drinking water protection;
    - climate change/resiliency;
    - green infrastructure/SWM requirements;
    - wildlife corridors;
    - green acres;
    - environmental justice;
    - Combined Sewer Overflow Long Term Control Plans;
    - wetlands;
    - riparian buffers;
    - forest corridors;
    - related ongoing projects;
    - Pinelands Commission;
    - Highlands Council; and
    - Delaware River Basin Commission.
- iv. The proposed implementation schedule for the water quality improvement projects;
- v. A schedule of the public information sessions to be held;
- vi. Problems identified that are outside the jurisdiction of the permittee, if any. These can be related to pollutant loading due to agricultural properties, or other lands not under the jurisdiction of the municipality, and opportunities to address them;
- vii. Costs, broken down by project and year, the funding opportunities that will be sought; and



- viii. This plan shall describe how stormwater related problems in overburdened communities have been prioritized.
- h. The permittee shall begin implementation of the Watershed Improvement Plan in accordance with the schedule set forth in the Plan.
- i. The permittee shall update this Plan, when necessary, based upon the biennial (every 2 years) review of the revisions to the impairments of the permittee's waterbodies as per the Department's Integrated Report and newly adopted TMDLs.

## **I. Additional Measures and Optional Measures**

### **1. Incorporation of Additional Measures**

- a. Additional Measures are non-numeric (e.g., best management practices) or numeric effluent limitations that are expressly required to be included in a permittee's stormwater program by a TMDL, a regional stormwater management plan, or other elements of an adopted areawide Water Quality Management Plan.
- b. The Department will provide written notice of the adoption of any Additional Measure(s) to any affected permittee. The Department will list each adopted Additional Measure in a minor modification to the permit. The required Additional Measure(s) will also specify the implementation schedule.

### **2. Incorporation of Optional Measures**

- a. Optional Measures are BMPs, developed by the Permittee, that extend beyond the requirements of the Tier A MS4 NJPDES permit and that prevent or reduce pollution to waters of the State.
- b. The Permittee may, at its own discretion, incorporate Optional Measures into its MS4 stormwater program. Such BMPs shall be identified in the SPPP as Optional Measures.
- c. Failure to implement an Optional Measure identified in the SPPP shall not be considered a violation of the NJPDES permit.

### **3. Refuse Container / Dumpster Ordinance**

- a. Permittees have the option of adopting and enforcing an ordinance requiring dumpsters and other refuse containers that are outdoors or exposed to stormwater to be covered at all times. This ordinance serves to prevent the spilling, dumping, leaking, or otherwise discharge of liquids, semi-liquids or solids from the containers. This ordinance is not intended for litter receptacles; individual homeowner trash and recycling containers; containers that hold large bulky items (e.g., furniture, bound carpet and padding); permitted temporary demolition containers; and refuse containers at industrial facilities authorized to discharge stormwater under a valid NJPDES permit. For a sample ordinance see [www.nj.gov/dep/dwq/tier\\_a.htm](http://www.nj.gov/dep/dwq/tier_a.htm).

## **J. Recordkeeping**

### **1. Standard Recordkeeping Requirements**

- a. The permittee shall retain copies of all records required to be kept by this permit for a period of at least 5 years and be made available to the Department upon request.
- b. Existing Tier A permittees and new Tier A permittees shall implement this requirement upon EDPA.

## **K. Annual Report and Certification**

### **1. Annual Reporting Requirements**

- a. The permittee shall complete an Annual Report and Certification using the Department's electronic MSRP Annual Report service tool in the Regulatory Services Portal (<https://www.njdeponline.com>). The Annual Report shall summarize the status of compliance with the permit conditions for the subject year between January 1 and December 31.
- b. The permittee shall complete the annual Supplemental Questionnaire, which includes the Major Development Project List, and upload it as an attachment with the Annual Report. The Annual Report and Certification will be considered incomplete if the Supplemental Questionnaire is not included as an attachment when the Annual Report is submitted. The Supplemental Questionnaire is available at [www.nj.gov/dep/dwq/tier\\_a.htm](http://www.nj.gov/dep/dwq/tier_a.htm).
- c. The Stormwater Program Coordinator shall certify, sign and date the Annual Report.
- d. Submit the Annual Report and Certification, including the Supplemental Questionnaire, on or before May 1st annually.

## Attachment A – Points System for Public Education and Outreach Activities

The permittee shall implement a Public Education and Outreach Program that focuses on educational and pollution prevention activities about the impacts of stormwater discharges on surface water and groundwater and to involve the public in reducing pollutants in stormwater runoff and mitigating flow.

The permittee shall **annually** conduct educational activities that total at least **12 points** and include activities from **at least three of the five categories** found below.

At a minimum, at least one of the activities shall involve educating businesses and the general public of hazards associated with illicit connections and improper disposal of waste.

Each approved activity is listed below with an assigned point value. Additional information on how to conduct these Public Education and Outreach activities can be found under Notes and Definitions Part IV.A.3 and 4 of this permit. Records shall be kept necessary to demonstrate compliance with this requirement, including date of activities and any other relevant documentation.

Category 1: General Public Outreach		
Activity	Description	Points
<b>Social Media</b>	Post relevant stormwater materials on a municipal social media site, such as a Facebook, Instagram, or Twitter page. This information may include links to other stormwater related resources, including the municipality's stormwater webpage and the NJDEP stormwater website ( <a href="http://www.njstormwater.org">www.njstormwater.org</a> ).  *One point awarded for each social media platform used. A maximum of 3 points is allowed.	3*
<b>Newspaper Ad</b>	Use Department created and approved stormwater education materials available on <a href="http://www.cleanwater.nj.org">www.cleanwater.nj.org</a> to publish an ad in a newspaper or newsletter that serves the municipality.  *A maximum of 1 point is allowed.	1*
<b>Radio/Television</b>	Broadcast a stormwater-related radio or television public service announcement from <a href="http://www.cleanwater.nj.org">www.cleanwater.nj.org</a> on a local radio or municipal public service channel.  *One point awarded for each media outlet used. A maximum of 2 points is allowed.	2*
<b>Green Infrastructure Signage</b>	Post signs at municipally owned green infrastructure sites that describe the function and importance of the infrastructure, contact phone number, municipal identification number, and/or website for more information.  *New signs receive 0.5 points per sign. Existing signs that are maintained or upgraded receive 0.25 points per sign. A maximum of 5 points is allowed.	5*

<b>Billboard/Sign</b>	Post and maintain (for credit in subsequent years) a stormwater-related billboard or sign which can be displayed on a bus, bus stop shelter, recreation field (outfield sign), or other common public location.	2
<b>Mural</b>	Produce and maintain (for credit in subsequent years) the planning and painting of a stormwater pollution themed mural, storm drain art or other artwork at a local downtown/commercial area or other similar public venue.	2
<b>Stormwater Facility Signage</b>	<p>Post signs at municipally owned stormwater management basins or other structural stormwater related facilities that describe the function and importance of the facility, contact phone number, municipal identification number, and/or website for more information.</p> <p>*New signs receive 0.5 points per sign. Existing signs that are maintained or upgraded receive 0.25 points per sign. A maximum of 5 points is allowed.</p>	5*

<b>Category 2: Targeted Audiences Outreach</b>		
<b>Activity</b>	<b>Description</b>	<b>Points</b>
<b>Stormwater Display</b>	Present a stormwater related display or materials at any municipal event (e.g., Earth Day, town picnic), at the municipal building or other similar public venue.	1
<b>Promotional Item</b>	Distribute an item or items with a stormwater related message (e.g., refrigerator magnets, temporary tattoos, key chains, bookmarks, pet waste bag dispensers, coloring books, and pens or pencils). Municipality must initially have available a minimum number of the items equal to 10% of the municipal population.	2
<b>Private Stormwater Facilities Education</b>	Provide information to all known owners of stormwater facilities not owned or operated by the municipality (i.e., privately-owned) highlighting the importance of proper maintenance of stormwater measures. For assistance, see information at <a href="http://www.nj.gov/dep/stormwater/maintenance_guidance.htm">www.nj.gov/dep/stormwater/maintenance_guidance.htm</a> .	3
<b>Mailing or e-Mailing Campaign</b>	<p>Distribute any of the Department's educational brochures, tip cards, or a municipally produced equivalent (e.g., community calendar, newsletter, or recycling schedule) via a mailing to every resident and business in the municipality.</p> <p>*A maximum of 2 points is allowed.</p>	2*
<b>Ordinance Education</b>	Distribute a letter or e-mail from the mayor or municipal official to every resident and business in the municipality highlighting the requirements and environmental benefits of the Pet Waste, Wildlife Feeding, Litter Control, Improper Disposal of Waste, Containerized Waste/Yard Waste Collection, Private Storm Drain Inlet Retrofitting, Illicit Connection, Tree, and Salt Storage ordinances. Provide a link to the municipal website where subject ordinances are posted.	3

<b>Category 3: School/Youth Education and Activities</b>		
<b>Activity</b>	<b>Description</b>	<b>Points</b>
<b>School Presentations</b>	Provide water-related educational presentation(s) and/or activities to local preschool, elementary, middle, and/or high school classes using municipal staff or local partner organizations. Topics could include stormwater,	5*

	<p>nonpoint source pollution, watersheds, water conservation and water quality. For ideas, see information at <a href="http://www.nj.gov/dep/seeds">www.nj.gov/dep/seeds</a>.</p> <p>*Presentations receive 1 point per presentation, with a maximum of 5 points allowed.</p>	
<b>Water Education Workshops</b>	Provide water-related professional development workshops for local teachers from a registered NJ Department of Education Professional Development Provider	2
<b>Storm Drain Labeling</b>	Organize a project to label and/or maintain storm drain labels (that are not already precast with a message) with a scout troop, local school district, or faith-based group, or other community youth group for a minimum of 40 labels. This project could also include stenciling over precast labels to improve legibility.	3
<b>Educational Contest for Schools</b>	Organize an educational contest with a local school district or a local community organization serving youth to design a poster, magnet, rain stick, rain barrel or other craft/art object. Contest themes shall have an appropriate stormwater message. Winning entries are to be displayed at publicly accessible locations within the municipality such as at the town hall, library, post office, or school. The winning design should be shown on the municipality's website or social media site, if practical.	3
<b>AmeriCorps Event</b>	Coordinate an event (e.g., volunteer stream monitoring, educational presentations, or stormwater awareness project) through AmeriCorps NJ Watershed Ambassador Program.	4
<b>Clean-up</b>	Sponsor or organize a litter clean up for a scout troop, local school district, faith-based group or other community youth group along a local waterway, public park, stormwater facility, or in an area with storm drains that discharge to a local lake or waterway.	3

