Stormwater Pollution Prevention Plan

Township of Verona Essex County, New Jersey



NJPDES Permit No. NJG0152897 NJDEP Program Interest No. 167074

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Stormwater Coordinator

Prepared By:



Our Project No. VA-172

October 2024

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Form 1 – Team Members

Stormwater Program Coordinator (SPC)						
Name an	nd Title	e Kevin O'Sullivan, P.E., Deputy Township Manager			ownship Manager	
Phone	(973) 857-4804		Email	kosulliva	n@veronanj.org	
	Individual(s) Responsible for Major Development Project Stormwater Management Review					
Name an	d Title	Pete Ten Kate, Township Engi		well Engi	neering	
Phone	(201) 641-0770	, ()	Email	ptenkate	@boswellengineering.com	
Name an	Name and Title Alvaro Gonzalez, P.E. Ph.D. Boswell Engineering				vell Engineering	
	Hydraulic Engineer					
Phone	(201) 641-0770		Email Agonzalez@boswellengineering.com			
	C	ther Municipal	Stormw	ater Tear	n Members	
Nam	ne and Title	George Zehnde	er, Assista	nt Superv	risor Of Public Works	
Phone	(973) 857-4805		Email	gzehnd	ler@veronanj.org	
Name an	nd Title	Chuck Molinar	o, Superii	ntendent o	of Public Works	
Phone	(973) 857-4805		Email cmolinaro@veronanj.org			
Name and Title D			Denise Pedicini, DPW Clerk			
Phone	(973) 857-4804		Email dpedicini@veronanj.org			
	Shared/Contracted Service Providers					
Prov	vider Name	Service	Provided	1	Term of Service	
_	N/A					

Form 2 – Revision History

Revision Date	Form # Changed	Reason for Revision (Updates to staff, policy, webpage, etc.)
April 2006	All	First Iteration
April 2012	All	Updated information
September 2024	All	New NJDEP Regulations December 2023

Form 3 – Public Announcements Part IV.B. and C.

1.	Provide the link to the dedicated stormwater webpage for your municipality.

https://www.veronanj.org/stormwater

2. List the name and title of person(s) responsible for stormwater webpage postings/updates.

Elisa Northrop, Public Information Officer

3. List the newspapers, social media outlets, websites, direct mailings (Email or postal), and other communication approaches typically used to inform/educate the public on stormwater program information and related events/activities.

The Township conducts activities that total at least 12 points, and include activities from at least three of the five categories as set forth in Attachment A of the Tier A Municipal Stormwater General Permit. The Township website at (https://www.veronanj.org/stormwater) posts all public outreach materials available from the NDJEP.

The Township of Verona maintains records of compliance with public participation requirements at the Department of Public Works located at: 5 Ozone Ave, Verona NJ and on the webpage: https://www.veronanj.org/stormwater

Form 4 – Post-Construction Stormwater Management in New Development and Redevelopment

Part IV.E.

1. How does the municipality define "major development"? If it is different from the definition in N.J.A.C. 7:8, explain the difference.

"Major development" means an individual "development," as well as multiple developments that individually or collectively result in:

- 1. The disturbance of 0.5 or more acres of land since February 2, 2004;
- 2. The creation of 5,000 square feet or more of "regulated impervious surface" since February 2, 2004;
- 3. The creation 5,000 square feet or more of "regulated motor vehicle surface" since March 2, 2021; or
- 4. A combination of 2 and 3 above that totals an area of 5,000 square feet or more. The same surface shall not be counted twice when determining if the combination area equals 5,000 square feet or more.
 - 2. Is the municipality's stormwater control ordinance (SCO) the same as or more stringent than NJDEP's model SCO? If more stringent, explain the difference.

The municipality has adopted a SCO that has more stringent development requirements than the NJDEP model SCO.

3. Describe the process for reviewing major development project applications for compliance with the SCO and Residential Site Improvement Standards (RSIS).

For major development projects the Township is undertaking, the Township Engineer is responsible for reviewing the stormwater management design.

For non-municipal projects, the Planning Board Engineer reviews the stormwater management design for compliance with the water quality, water quantity, groundwater recharge and green infrastructure design standards as per NJAC 7:8 and the more stringent criteria included in Township of Verona's SCO. If the project is deemed compliant with the SWM rule and Township's SCO, it is presented to Township of Verona's Planning Board for approval.

Throughout construction, the Township's Code Enforcement Officer and the Township Engineer inspects the construction sites at project milestones to ensure that the project is constructed in accordance with the approved development plans.