<b>Category 4: Watershed/Regional Collaboration</b>		
<b>Activity</b>	<b>Description</b>	<b>Points</b>
<b>Regional Stormwater Collaboration</b>	Participate in a regional stormwater, community collaborative or other watershed-based group on a regular basis to discuss impaired waterbodies, TMDLs, regional stormwater related issues, or watershed restoration plans that address those waterbodies. Evaluate, develop, and implement remedies that resolve stormwater-related issues within the affected waterbody or watershed.	3
<b>Green Infrastructure Workshop</b>	Organize or participate in a rain barrel, rain garden or other green infrastructure workshop on a regional or watershed basis. This could be a partnership exercise with a local watershed organization, utility, university, school, youth/faith-based group, and/or other organization.	3
<b>Community Activity</b>	Organize or participate in the organization of a regional or watershed-based event to carry out stormwater activities such as stormwater facility maintenance or litter clean-up. The municipality may identify and enter into a partnership agreement with a local group such as a watershed organization, utility, university, school, youth/faith-based group, and/or other organization to carry out these activities.	3

<b>Category 5: Community Involvement Activities</b>		
<b>Activity</b>	<b>Description</b>	<b>Points</b>
<b>Volunteer Stormwater Assessment or Stream Monitoring</b>	Establish a volunteer stormwater facility assessment (inspection, inventory and/or mapping) or stream monitoring program for a waterbody within the municipality to gauge the health of the waterway through chemical, biological or visual monitoring protocols. Contact NJDEP's AmeriCorps NJ Watershed Ambassador Program or review USEPA National Directory of Volunteer Monitoring Programs.	3
<b>Rain Barrel Workshop</b>	Organize or participate in a rain barrel workshop. This could be a partnership exercise with a local watershed organization, university, school, youth/faith-based group, and/or another nonprofit.	3
<b>Rain Garden Workshop</b>	Organize or participate in a rain garden training or installation workshop. This could be a partnership exercise with a local watershed organization, university, school, youth/faith-based group, and/or another nonprofit.	3
<b>Community Event</b>	Organize or participate in the organization of a community event to carry out stormwater activities such as stormwater measure maintenance or a stream buffer restoration. The municipality may identify and enter into a partnership agreement with a local group such as a watershed organization, university, utility, school, youth/faith-based group, and/or other nonprofit to carry out these activities.	3
<b>Community Involvement</b>	Organize a project with a local organization to create and post signs at either green and/or gray stormwater infrastructure sites or facilities that describe the function and importance of the facility, contact phone number, municipal identification number, and/or website for more information.  *Signs receive 0.5 points per sign. A maximum of 5 points is allowed.	5*

## Attachment B - Design Standards for Storm Drain Inlets

### Application of Design Standard

The below design standard applies to the following types of storm drain inlet installation or retrofit projects unless a more stringent standard is specified by the municipality's Stormwater Control Ordinance:

- Storm drain inlets installed as part of new development and redevelopment (public or private) that disturb one acre or more;
  - Storm drain inlets installed as part of new development and redevelopment (public or private) that disturb less than one acre that are part of a larger common plan of development or sale (e.g., phased residential development) that ultimately disturbs one acre or more;
- Tier A Municipality owned or operated storm drain inlets must be retrofitted where the storm drains are (1) in direct contact with any repaving, repairing (excluding individual pothole repair), or resurfacing (including top coating or chip sealing with asphalt emulsion or a thin base of hot bitumen); or (2) in direct contact with any reconstruction or alteration of facilities; and
- Privately-owned or operated storm drain inlets (e.g., condominium association) must be retrofitted where the storm drains are (1) in direct contact with any repaving, repairing (excluding individual pothole repair), or resurfacing (including top coating or chip sealing with asphalt emulsion or a thin base of hot bitumen); or (2) in direct contact with any reconstruction or alteration of facilities. This does not include single family homes.

## Design Standard

Grates in pavement or other ground surfaces shall meet either of the following standards:

- The New Jersey Department of Transportation (NJDOT) bicycle safe grate standards described in Chapter 2.4 of the NJDOT Bicycle Compatible Roadways and Bikeways Planning and Design Guidelines (see [www.state.nj.us/transportation/about/publicat/pdf/BikeComp/introtofac.pdf](http://www.state.nj.us/transportation/about/publicat/pdf/BikeComp/introtofac.pdf)); or
- A grate where each individual clear space in that grate has an area of no more than seven (7.0) square inches or is not greater than 0.5 inches across the smallest dimension. Note that the Residential Site Improvement Standards at N.J.A.C. 5:21 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 used to collect stormwater from the surface into a storm drain or surface water body.

For curb-openings inlets, including curb-opening inlets in combination inlets, the clear space in the 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 from the Design Standard

- Where each individual clear space in the curb opening in existing curb-opening inlets does not have an area of more than nine (9.0) square inches;
- Where the review agency determines that the standards would cause inadequate hydraulic performance that could not practicably be overcome by using additional or larger storm drain inlets;
- Where flows from the water quality design storm as specified in N.J.A.C. 7:8 are conveyed through any device (e.g., 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 rectangular space four and five-eighths inches long and one and one-half inches wide;  
or

A bar screen having a bar spacing of 0.5 inches;

Note that these 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).

- 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; or
- 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 the standard is an undertaking that constitutes an encroachment or will damage or destroy the New Jersey Register listed historic property.

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

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

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

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

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

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

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

Acceptable \_\_\_\_\_

Unacceptable \_\_\_\_\_

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

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

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

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

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

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

### Underground Vehicle Wash Water Storage Tank Use Log

Name and Address of Facility \_\_\_\_\_

Facility Permit Number \_\_\_\_\_

Tank ID Number \_\_\_\_\_

Tank Location \_\_\_\_\_

Tank Volume \_\_\_\_\_ gallons

Tank Height \_\_\_\_\_ inches

95% Volume \_\_\_\_\_ gallons

95% Volume \_\_\_\_\_ inches

<u>Date and Time</u>	<u>Inspector</u>	<u>Height of Product Before Introducing Liquid (inches)</u>	<u>Is Tank Less Than 95% Full? (Y/N)</u>	<u>Visual Inspection Pass? (Y/N)</u>	<u>Comments</u>

Notes: The volume of liquid in the tank should be measured **before** each use.

Liquid **should not be introduced** if the tank contains liquid at 95% of the capacity or greater.

A visual inspection of all exposed portions of the collection system should be performed before each use. Use the comments column to document the inspection and any repairs.

**Underground Vehicle Wash Water Storage Tank Pump Out Log**

Name and Address of Facility \_\_\_\_\_

Facility Permit Number \_\_\_\_\_

Tank ID Number \_\_\_\_\_

Tank Location \_\_\_\_\_

Tank Volume \_\_\_\_\_ gallons

<b><u>Date and Time of Pump Out</u></b>	<b><u>Volume of Liquid Removed</u></b>	<b><u>Waste Hauler *</u></b>	<b><u>Destination of the Liquid Disposal *</u></b>

**\* The Permittee must maintain copies of all hauling and disposal records and make them available for inspection.**

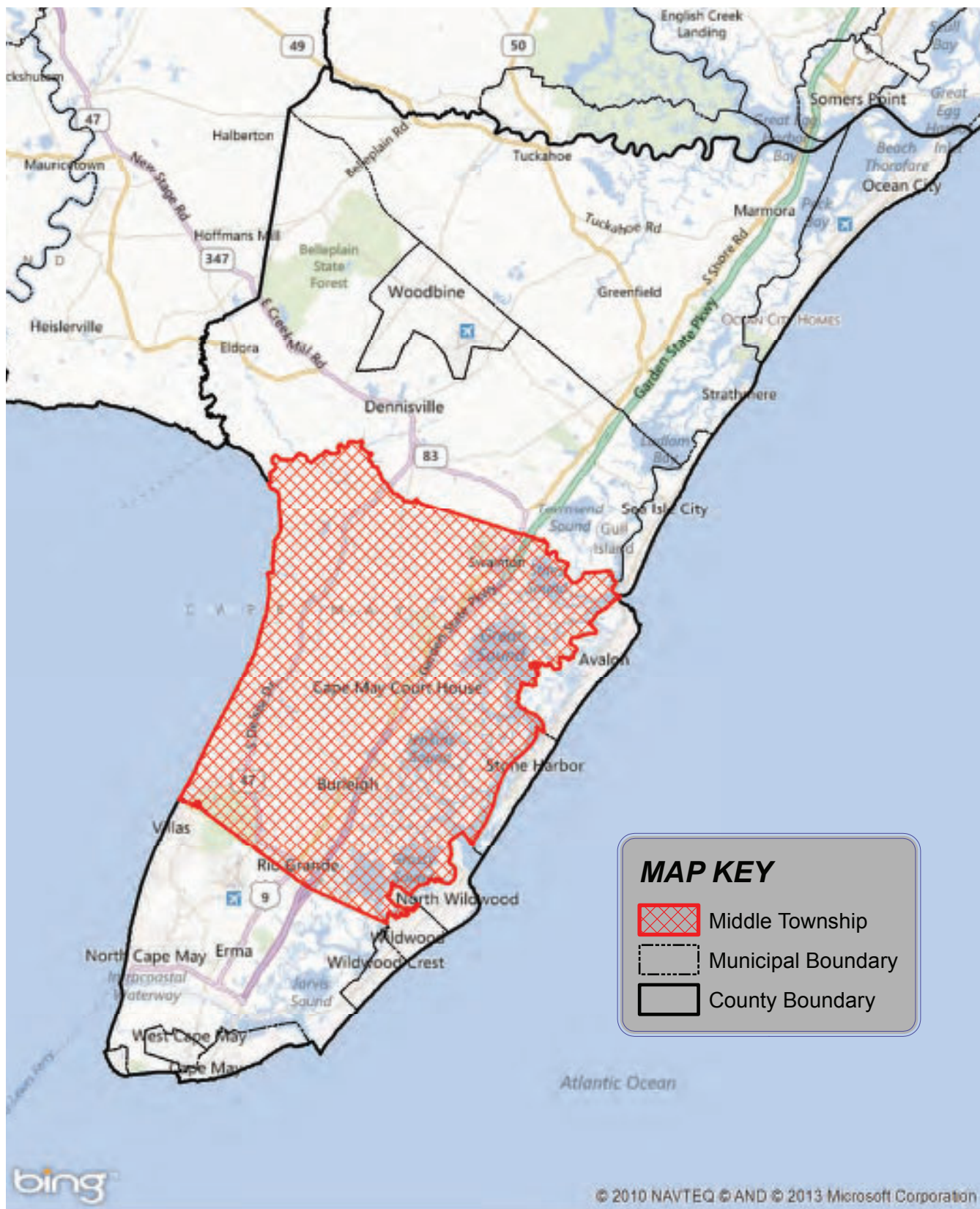


FIGURE: MIDDLE TOWNSHIP LOCATION MAP

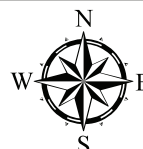
SOURCE: GIS DATA PROVIDED BY BINGMAPS,  
& NJDEP <http://njgin.nj.gov/>