4. Does your municipality have a mitigation plan included in your Municipal Stormwater Management Plan and Stormwater Control Ordinance? Indicate the location of records of all variances granted.

The municipality does not have a Mitigation Plan.

starting with the initial adoption and including revisions.
The original SCO was adopted 21 November 2005 and amended on 11 March 2024.
6. Indicate the dates of each iteration of the Township's Municipal Stormwater
Management Plan, starting with the initial adoption and including revisions.
Once the NJDEP has released the new guidance for the MSMP, the Township will update their
MSMP to the new standards.

5. Indicate the dates of each iteration of the Township's Stormwater Control Ordinance,

Form 5 – Ordinances

Part IV.F.1.

Ordinance	Date Adopted	Was the DEP model adopted without change? If not, explain how the municipality's is more stringent.	Entity Responsible for Enforcement	Fees & Fines
1. Pet Waste	11/21/2005	Yes	Verona Police Department and the Local Board of Health	\$<2,000
2. Wildlife Feeding	11/21/2005	Yes	Verona Animal Control Officer, Heath Officer, or Code Enforcement Official	\$<2,000
3. Litter Control	11/21/2005	Yes	Verona Police Department and/or Code Enforcement	\$<2,000
4. Improper Disposal of Waste	11/21/2005	Yes	Police Department, Code Enforcement and/or Public Works	\$2,500- \$10,000
5. Yard Waste	11/21/2005	Yes	Police Department, Code Enforcement and/or Public Works	\$<2,000
6. Private Storm Drain Inlet Retrofitting	03/28/2021	Yes	Police Department	\$<2,000

7. Illicit	11/21/2005	Yes	Police	<\$1,000
Connections			Department,	
			Code	
			Enforcement	
			and/or	
			Public	
			Works	
8. Privately-	12/18/2023	Yes	Township	<\$2,000
Owned Salt			Manager	
Storage				
9. Tree	10/21/2019	No, more stringent	Zoning	<\$2,000
Removal-		preservation requirements	Official	
Replacement				

List any additional stormwater-related ordinances the municipality has adopted that address issues beyond the scope of the MS4 permit. Include adoption date, entity responsible for enforcement, and related fees and fines.

None

Indicate the location of records associated with ordinances and related violations and enforcement actions below.

Records of all ordinances and related enforcement actions are kept at the Township Hall located at: 600 Bloomfield Ave, Verona NJ and on the municipal stormwater website.

Form 6 – Street Sweeping

Part IV.F.2.a.i. and ii.

- 1. Provide a written description and/or attach a map outlining the sweeping schedule for the following:
 - Segments of municipal roads with storm drain inlets that discharge to surface water (required at least 3 times each year)
 - Segments of municipal roads that do <u>not</u> have storm drain inlets but <u>do</u> discharge to surface water (required at least 1 time each year)