DATE:  
3-8-13

DRAWN BY:  
PLL

1 inch = 20,000 feet



**MIDDLE TOWNSHIP  
2022 MS4 ANNUAL REPORT SUMMARY**

**CATCH BASIN CLEANING**

**# loads(1000 gallons debris)**

	<b># cleaned</b>	<b>Repairs</b>
1-Jan	<b>0</b>	0
1-Feb	0	0
13-Mar	6	1
15-Mar	<b>8</b>	1
16-Mar	<b>8</b>	1
17-Mar	<b>8</b>	1
18-Mar	<b>10</b>	1
23-Mar	<b>8</b>	1
24-Mar	<b>8</b>	1
25-Mar	<b>10</b>	1
28-Mar	<b>8</b>	1
29-Mar	<b>8</b>	1
30-Mar	<b>8</b>	1
31-Mar	<b>4</b>	1
5-Apr	<b>10</b>	1
7-Apr	<b>7</b>	1
11-Apr	<b>7</b>	1
12-Apr	<b>14</b>	2
14-Apr	<b>8</b>	1
20-Apr	<b>8</b>	2
21-Apr	<b>11</b>	2
25-Apr	<b>8</b>	2
26-Apr	<b>7</b>	1
27-Apr	<b>13</b>	2
28-Apr	<b>9</b>	1
6-May	<b>1</b>	0
17-May	<b>5</b>	1
1-Jun	<b>2</b>	5
2-Jun	<b>2</b>	6
14-Jun	<b>8</b>	1
15-Jun	<b>2</b>	2
16-Jun	<b>10</b>	1
21-Jun	<b>4</b>	2
22-Jun	<b>10</b>	2
23-Jun	<b>10</b>	2
12-Jul	<b>9</b>	1
19-Jul	<b>29</b>	1
25-Jul	<b>40</b>	3

26-Jul	<b>60</b>	3
27-Jul	<b>32</b>	3
28-Jul	<b>28</b>	2
29-Jul	<b>33</b>	2
1-Aug	<b>28</b>	1
2-Aug	<b>23</b>	2
3-Aug	<b>5</b>	2
4-Aug	<b>32</b>	1
5-Aug	<b>19</b>	2
8-Aug	<b>35</b>	2
9-Aug	<b>22</b>	2
10-Aug	<b>21</b>	2
11-Aug	<b>3</b>	1
12-Aug	<b>6</b>	1
18-Oct	<b>14</b>	2
20-Oct	<b>19</b>	2
28-Oct	<b>30</b>	3
31-Oct	<b>26</b>	3
2-Nov	<b>12</b>	<b>1</b>
3-Nov	<b>18</b>	2

***796 Inlets***

***91***

2022 totals

796 inlets

45.5 # loads(1000 gallons debris)



# OUTFALL CLEANING LOG

DATE	STREET	WORK PERFORMED
1/10/23	Conover lane	Trimmed/blew ditch
	Brooks ave	Blew ditch/
	Cynwyd dr	Trimmed and blew ditch
	Steeple/Moore	Blew ditch
	Arbutus dr	Blew outfall
	Secluded lane	Cleared pipe blew ditch to pond
	Teal rd	Cleared basins
1/11/23	Solar Way	Blew out ditch
	Oakview rd	Blew leaves
	304/311 Stagecoach	Trimmed growth Cleared basins blew out ditch
	6 new river	Clear
	New river cul de sac	Clear debris blew ditch
	Wildwood ave/central	Blew leaves
	Cedar ave Edgewood	Cleared basins blew out ditch
1/12/23	High Beach pipe	clear
	Pierces point pipes	Trimmed growth
	101 Eldredge	Trimmed growth blew out ditch
	204 Eldredge	Trimmed growth clear basin
	Roosevelt Blvd. pipe	clear
	Rutledge/Oak	Cleared basin
	N10th/11th	Trimmed growth blew out ditch
	100 Lafayette	Trimmed growth blew out ditch
	126 Lafayette/s15	Clear basin blew ditch
	Atlantic Ave Church lot/Overpass	Trimmed growth blew out ditch
1/17/23	Bayberry/Langford	Clear debris
	210 e 3 <sup>rd</sup>	Trimmed growth blew north side
	Colonial AVE	Trimmed growth blew out ditch
	Magnolia behind acme to rt9 split	Trimmed growth cleared debris



# OUTFALL CLEANING LOG

DATE	STREET	WORK PERFORMED
1/17/23	401 w mechanic Bucks Ave	Trimmed growth blew out ditch Checked pipes
1/18/23	21 Cochran to WW Ave Rt 9 bridge Wboro E. Lena N/S side S side Main St Wboro	Trimmed growth blew out ditch Trimmed growth cleared debris Trimmed growth blew out ditch Trimmed growth blew out ditch
1/19/23	NC-Maryland Wboro Golf Club (Burkes) Golf club – GSP Burkes E Wiley to rt9 E Wiley – E Anna Swamp	Trimmed growth blew out ditch Cleared debris Cleared debris Trimmed growth blew out ditch hauled away leaves Trimmed growth blew out ditch
1/20/23	1202 golf club North of 1202 golf club 1156 golf club South of central ave Turtle Thorofare cull de sac pipe	     Recut to GSP Blew leaves Pipe Clear
1/23/23	20 w woodland Maple CT – 121 e woodland E woodland cull de sac ditch Across 121 e woodland	Cleared debris Cut growth blew leaves Cut growth blew leaves Blew ditch
1/24/23	102 Whiting Way Regan's run -whiting -rt9 ditch (SHAW DITCH	Cut out cleard leaves Trimmed growth blew out ditch trees down
1/25/23	Del Val – Marsh GSP	Trimmed growth cleared debris

## OUTFALL CLEANING LOG

[illegible]



# WHEN YOU'RE WASHING YOUR CAR IN THE DRIVEWAY, REMEMBER YOU'RE NOT JUST WASHING YOUR CAR IN THE DRIVEWAY.



---

Rain washes pollutants into storm drains and directly into our lakes, rivers and the ocean.  
So what can you do? Take your car to a car wash where  
the water gets treated and recycled.

---

[www.cleanwaterNJ.org](http://www.cleanwaterNJ.org)



Bradley M. Campbell, Commissioner  
NJ Department of Environmental Protection



## WHAT'S THE PROBLEM WITH WASHING YOUR CAR?

Washing your car on a paved surface can allow the soapy wash water and other pollutants, like oil and grease, to run off into a storm drain. Most soap contains phosphates and other chemicals that, in large amounts can contaminate your drinking water, as well as kill fish, wildlife and plants. The soap, together with the dirt and oil washed from your car, flows into nearby storm drains, which flows directly into lakes, rivers and the ocean. The phosphates from the soap can cause excess algae to grow, which can be harmful to the water quality.

### YOU CAN HELP!

- Take your car to a car washing facility, rather than washing it yourself. Commercial car washes treat and recycle the water.
- If you can't get to a car washing facility, wash your car on an unpaved surface and use biodegradable soap.
- Organize a Car Wash Fundraiser for a local organization. Visit [www.cleanwaterNJ.org](http://www.cleanwaterNJ.org) to learn how.

## WHY SHOULD YOU CARE ABOUT CLEAN WATER?

Stormwater pollution is one of the greatest threats to New Jersey's clean water supply. Clean water provides access to safe drinking water, places for recreation, commercial opportunities, healthy wildlife habitats, and adds beauty to our landscape. Rain washes pollution from streets, parking lots, and lawns into storm drains, then directly to our streams, rivers, lakes and oceans.

**Did you know more than 60 percent of water pollution comes from things like motor oil, fertilizers, pet waste, and detergents? By sharing the responsibility and making small, easy changes in our daily lives, we can keep common pollutants out of stormwater.**



[www.cleanwaterNJ.org](http://www.cleanwaterNJ.org)



Thanks to the Washington State Department of Ecology,  
King County, and the cities of Bellevue, Seattle and Tacoma.

# WHEN YOUR CAR'S LEAKING OIL ON THE STREET, REMEMBER IT'S NOT JUST LEAKING OIL ON THE STREET.



---

Rain washes pollutants into storm drains and directly into our lakes, rivers and the ocean. So what can you do? Recycle used oil at certified facilities and maintain your vehicle to prevent leaks.

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[www.cleanwaterNJ.org](http://www.cleanwaterNJ.org)



Bradley M. Campbell, Commissioner  
NJ Department of Environmental Protection



## WHAT'S THE PROBLEM WITH MOTOR OIL?

Oil does not dissolve in water. When motor oil runs into storm drains either from changing your car's oil or from leaky cars, it goes directly to our lakes, rivers and the ocean. Oil and other petroleum products are toxic and can contaminate your drinking water, as well as kill fish, wildlife and plants. Did you know that one pint of oil can make a slick larger than a football field? Used motor oil is the largest single source of all oil pollution in lakes, streams and rivers. Americans spill 180 million gallons of used oil each year into our waters.

### YOU CAN HELP!

- Keep your car well maintained.
- Regularly check your car for leaks and schedule tune-ups. If you find leaks or drips, have your car repaired.
- Take your car to a service center to change oil.
- If you do change your own oil, do it in a garage, never on the street. Use a self-contained oil pan and discard the oil at a local service center for recycling.
- NEVER discard oil, gas, or antifreeze into a storm drain.
- If you spill hazardous fluids, contain it immediately with rags and cat litter. Clean up the spill and properly dispose of the waste.

## WHY SHOULD YOU CARE ABOUT CLEAN WATER?

Stormwater pollution is one of the greatest threats to New Jersey's clean water supply. Clean water provides access to safe drinking water, a place for recreation, commercial opportunities, healthy wildlife habitats, and adds beauty to our landscape. Rain washes pollution from streets, parking lots, and lawns into storm drains, then directly into streams, rivers, lakes and the ocean.

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[www.cleanwaterNJ.org](http://www.cleanwaterNJ.org)



Thanks to the Washington State Department of Ecology,  
King County, and the cities of Bellevue, Seattle and Tacoma.



# WHEN YOUR PET GOES ON THE LAWN, REMEMBER IT DOESN'T JUST GO ON THE LAWN.



---

Rain washes pollutants into storm drains and directly into our lakes, rivers and the ocean.  
So what can you do? Properly dispose of your pet's waste by flushing it down the toilet  
or by placing it in a bag and throwing it in the trash.

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[www.cleanwaterNJ.org](http://www.cleanwaterNJ.org)



Bradley M. Campbell, Commissioner  
NJ Department of Environmental Protection



## WHAT'S THE PROBLEM WITH PET WASTE?

Rain can wash pet waste that sits on a lawn or unpaved surface into storm drains, ultimately ending up in our lakes, rivers and the ocean. Pet waste contains coliform bacteria and other pollutants that can make people sick, and often cause beach closures on lakes or the ocean. Coliform bacteria can contaminate shellfish, which causes people to get very sick when they are eaten. Bacteria from pet waste can also pollute your drinking water, as well as kill fish, wildlife and plants. Pet waste is not only a health hazard but also a nuisance in our neighborhoods.

### YOU CAN HELP!

- Use newspaper, plastic bags, or a pooper-scooper to pick up the waste when you walk your pet.
- Properly dispose of pet waste into the trash or toilet. (Do NOT dispose of newspaper or plastic bags in the toilet.)
- Do not dispose of pet waste in storm drains.

## WHY SHOULD YOU CARE ABOUT CLEAN WATER?

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[www.cleanwaterNJ.org](http://www.cleanwaterNJ.org)



Thanks to the Washington State Department of Ecology,  
King County, and the cities of Bellevue, Seattle and Tacoma.



WHEN YOU'RE FERTILIZING THE LAWN,  
REMEMBER YOU'RE NOT JUST  
FERTILIZING THE LAWN.



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Rain washes pollutants into storm drains and directly into our lakes, rivers and the ocean.  
So what can you do? Follow the directions on the fertilizer bag,  
do not apply before it rains and use only when necessary.

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[www.cleanwaterNJ.org](http://www.cleanwaterNJ.org)



Bradley M. Campbell, Commissioner  
NJ Department of Environmental Protection



## WHAT'S THE PROBLEM WITH FERTILIZERS AND PESTICIDES?

Fertilizers help plants grow by adding nutrients to the soil. Pesticides (including herbicides) are any toxic substances used to kill insects, animals or plants. If fertilizers or pesticides are improperly applied, they can wash off your lawn or garden into storm drains and directly to our lakes, rivers, and the ocean. These chemicals can contaminate your drinking water, as well as kill fish, wildlife and plants. Too much fertilizer washing into a lake can cause algae to bloom in lakes, which will affect swimming, fishing and boating.

### YOU CAN HELP!

- Test your soil at your County's Rutgers Cooperative Research and Extension office, or buy a self-test kit.
- Use natural, slow-release nitrogen, or low phosphorus fertilizers.
- Look into natural alternatives to fertilizers and pesticides, such as integrated pest management (IPM).
- If you need to use fertilizers or pesticides, follow the instructions on the label on how to correctly apply.
- Do not apply fertilizers or pesticides before it rains. This will not allow the fertilizers or pesticides to penetrate through the soil.
- Use drought-resistant native plants in gardens; they require less fertilizer and less water.
- Use a mulching mower instead of bagging grass clippings.

## WHY SHOULD YOU CARE ABOUT CLEAN WATER?

Stormwater pollution is one of the greatest threats to New Jersey's clean water supply. Clean water provides access to safe drinking water, places for recreation, commercial opportunities, healthy wildlife habitats, and adds beauty to our landscape. Rain washes pollution from streets, parking lots, and lawns into storm drains, then directly to our streams, rivers, lakes and the ocean.

**Did you know more than 60 percent of water pollution comes from things like motor oil, fertilizers, pet waste and detergents? By sharing the responsibility and making small, easy changes in our daily lives, we can keep common pollutants out of stormwater.**



[www.cleanwaterNJ.org](http://www.cleanwaterNJ.org)



Thanks to the Washington State Department of Ecology,  
King County, and the cities of Bellevue, Seattle and Tacoma.



IF YOU LITTER IN THE STREET,  
YOU MIGHT AS WELL LITTER  
IN THE RIVER.



---

Rain washes pollutants into storm drains and directly into our lakes, rivers and the ocean.  
So what can you do? Recycle and dispose of your trash properly.

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[www.cleanwaterNJ.org](http://www.cleanwaterNJ.org)





## STORMWATER POLLUTION: WHAT DO YOU THINK?

- You may think littering is no big deal (it is).
- You may think that whatever runs into the storm drains gets treated before it reaches local rivers and streams (it doesn't).
- You may think motor oil and other hazardous materials don't harm the water (they do).

Pollution seeps into the ground and is carried by stormwater (rain and snow) directly to our drinking water, streams, lakes and oceans. Contaminated stormwater is the #1 cause of water pollution in New Jersey. Simple things, like proper clean-up after oneself and careful use of chemicals in the home, office and yard, are helpful ways for businesses and residents to protect the water.

[Insert Municipality Name] has ordinances aimed at reducing pollution from litter, fertilizer, oil, pesticides, detergents, animal waste, grass clippings and other debris. For details, see [insert municipal ordinance website link]. Thank you for keeping them in mind and doing your share.



**Keep grass, leaves and trash  
out of storm drains**



**Don't feed wildlife**



**Clean up after your pet**



**Limit use of fertilizers &  
pesticides**



**Properly handle hazardous  
products**



**NJ DEPARTMENT OF  
ENVIRONMENTAL  
PROTECTION**

[www.nj.gov/dep/dwg](http://www.nj.gov/dep/dwg)

[www.cleanwater.nj.org](http://www.cleanwater.nj.org)

## Township of Middle

# PET WASTE AND WATER POLLUTION



[insert municipality] has adopted and enforces an ordinance that requires immediate and proper disposal of solid pet waste deposited on any property not owned or possessed by the pet owner or keeper. [insert municipality page/hotlink] [Township can insert any other specific requirement to their ordinance].

Pet waste is carried by rain, melting snow, and ice to storm drains that empty into rivers, lakes, and the ocean. It also reaches reservoirs which supply much of the drinking water in New Jersey.

Pollution due to pet waste negatively impacts swimming, boating and fishing in these water bodies.

Pet waste contains microorganisms that can cause bacterial diseases, roundworms and parasitic infections.

In addition, pet waste contains harmful levels of nutrients which promote excessive algae and plant growth. This can rob the waterbody of oxygen, potentially killing all aquatic life in the area. Such nutrient pollution also causes waters to become cloudy and green.

## Proper Pet Waste Disposal

Flush it down the toilet.

\*But do not flush bags, debris, or nonbiodegradable items\*

OR

Put it in the trash.

**THANK YOU FOR  
DOING YOUR PART  
TO KEEP  
NEW JERSEY'S  
WATERS CLEAN**



## For More Info

- See the Pet Waste Ordinance [insert municipal page/hotlink]
- NJDEP Municipal Stormwater Regulation [https://www.nj.gov/dep/dwq/msrp\\_home.htm](https://www.nj.gov/dep/dwq/msrp_home.htm)
- EPA- Polluted Runoff: Nonpoint Source Pollution <https://www.epa.gov/nps>



# Fact sheet

## Backyard Leaf Composting

*Franklin Flower, Extension Specialist Emeritus in Environmental Science*  
*Peter Strom, Assistant Professor in Environmental Science*

Many New Jersey homeowners have an excessive quantity of leaves in the fall. One alternative for dealing with leaves is backyard composting. This process involves primarily the microbial decomposition of organic matter. Compost - the end result - is a dark, friable, partially decomposed substance similar to natural organic matter found in the soil.

### The Composting Process

Composting speeds natural decomposition under semi-controlled conditions. Raw organic materials can be converted into compost by microorganisms. As microorganisms decompose organic matter, temperatures within the pile increase, sometimes approaching 150 degrees F. at the center. These inside-pile temperatures speed the process, and kill many weed and disease organisms.

Leaves may be composted by piling them in a heap. Locate the pile where drainage is adequate and there is no standing water. The composting pile should be damp enough that when a sample taken from the interior is squeezed by hand a few drops of water will appear. A shaded area will reduce moisture evaporation from the surface, but tree roots may grow into the pile. If the surface of the pile becomes excessively dry, it will not compost, and those leaves may blow away.

The leaf pile should be at least 4 feet in diameter and 3 feet in height. If it is too small, it is difficult to maintain adequate temperatures for rapid decomposition. The maximum size should be about 5 feet in height and 10 feet in diameter. If the pile is too large, the interior will not obtain the oxygen needed for adequate, odor-free decomposition. If more material is available, lengthen the pile into a rectangular shape while keeping it 10 feet wide and 5 feet high. If there is sufficient space and material, two or three piles will provide greater flexibility. One pile can contain compost for immediate use; the second is actively composting; and the

third receives newly fallen leaves. If there is space for only one pile, new material may be added gradually to the top while removing the decomposed product from the bottom.

### Containing the Pile

Composting may be done in a loose pile. However, for the most efficient use of space, it can be contained in a bin or other enclosure. The sides of this bin should be loose enough to permit air movement. One side should be open, or easily opened, for turning the pile and for removing the finished compost.