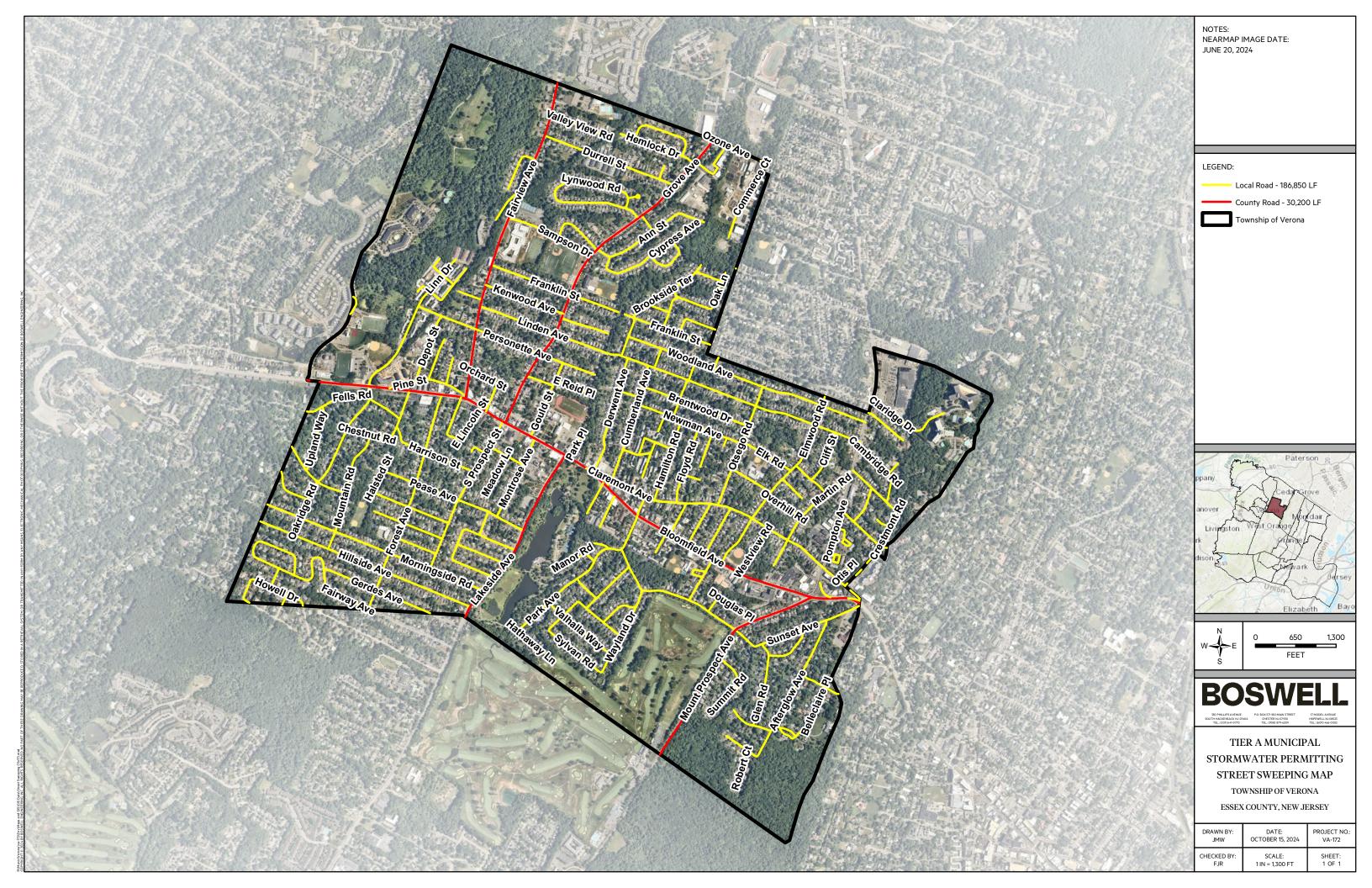
Note: Only asphalt and concrete roads need to be swept. Roads that do not have storm drain inlets and do not discharge to surface water do <u>not</u> need to be swept.

The Township of Verona intends on maintaining its existing street sweeping program for all municipal streets as seen on the attached map. The Township will sweep all streets a minimum of 3 times a year. The total length of all street sweeping is 41.11 miles and the schedule of maintenance is recorded in the DPW Office located at: 5 Ozone Ave, Verona NJ.

2. Indicate if sweeping work is outsourced and if so, describe the arrangement.

The Township of Verona does not outsource sweeping.

Street Sweeping Required Roads									
Date Area Swept Number of Miles Swept Total Amount of Wet Tons/Month									
	1								
			<u> </u>						
			+						
			<u> </u>						
			+						
			-						
			+						
			 						
			 						
	+		-						



Form 7 – MS4 Infrastructure

Part IV.F.2-4. and Part IV.G.2-3.

1. Municipal Storm Drain Inlets

- a. Describe how you ensure that municipal inlets without permanent wording cast into the design have been properly labelled.
- b. Describe how you ensure that municipal and private storm drain inlets have been retrofitted.
- c. Describe how you ensure that newly installed storm drain inlets include corresponding catch basins or other BMPs to collect solids.
- d. Describe when and how you conduct inspections of storm drain inlets and the criteria used to determine when they need to be cleaned.
- a. Our DPW crew conducts drive-by inspections of the storm drain inlets and open conveyances at which time they inspect the condition of the labels on storm drain inlets. If any buttons need to be replaced or paint needs re-stenciling, the DPW crew will make the repair or repaint as needed at that time or will schedule follow up work with the DPW supervisor.
- b. Throughout major development project construction and during repaving projects, the Code Enforcement Office or Township Engineer performs site inspections and checks for proper storm drain inlet retrofits. Additionally, during day-to-day operations that entail driving through various areas of the Township, DPW staff are instructed to observe storm drain inlets and note those that have not been retrofitted. If any are located along Township roads or properties and are in areas that are known to have been repaved, they are identified by the staff for follow-up retrofitting and the responsible entity notified, if it is a private entity. As noted in the Private Storm Drain Inlet Retrofitting Ordinance, private entities are not authorized to complete repaving, repairing, resurfacing, reconstructing or altering any surface that is in direct contact with an existing storm drain inlet on that property unless the storm drain inlet already meets the design standards or is retrofitted or replaced to meet the standard.
- c. The Township Engineer checks the plans for road projects and major developments to verify that a catch basin or some sort of BMP to capture solids is included with, or downstream of, the affect storm drain inlets. Records are retained in the annual certification that is filed with the NJDEP.
- d. DPW staff perform inspections of all storm drain inlets at least annually as they drive the roads of the Township. The staff will either decide to stop then to remove any debris off the inlet grate and surrounding area and load the debris into their trucks for proper disposal or make a note of the location to return to conduct the cleaning within 1 week. Areas that clog and flood often during storms, such as Bloomfield Ave, are inspected more regularly and prior to large, forecasted storms, and cleaned if necessary.