Woven wire or wooden slat fencing, or cement blocks on their sides have been used successfully. Wood gradually decomposes, and wire fencing may rust, so these materials will need periodic replacement. Wooden stakes driven into the ground may attract termites, so lumber treated with wood preservative or metal snow-fence posts may be better.

### Constructing the Pile

Many instruction sheets advocate constructing the pile in layers that may include grass clippings, fertilizer, limestone, manure, soil, and leaves. However, we have found this practice to be unnecessary. The pile can be constructed of leaves only. A small amount of grass clippings may be added to the leaves as the pile is being constructed. However, because of its high demand for oxygen, too much grass tends to cause an anaerobic (without oxygen) condition. This greatly reduces the composting rate, and can produce unpleasant odors. Fresh vegetable peelings may be included, but do not add meat or grease because they may cause odors or attract pests.

Unless leaves are collected in a very wet condition, add water while placing them in the pile. Without moisture, the microorganisms will not function. Moist-en to the point



where it is possible to squeeze droplets of water from a hand-held mass of leaves.

Dead leaves lack adequate nitrogen for rapid decomposition. Therefore, a high-nitrogen fertilizer added to the pile may speed up decomposition. However, since leaves fall only for about 2 months a year, there are 10 months for decomposition before space is needed for the next batch. So, while it is generally unnecessary to add fertilizer, for more rapid decomposition and a product with a higher nutritive content, 5 ounces (about 1/2 cup) of 10% nitrogen fertilizer per 20-gallon can of hand-compacted leaves could be added. Fresh manure could be substituted, but it may cause odor problems.

Ordinarily it is unnecessary to add ground limestone because the pile seldom becomes too acidic. If fertilizer has been added, an equivalent quantity of limestone will counteract any acidity. Little or no limestone should be added if the compost is to be used on acid-loving plants.

Some guides on leaf composting recommend adding layers of soil periodically to the piles to supply the microorganisms needed for decomposition. We have not found this practice to be necessary, because leaves, themselves, contain a multitude of microorganisms. Available commercial activators or starters definitely are not needed.

Avoid packing the materials too tightly. Too much compaction will limit movement of air through the pile. Shredding the leaves generally speeds up composting.

To reduce weed germination, weeds in flower or with seeds should not be composted. Also, it is best to avoid composting diseased plants, or herbicide-treated lawn clippings until after at least three mowings.

## Care of the Pile

The composting pile must be kept moist, but not soggy, for proper decomposition. Inadequate moisture reduces microbial activity, while excessive water may cause anaerobic conditions. A thin outer layer of dry leaves is unavoidable.

The pile should be periodically turned or mixed. The main objectives of turning are to shift materials from the outer parts of the pile closer to the center for better decomposition, and to incorporate oxygen. During warm weather, turn the pile once a month. In cool weather frequent turning is not recommended because it allows too much heat to escape. Piles should be turned immediately if ammonia or other offensive odors are detected. If space is available, turning may be accomplished by shifting the entire pile to an adjacent area or bin.

Within a few weeks after starting, the pile should be hot in the center. Heating generally indicates that the pile is decomposing properly. Failure to heat may be caused by too little or too much water, improper aeration, packing too tightly, or a pile that is too small. As leaves decompose, they should shrink to less than one-half of their original volume. During dry weather it may be necessary to add more water. The moisture content of the interior of the pile should be observed while turning.

## Using Leaf Compost

Finished compost should be dark and crumbly with much of the original appearance no longer visible. It should have an earthy odor. Normally, compost will be ready in 4-9 months.

The major horticultural use for leaf compost is to improve the organic content of soil. Most New Jersey soils need an increase of 1/2 to 1% in organic content, particularly to improve moisture-holding capacity and tilth. Leaf compost is not normally a fertilizer, because it is too low in nutrients. Compost serves primarily as an organic amendment and as a soil conditioner. Soil mulch is another valuable use for leaf compost.

*Based in part on Experiment Station Research Project No. 07526.*

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**RUTGERS COOPERATIVE EXTENSION  
N.J. AGRICULTURAL EXPERIMENT STATION  
RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY  
NEW BRUNSWICK**

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# Fact sheet

## Minimizing Waste Disposal: Grass Clippings

*Peter F. Strom, Ph.D., Associate Professor of Environmental Science; James A. Murphy, Ph.D., Specialist in Turfgrass Management; and Henry W. Indyk, Ph.D., Specialist Emeritus in Turfgrass Management*

Since refuse disposal costs have dramatically increased, and some landfills no longer accept grass clippings, many individuals and governmental agencies are seeking alternatives for disposal of clippings. During the maximum grass growing period, the municipal refuse load in some New Jersey suburban communities may contain nearly one-third grass clippings. Collected clippings become anaerobic very quickly because of their high demand for oxygen. After becoming anaerobic they emit strongly unpleasant odors. Therefore, grass clippings (in quantity) are difficult to handle and to process.

From our own experience with the handling and disposal of grass clippings, and discussions with others such as lawn care professionals, we suggest considering the following methods to reduce landfilling:

1. **RETURN TO LAWN** — It is most desirable to leave grass clippings uncollected on the lawn so that they are recycled, contributing to soil organic matter and supplying part of the fertilizer needs of the lawn. Adopt a mowing schedule to keep clippings short enough to filter through growing grass and not remain as a mat on top of the lawn. Research and experience indicate that only 1/3 of the grass length should be removed during mowing. Never allow the lawn grass to double its height between mowings. This approach not only eliminates clipping collection and disposal problems, but also can contribute to improvement of the lawn.

Clippings are not a cause of thatch in lawns. Rather, thatch is formed primarily from a dense accumulation of grass roots and stemmy material. Returning clippings along with proper mowing frequency will not increase disease problems.

Use caution when removing collection bags from mowers. Some machines are not designed to operate safely without a bag or other attachment in place. If you are unsure, check with your equipment supplier.

2. **GARDEN MULCH** — Grass clippings can be used as a garden mulch. To minimize any tendency to protect slugs, clippings can be dried in the sun for a day prior to being used in this way. Clippings can be spread on garden soil to check weed growth, reduce soil spattering and crusting, moderate soil temperatures, etc. As a precaution, do not use grass clippings from herbicide-treated lawns until after two grass cuttings have been made.

3. **SOIL INCORPORATION** — Clippings can serve as a source of organic matter for soil improvement when incorporated into the garden.

4. **BACKYARD COMPOSTING** — Grass clippings can be composted, particularly when incorporated into a backyard leaf composting pile. However, grass has a high nitrogen content, a much higher demand for oxygen than leaves, and a tendency to mat, thereby greatly reducing the passage of oxygen. Composting piles containing



grass clippings thus readily become anaerobic. This, in turn, can produce strong, unpleasant odors. These odors are particularly noticeable when the pile is disturbed.

Because of these problems, grass clippings should not be composted alone, but rather mixed with composting leaves. The partially decayed leaves which now (6-9 months after leaf fall) have a low demand for oxygen, will serve as a bulking agent permitting more oxygen to reach the grass. Grass, which is high in nitrogen, will provide a more rapid decomposition of the remaining leaves as long as it remains under aerobic conditions. Grass clippings will also contribute to a better end product (higher nitrogen content) than that obtained from composting leaves alone. One must be aware, however, that an excess of damp grass in the pile will soon become anaerobic, produce very unpleasant odors, and reduce the rate of decomposition. The objective is to keep the material **aerobic**. Also, to ensure that excess nitrogen is not given off as ammonia, do not add more than 1 part fresh grass clippings to 3 parts partially composted leaves.

The resulting compost can be used as a soil amendment, as a mulch for gardens, flower or shrub beds, or as a potting medium.

**5. MUNICIPAL COMPOSTING** — Some grass clippings can be incorporated into a municipal leaf composting operation. However, problems that may be experienced with backyard grass composting could be greatly magnified at a municipal facility. Even grass stored for one day or less in plastic bags or the back of a lawn maintenance pick-up truck may emit very unpleasant odors when being unloaded at the site. For this

reason, grass clippings are banned at many leaf composting facilities, unless they are very isolated. Research is continuing in this area, but other problems include the high cost of collection and an inadequate supply of leaves for the amount of clippings.

Partially composted leaves should be mixed with the grass in a 3:1 ratio, or more. Because the leaves have already decomposed by the time the grass comes to the site, however, this means the ratio actually collected must be at least 6:1. For most towns this would be possible only if most of the grass clippings are handled directly by residents on their own property.

**6. CLIPPING REDUCTION** — Fertilizing and watering above the requirements of the grasses may be more detrimental than beneficial to the lawn. One of the effects is increased production of clippings. (Another is potential ground or surface water pollution.) Judicious and proper use of fertilizer and water can provide an attractive lawn with a reduction in the costs, effort, susceptibility to disease, and amount of clippings produced. A fertilization program should emphasize fertilizing the lawn in the fall season rather than in the spring. This can be effective not only in reducing the amount of clippings produced, but also in contributing to a better lawn.

Two related fact sheets: “Backyard Leaf Composting” (FS074) and “Using Leaf Compost” (FS117), and assistance with procedures covered above, may be obtained from the Rutgers Cooperative Extension office in your county. The telephone number appears under County Government in your local phone directory.





# Fact sheet

## Using Leaf Compost

*Roy L. Flannery, Specialist in Soils, Emeritus and  
Franklin Flower, Specialist in Environmental Science, Emeritus*

Composting involves primarily the microbial decomposition of organic matter. Compost - the end product - is a dark, friable, partially decomposed substance similar to natural organic matter found in the soil. The organic matter content of soils is very important. It influences the physical condition, water-holding capacity, and temperature of the soil, and especially the soil bacterial processes which affect the availability of mineral salts to plants.

### Why Compost Leaves

If newly fallen leaves are added directly to the soil without first being composted, the microbes that decompose the leaves compete with growing plants for soil nitrogen. The temporary nitrogen shortage caused by the microbes can reduce plant growth. To reduce or eliminate this competition for nitrogen, composting of the leaves is recommended prior to incorporating them into soils.

### Need for Organic Matter

Most New Jersey soils need an increase of 1/2 to 1% in organic matter. Sandy soils, such as loamy sands and sands, and soils with very high clay content are improved the most by an increase in organic matter content.

### Benefits of Adding Leaf Compost to Soil

- Among the benefits derived from adding leaf compost to New Jersey soils are:
- Drought damage to plants is reduced because of an increased water-holding capacity of the soils.
- Soil tilth is improved making the soils easier to cultivate.

- Very small amounts of the 16 essential elements needed for plant growth are supplied.
  - Adverse effects of excessive alkalinity, acidity, or over-fertilization are reduced by the added buffering of the soil.
  - The cation exchange capacity of soils is increased, enabling the soils to hold more plant nutrients for longer periods.
  - Decomposition of the organic matter produces organic acids which combine with iron and aluminum ions, thereby reducing their potential toxicity to plants. This also makes more phosphorus available for plants because free iron and aluminum can tie up the phosphates.
  - The added organic matter provides a food source for desirable soil micro-organisms.
  - When incorporated into the soil, or used in a thin mulch 1/16- to 1/8-inch thick, compost helps seeds to germinate.
- Overall, compost improves the physical, chemical, and biological properties of soils. Leaf compost, however, is not normally considered a fertilizer as it is too low in nutrient content. It serves primarily as an organic amendment and a soil conditioner. The nitrogen content of composted leaves on a dry basis is about 1/2 to 1% by weight. For other materials commonly added to backyard leaf compost piles, the nitrogen content is: blood meal 10-14%; grass clippings 2-4%; coffee grounds 1 1/2-2%; eggshells 1-2%; horse manure 1-5%; cow manure 1-1 1/2%; poultry manure 3-5%; ammonium sulfate 20 1/2%; urea 45%; bone meal 1 1/2-4%; and cotton seed meal 6-7%.

## When Compost is Ready to Use

When compost is ready to use (6 to 18 months after starting) its temperature will generally have decreased to slightly above air temperature. Finished compost will usually be drier than leaves during composting. The material also will be crumbly in texture. Before using compost, "screening" may be necessary to remove the larger partially decomposed materials. These materials will sometimes be present in composting piles because not all items decompose at the same rate. The undecomposed organic matter clumps may be broken up and added to another active compost pile for additional decomposition.

## Adding Leaf Compost to the Soil

A good rate of organic matter to work into the top 6 1/2 to 7 inches of most New Jersey cultivated soils is 0.5 to 1.0% organic matter by weight. This is equivalent to adding 900 to 1,800 wet pounds (25 to 50 bushels) of leaf compost per 1,000 square feet of area. To accomplish this, spread a 3/8- to 3/4-inch depth of leaf compost uniformly over the soil surface and mix into the top 6 to 8 inches of soil.

Little or no nitrogen will be released from compost for plant use during the season immediately following incorporation into the soil. It is generally necessary to add nitrogen to soils containing compost to prevent the compost from "robbing" the soil of nitrogen and creating deficiency problems in plants grown in the soil. Adding 1 to 1 1/2 lbs. of 10% nitrogen fertilizer to each 100 lbs. (about 3 bushels) of leaf compost is recommended.

The preceding recommendations supply only the needs of the leaf compost. Most plants require an additional 1 to 3 lbs. of actual nitrogen per 1,000 square feet for normal feeding. This nitrogen should be applied to the soil in addition to that applied in the leaf compost.

## Using Leaf Compost as a Mulch

Leaf compost can also be used as an organic mulch on the surface of soil in place of peatmoss, straw, etc. Organic mulches are valuable because they:

- Reduce rainfall runoff, thereby making more water available for plant growth.

- Decrease water evaporation losses from the soil.
- Keep the soils cooler in hot weather and warmer in cold weather.
- Reduce alternate freezing and thawing of soils which can injure the fibrous roots of plants.
- Help to prevent soil erosion by wind or water.
- Keep soils friable, therefore easier to cultivate.
- Increase biological activity of earthworms and other soil organisms.
- Prevent soil spattering on leaves, flowers, or fruits such as strawberries.
- Reduce soil compaction from rain and irrigation water.
- Help to control weeds.
- Present a pleasing appearance.

Recommended thicknesses of mulch layers: 2-3 inches for deciduous shrubs and trees, vegetables, and rosebeds; 3 inches for flower beds; and 3-4 inches for shallow-rooted, acid-loving plants.

## Other Uses for Leaf Compost

Leaf compost may also be used in potting soil. However, no more than 25 to 30% of the potting soil should be leaf compost. Frequently leaf compost will continue to decompose. If more than 25 to 30% of the potting soil is leaf compost, there will be a significant volume reduction of the potting soil after 1 year.

Composting generally destroys most weed seeds contained in the compost material; however, not all of them will be destroyed. Some are heat resistant, and others will not be fully exposed to the high temperatures. If a completely pasteurized leaf compost is desired for potting soil, it will be necessary to heat it in an oven until the temperature of the center of the mass reaches 180°F and is maintained for 30 minutes.



# Fact sheet

## Yard Trimmings Management Strategies in New Jersey

*Jonathan H. Forsell, Agricultural and Resource Management Agent, Essex County*

### Introduction

Most yard debris consists of leaves, grass clippings, prunings, branches, trunks of trees, and their root systems. There are various options for managing these materials. The following are some guidelines to assist decision makers and others in determining best management strategies.

### Materials Management Guidelines

**Leaves:** In New Jersey, leaves were banned from landfills, transfer stations, and incinerators in 1988. Collected leaves are generally composted at municipal, regional, commercial, or farm sites in large windrows (elongated piles) using the Leaf Composting Manual for New Jersey Municipalities as a guide. Municipal, regional, and private facilities can use a Type 1.11 simplified New Jersey Department of Environmental Protection (NJDEP) permit, if fewer than 20,000 cubic yards of leaves are composted annually, or a more detailed Type 2.1 permit, if the volume is greater.

Farmers can accept leaves for composting with the simplified permit if the volume is less

than 20,000 cubic yards or can receive leaves to be mulched into the soil at no greater than a six-inch depth on the soil and within seven days from delivery without need of a permit. This requires that the leaves be incorporated into the soil no later than the next tillage season.

Backyard composting (household scale) is the most cost-effective method of leaf composting because of avoided collection costs, tipping fees, permits, equipment, and management costs. Refer to fact sheets FS074 and FS117. Further detailed information about composting and trimmings management can be obtained through Rutgers Cooperative Extension and the NJDEP, Bureau of Resource Recovery.

**Grass Clippings:** Ideally, lawns should be mowed frequently (about five-day intervals) removing only one-third of the grass blade. The clippings will biodegrade at the soil surface providing nitrogen and organic matter. Although any type mower may be used, mulching mowers or mulching attachments on traditional rotary machines can improve the results by chopping more finely. If clippings are long and clump on the lawn, the excess can be raked up and used as a nitrogen source in the backyard composting pile. Permits can be issued by the

NJDEP to include a limited volume of grass clippings in large-scale leaf composting facilities, but the rules are quite stringent to prevent odor problems, which are common, when grass is composting in an anaerobic (oxygen-deficient) environment. A one-year farm grass clippings demonstration permit is available to farmers from NJDEP to apply grass around seasonal crops under a nutrient management plan.

**Prunings:** Trimmings from trees, shrubs, hedges, and perennials are composted at some permitted facilities, but can also be composted in the backyard pile. A shredder-grinder is helpful to break down larger woody material to a more compostable size.

**Tree Limbs:** Limbs can be cut for firewood or chipped to make a mulch for landscape use. If finely ground, the product can be composted, but at a slower rate than leaves or grass clippings. Woodchips can be used as a carbon source, when composting sewage sludge.

**Tree Trunks:** Trunks are usually cut, split, and dried for use as firewood. Some desirable species are used to make furniture and cabinetry, and others are ground for mulch or pulp.

**Tree Root Systems:** Excavated tree roots are generally ground into mulch material. Massive root systems and trunks that are not made into firewood or mulch cannot be stockpiled at a

site and are classified as Type 13 Bulky Waste, which must be hauled away for grinding or other processing.

## Summary

Because yard trimmings are recyclable through composting or other means, it is prudent for government, businesses, farmers, and other people to avoid non-recycling avenues for managing this important fraction of the solid waste stream.

## References

1. **Backyard Leaf Composting**, FS074, Franklin Flower and Peter F. Strom, Dept. of Environmental Science, Cook College.
2. **Grass—Cut It and Leave It**, NJDEP Division of Solid Waste Management, Office of Recycling, in cooperation with Rutgers Cooperative Extension. 1991.
3. **Leaf Composting Manual for New Jersey Municipalities**, Peter F. Strom and Melvin Finstein, Dept. of Environmental Science, Cook College and NJDEP. 1989.
4. **Using Leaf Compost**, FS117, Roy Flannery and Franklin Flower.







# Fact sheet

## Home Composting

*William T. Hlubik, Middlesex County Agricultural Agent; Jonathan Forsell, Former Essex County Agricultural Agent (deceased); Richard Weidman, Middlesex County Program Associate; and Mark Winokur, Former Program Assistant*

### What is Composting?

Composting is a natural process where organic materials decompose and are recycled into a dark, crumbly, earthy smelling soil conditioner known as “compost”. Compost improves soil structure and moisture retention, and contributes to healthy plant growth by providing plant nutrients.

### Why Should I Compost?

- Composting can save money!
- Reduces fertilizer and water use
- Avoids garbage collection and landfill fees
- Reduces the need for soil and plant amendments
- Composting helps the environment
- Reduces the volume of garbage going to landfills, transfer stations and incinerators
- Composting benefits your soil and plants
- Improves soil structure and texture
- Increases aeration and water holding
- Promotes soil fertility

- Stimulates healthy root development
- Aids in erosion control
- Reduces chemical inputs
- Composting is easy
- Save time bagging grass and leaves
- Quick and fun way to do part for the environment

### Compost Ingredients

#### Do Compost:

- ✓ Vegetable food scraps
- ✓ Grass clippings
- ✓ Leaves
- ✓ Flowers
- ✓ Weeds
- ✓ Sawdust and wood ash
- ✓ Chopped twigs and branches
- ✓ Coffee grounds w/filters



### Don't compost:

- × Meat scraps
- × Diseased or insect infested plants
- × Weeds with seeds
- × Dog and Cat feces
- × Food with grease or soap residues

## Composting Methods

### Slow Harvest: Ready in 12-18 Months

Made by adding layers of available yard waste over several months.

1. Set compost bin where it will get rain.
2. Put yard waste in bin as it is generated in your yard. The material at the bottom and in the center will compost first.

### Fast Harvest: Ready in 5-15 Weeks

Made by mixing equal weights of green and brown materials at once.

1. Add green materials such as grass clippings or vegetable scraps mixed with brown materials such as leaves (no woody-type materials should be included).
2. Add water to pile until it's as wet as a wrung out sponge.
3. Turn pile with a pitch fork or compost aerator tool twice a week for faster compost production (less often in wintertime).

## Types of Compost Bins

Compost can be made in open piles. However, to help keep a pile neat and maintain conditions needed for rapid decomposition, consider simple homemade or

store bought bins. See back page for demonstration sites in New Jersey.

### Homemade Bins:

- Made from wood pallets
- Made from snow fences



### Store Bought:

- Compost Tumbler
- Durable Plastic Bin



## Troubleshooting

Here is how to solve problems should they occur:

Symptom	Problem	Solution
Pile has a rotten odor	Not enough air	Turn pile
Pile has ammonia odor	Too many greens	Add brown material like leaves/straw
Pile is dry	Not enough water; too much woody material	Turn and moisten; add fresh greens
Low pile temperature (pile is not composting)	Pile is too small	Add new materials
	Insufficient moisture	Add water
	Poor aeration	Turn pile
	Lack of nitrogen	Mix in greens like grass or food scraps
	Cold weather	Insulate pile with layer of straw or cover with tarp
Pests (rats, raccoons, insects)	Presence of meat or fatty food scraps	Remove from pile

## Keys to Good Compost

**Water:** The microorganisms in the compost pile need water to live. Water pile only as needed, to maintain compost as moist as a wrung out sponge. Don't let your pile dry out completely.

**Nutrients:** The microorganisms in the pile need carbon for energy and nitrogen for protein in order to survive. A good balance can be achieved by mixing two parts of nitrogen rich green materials such as grass clippings, with one part of carbon rich brown materials such as leaves. However, carbon-rich leaves by themselves will compost.

**Aeration:** To speed up decomposition, turn the pile frequently using a pitch fork. This provides the microorganisms with enough oxygen to thrive so they can heat up the compost. Placing large branches at the bottom of the pile will also help add air to the pile. Minimal turning would be once per month and less frequently during the year.

**Surface area:** The more surface area the microorganisms have to work on, the faster materials will decompose. Consider chopping materials, particularly brush or branches which have a diameter of 1/4 inch or more. Pile size is also important. For quicker decomposition, pile should be at least 3 feet x 3 feet to hold the heat of microbial activity, but not so large (larger than 5 feet x 5 feet) that air can't reach microbes at the center of the pile.

## Use for Compost

**Mulch:** Spread compost around flower and vegetable plantings, trees, shrubs, and on exposed slopes. This will smother weeds, keep plant roots moist, and prevent soil erosion.

**Soil Conditioner:** Mix 1-3 inches of compost into vegetable and flower beds before planting. This returns organic matter to the soil in a usable form.

**Potting Mix:** Make your own mix by using equal parts of compost and sand or soil. Make sure compost is fully decomposed and screened.

## Resources

Some books to help you along...

*Backyard Composting*, Harmonious Technologies,  
P.O. Box 1865-100 Ojai, CA 93024

*How to Grow More Vegetables*, John Jeavons,  
Ecology Action, 5798 Ridgewood Rd. Willits, CA  
09590

*Let it Rot*, Stu Campbell, Storey Communications,  
Inc., Schoolhouse Rd., RD #1, Box 105, Pownal,  
VT 05261

*The Rodale Guide to Composting*, R.A. Simpson,  
Rodale Press, 33 E. Miner St., Emmaus, PA  
18098

*Worms Eat My Garbage*, Mary Appelhof, Flower  
Press, 10322 Shaver Rd., Kalamazoo, MI 49002

*For additional information on composting or where to get compost materials, call your Rutgers Cooperative Extension county office, found in the telephone directory blue pages, under "County Government" or your county recycling office.*

## Compost Deconstruction Areas

These areas in New Jersey have various types of compost bins on display. Call ahead for hours and when tours or workshops are given.

### Atlantic County

Atlantic County Utilities Authority Geo Garden  
6700 Delilah Rd.,  
Egg Harbor Township, NJ  
Contact: (609) 646-6600

### Burlington County

Burlington County Resource Recovery Geo Garden  
Complex, Rt 543,  
Border of Florence and Mansfield Township  
Contact: (609) 499-5210



Mazza & Sons, Inc. Recycling Facility  
3230 Shafto Rd.,  
Tinton Falls, NJ  
Contact: (732) 922-9292

**Middlesex County**  
Davidson's Mill Pond Park, Riva Avenue, South  
Brunswick, NJ  
Contact: (732) 745-3443

**Monmouth County**  
Deep Cut Park, Red Hill Rd.,  
Middletown, NJ  
Contact: (732) 842-4000

**Morris County**  
Frelinghuysen Arboretum, 53 E. Hanover Ave.,  
Morris Township, NJ  
Contact: (973) 326-7600

**Passaic County**  
Passaic County Office of Recycling  
1310 Rt. 23 N,  
Wayne, NJ  
Contact: (973) 305-5734

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N.J. AGRICULTURAL EXPERIMENT STATION  
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# Fact sheet

## Vermicomposting (Worm Composting)

*Jonathan H. Forsell, Agricultural/Resource Management Agent, Essex County*

Kitchen wastes, such as fruits, vegetables, coffee grounds, tea bags, and eggshells, are a part of the solid waste stream. Most of this material is disposed of as garbage at transfer stations, landfills, and incinerators at a high economic and environmental cost to citizens. A positive alternative is to compost kitchen scraps using red worms to make a valuable compost for use as a soil amendment or as a starter mix for house plants or seedlings. **Note:** Avoid meats, oils, and grease in the compost system.

Worm composting is enjoyable, and it demonstrates the natural process of decomposition and the life cycle of the organisms involved.

### Materials

- A worm bin can be made from an old dresser drawer, a 5-gallon plastic bucket, or from wood. A wooden box should be approximately 2 ft. X 2 ft. X 8 in. high. Do not use cedar, as it is toxic to the worms.
- Bedding material: shredded, moist newspaper, cardboard, and/or leaf compost.
- Watering can or container to provide water for the system.

- Red worms (*Eisenia foetida*) 1 pound. They can be ordered from:

Flowerfield Enterprises  
10332 Shaver Road  
Kalamazoo, MI 49002

Lower East Side Ecological Center  
P. O. Box 20488  
New York, NY 10009

### Procedure

1. Shred newspapers or cardboard or use leaf compost. Moisten this material and place it in the bin loosely to provide for air circulation.
2. Add 1 lb. of red worms to the bin. They will crawl to the bottom of the bedding material to avoid the light.
3. Place food scraps except animal products (meats, greases, etc.) under the bedding. The worms can consume 3 to 3 1/2 lbs. of kitchen waste per week while making vermicompost.
4. Keep the bin covered loosely with plastic or newspaper to retain moisture. The box should be checked every day or two

for moisture. When the surface or edges of the bedding begin to dry, add water.

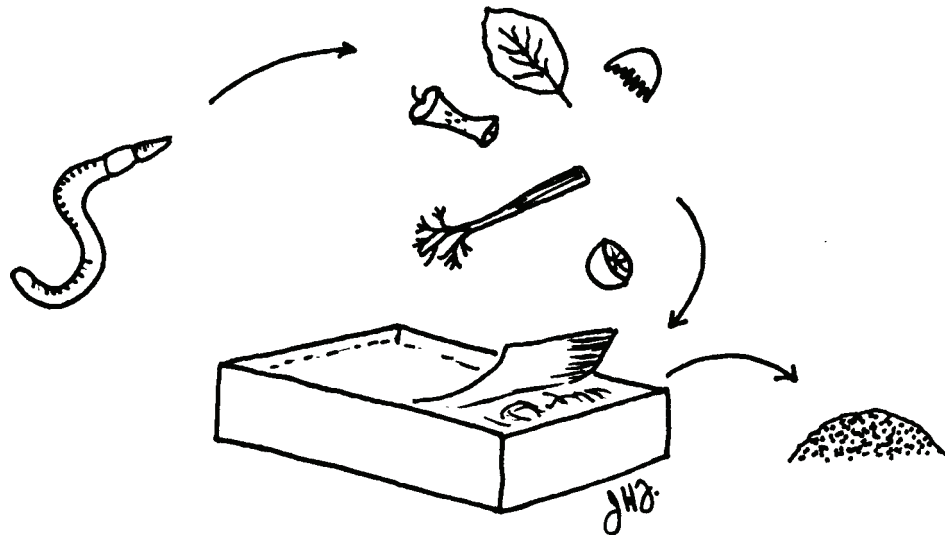
## Summary

The process takes about 3 to 4 months to produce a finished vermicompost product, which looks like brown coffee grounds. The compost consists of worm castings, partially decomposed kitchen waste, and some undecomposed bedding. The worms eat not only the food, but also the newspaper or other bedding. Vermicompost can be mixed into garden soil to improve structure and to provide nutrients, can be used as mulch, or as a potting soil mix.

To separate the compost, place it on a table under lights. The worms will go to the bottom of the pile away from the light. Remove the finished compost and start the process over again. Because the worms have reproduced, you can separate out the surplus and start a new box. Always keep the bin at a temperature above freezing and below 95° F. The bin should be kept indoors in winter, but can be placed in the shade in summer. Stop feeding for several days or weeks before ready to use.

## References

Appelhof, Mary. 1982. *Worms Eat My Garbage*. Flower Press, Kalamazoo, MI.



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Get the app & help fight illegal dumping



## SCAN

or visit [www.nj.gov/dep/stopdumping/instructions.htm](http://www.nj.gov/dep/stopdumping/instructions.htm) to access the app on your smart phone.



## SNAP

see an illegal dumpsite and take a photo with your smart phone.



## SUBMIT

use app to upload your photo and dumpsite location to authorities.



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For more information visit [www.stopdumping.nj.gov](http://www.stopdumping.nj.gov)





New  
Jersey  
Department of  
Environmental  
Protection

COMPLIANCE ADVISORY

# Enforcement **Alert**

*Making You Aware of Anticipated Enforcement Activities*

Compliance and Enforcement

Issued: November 7, 2012

# 2012-20

## **Illegal Dumping of Solid Waste**

### **Who is affected by this initiative?**

Solid waste coordinators, county and municipal staff or officials, law enforcement, and entities involved with solid waste transportation and disposal within New Jersey.

### **What is occurring?**

As the recovery from Hurricane Sandy progresses, it has become necessary to ensure that illegal dumping of solid waste does not occur – and will not be tolerated - since it will further set back our State's recovery efforts.

### **What is NJDEP doing?**

1. Providing help to those following the law and acting in the public's interest in this crisis. To address the significant volume of solid waste generated by Hurricane Sandy, the Department of Environmental Protection (NJDEP) is working with local officials to ensure that adequate temporary staging areas are available in addition to permitted disposal facilities.
2. To address the problem of illegal dumping of solid waste, including storm debris, NJDEP has notified the New Jersey State Police, local offices of emergency management, and local officials of the laws available to take immediate and strong enforcement actions against illegal dumpers. The Solid Waste Management Act authorizes NJDEP, and local boards of health and county health departments to initiate civil actions for violations of the Act.

**Illegal dumping and other harmful unauthorized activity will result in swift and severe action up to and including:**

- a. A mandatory fine of **\$2,500.00** for first offense, increasing to **\$10,000** for subsequent offenses
- b. Mandatory **loss of driver's license** for six months to one year
- c. **Forfeiture of vehicles** used or intended for use in the unlawful transportation or disposal of solid waste
- d. **Mandatory community service** up to 90 days.

# COMPLIANCE ADVISORY

## What should I do?

1. Be aware of useful information that explains, enables and supports legal disposal. Visit <http://www.nj.gov/dep/special/hurricane-sandy/debris.htm> where you will find information relating to:
  - a. Debris management guidance for municipalities
  - b. Status and hours of operation for disposal facilities
  - c. Temporary debris management areas
  - d. Temporary vehicle registrations
  - e. Suspension of county waste flow restrictions

For questions on this information call (609) 292-9880

2. If you see illegal dumping occurring, contact your local police department or call NJDEPs emergency hotline number at **1-877-WARNDEP** (1-877--927-6337).

If you are able to take a picture or video with your phone or camera, please email it to: [solidwasteemergencies@dep.state.nj.us](mailto:solidwasteemergencies@dep.state.nj.us) with the location, date and time, and vehicle make, model and license plate if available.

## Who can I contact with questions?

### **During Business Hours:**

Duty Officer  
New Jersey Dept. of Environmental Protection  
Bureau of Solid Waste Enforcement  
P.O. Box 420  
Mail Code 09-01  
9 Ewing Street, 2<sup>nd</sup> Floor  
Trenton, NJ 08625-0420  
(609) 292-6305

**Non-Business Hours:** 1-877-WARNDEP (1-877-927-6337)

## Where can I get more information?

Hurricane Sandy information page: <http://www.nj.gov/dep/special/hurricane-sandy/>  
Hurricane Sandy solid waste info: <http://www.nj.gov/dep/special/hurricane-sandy/debris.htm>  
General NJDEP contact information: <http://www.nj.gov/cgi-bin/dep/contactdep.pl>  
To comment on this advisory: <http://www.nj.gov/dep/enforcement/survey.html>

Please note this advisory is intended to be a summary explanation of a department initiative. It does not include all potentially applicable requirements. If you have any questions related to compliance with this initiative, please contact the contact numbers listed above.

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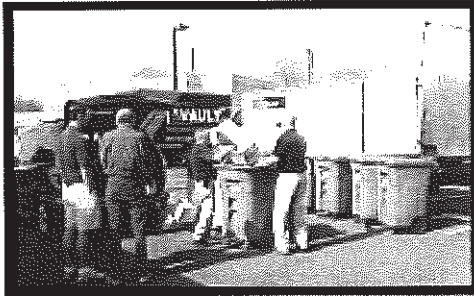
**WHERE:** Public Works Building  
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NJ 08210

**CONTACT:** Public Works,  
(609) 465-8745



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- 100% of the shredded paper is recycled!
- Only paper is accepted.
- 10 boxes maximum



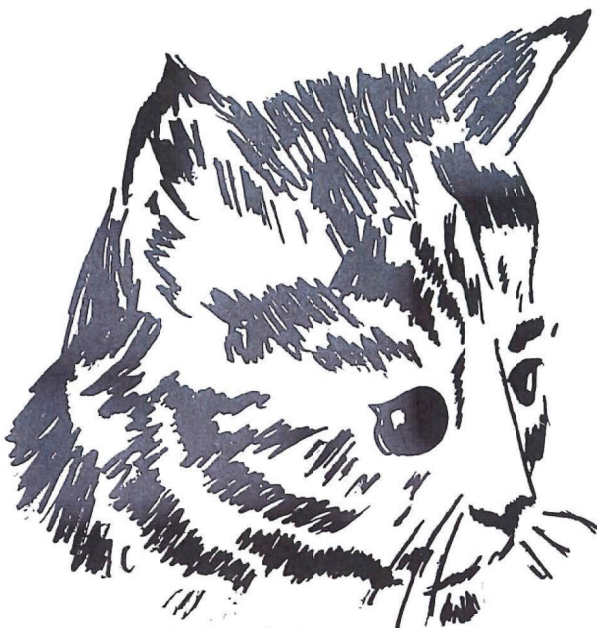
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(MIDDLE TWP. PUBLIC WORKS)

**DATE:** SATURDAY, MARCH 19, 2022

**TIME:** 9:30AM UNTIL 10:30AM



# Solutions to Stormwater Pollution

## *Easy Things You Can Do Every Day To Protect Our Water*

### **A Guide to Healthy Habits for Cleaner Water**

**P**ollution on streets, parking lots and lawns is washed by rain into storm drains, then directly to our drinking water supplies and the ocean and lakes our children play in. Fertilizer, oil, pesticides, detergents, pet waste, grass clippings: You name it and it ends up in our water.

Stormwater pollution is one of New Jersey's greatest threats to clean and plentiful water, and that's why we're all doing something about it.

By sharing the responsibility and making small, easy changes in our daily lives, we can keep common pollutants out of stormwater. It all adds up to cleaner water, and it saves the high cost of cleaning up once it's dirty.

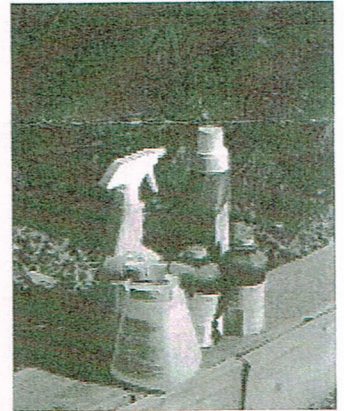
As part of New Jersey's initiative to keep our water clean and plentiful and to meet federal requirements, many municipalities and other public agencies including colleges and military bases must adopt ordinances or other rules prohibiting various activities that contribute to stormwater pollution. Breaking these rules can result in fines or other penalties.



**As a resident, business, or other member of the New Jersey community, it is important to know these easy things you can do every day to protect our water.**

### **Limit your use of fertilizers and pesticides**

- Do a soil test to see if you need a fertilizer.
- Do not apply fertilizers if heavy rain is predicted.
- Look into alternatives for pesticides.
- Maintain a small lawn and keep the rest of your property or yard in a natural state with trees and other native vegetation that requires little or no fertilizer.
- If you use fertilizers and pesticides, follow the instructions on the label on how to correctly apply it.



Make sure you properly store or discard any unused portions.

### **Properly use and dispose of hazardous products**

- Hazardous products include some household or commercial cleaning products, lawn and garden care products, motor oil, antifreeze, and paints.
- Do not pour any hazardous products down a storm drain because storm drains are usually connected to local waterbodies and the water is not treated.



■ If you have hazardous products in your home or workplace, make sure you store or dispose of them properly. Read the label for guidance.

■ Use natural or less toxic alternatives when possible.

■ Recycle used motor oil.

■ Contact your municipality, county or facility management office for the locations of hazardous-waste disposal facilities.



## Keep pollution out of storm drains

■ Municipalities and many other public agencies are required to mark certain storm drain inlets with messages reminding people that storm drains are connected to local waterbodies.

■ Do not let sewage or other wastes flow into a stormwater system.

## Clean up after your pet

■ Many municipalities and public agencies must enact and enforce local pet-waste rules.

■ An example is requiring pet owners or their keepers to pick up and properly dispose of pet waste dropped on public or other people's property.

■ Make sure you know your town's or agency's requirements and comply with them. It's the law. And remember to:

■ Use newspaper, bags or pooper-scoopers to pick up wastes.

■ Dispose of the wrapped pet waste in the trash or unwrapped in a toilet.

■ Never discard pet waste in a storm drain.

## Don't feed wildlife

■ Do not feed wildlife, such as ducks and geese, in public areas.

■ Many municipalities and other public agencies must enact and enforce a rule that prohibits wildlife feeding in these areas.



## Don't litter

■ Place litter in trash receptacles.

■ Recycle. Recycle. Recycle.

■ Participate in community cleanups.

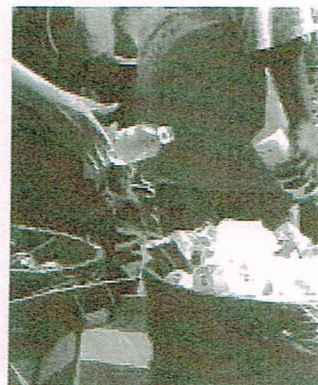
## Dispose of yard waste properly

■ Keep leaves and grass out of storm drains.

■ If your municipality or agency has yard waste collection rules, follow them.

■ Use leaves and grass clippings as a resource for compost.

■ Use a mulching mower that recycles grass clippings into the lawn.



## Contact information

For more information on stormwater related topics, visit [www.njstormwater.org](http://www.njstormwater.org) or [www.nonpointsource.org](http://www.nonpointsource.org)

Additional information is also available at U. S. Environmental Protection Agency Web sites [www.epa.gov/npdes/stormwater](http://www.epa.gov/npdes/stormwater) or [www.epa.gov/nps](http://www.epa.gov/nps)

New Jersey Department of Environmental Protection  
Division of Water Quality  
Bureau of Nonpoint Pollution Control  
Municipal Stormwater Regulation Program  
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