2. Municipal Catch Basins

- a. Describe when and how you conduct inspections of catch basins.
- b. Describe the criteria used to determine when catch basins need to be cleaned.
- a. Township of Verona has a number catch basins which are identified on our stormwater infrastructure map. Each year, we inspect at least 20% of the total catch basins on rotation and ensure that all catch basins are inspected at least once within the 5-year permit cycle. Areas that clog and flood often during storms are inspected regularly and prior to large, forecasted storms, and cleaned if necessary. DPW staff conduct a visual inspection using a flashlight and measuring pole.
- b. DPW staff are trained to check for debris collected in the catch basin. All catch basins that are 40% or more full are scheduled for clean-out by a vacuum truck contactor within one month of inspection.

Additionally, catch basins that are in areas of recent flooding complaints are inspected within 1 week of the complaint.

The Township also refers to previous records and puts those catch basins that have been noted as needing frequent cleaning on a more frequent inspection schedule.

3. Municipal Conveyance System

Describe when and how inspections of MS4 conveyance systems are conducted, and the criteria used to determine when they need to be cleaned. Include a description of the equipment and techniques used.

Similar to our procedure for inspecting our storm drain inlets as DPW staff drive the roads of the Township for various activities. If there is noticeable trash or debris interfering with the stormwater flow, the staff is required to clean up the debris preferably immediately, but no later than 1 week.

On an as needed basis, sewer inspection cameras and jetting are used by Montana Construction to view and clear enclosed pipe conveyances in areas associated with our catch basins, as we perform those inspections. If it appears that any ditches or swales need to be cleared, they will be added to our maintenance schedule to be completed as soon as possible, but no later than 3 months of the inspection.

Additionally, conveyance systems that are downstream of areas with recent flooding complaints are inspected within 1 week of the complaint.

We perform our outfall infrastructure inspections using the Department's Outfall Inspection Form when we inspect those outfalls for Stream Scouring and Illicit Discharges as noted below.

4. Municipal Outfall Inspections – Stream Scouring

Describe the program in place to detect, investigate, and control localized stream scouring from stormwater outfalls. Include a description of the equipment and techniques used.

The Township of Verona has a number of outfalls. Each year, we inspect at least 20% of the total outfalls and the surrounding areas for scouring. If scouring is detected, we complete the Stream Scouring Investigation Recordkeeping Form. Any time we identify a new outfall (due to expansion or a change to our conveyance system or one we hadn't inventoried before), we inspect it, and check it for scouring within 30 days of identification.

In the cases where steam scouring is detected, we will attempt to trace it back to the source within 3 months. If a source is identified, the Township would take corrective action if it related to municipally owned property or will ensure that the private entity(ies) perform necessary maintenance. If the Township is unable to identify the source, the enforcement inspector and MS4 case manager will be notified before the end of the 3 months.

Additionally, outfalls are inspected within 1 week of any complaints.

All identified scour problems will be evaluated and prioritized for remediation as soon as possible. If remediation cannot be completed within twelve months, a schedule will be submitted to the MS4 case manager prior to the twelve-month deadline. All restoration shall be made in accordance with the Soil Erosion and Sediment Control Standards and the requirements for bank stabilization and channel restoration found at N.J.A.C 7:13, as per our Tier A permit requirements. Prioritization of repairs will be based in part upon extend of scour, potential safety threat, and need for NJDEP permit(s).

All pertinent repair records including the date, location, type of repair, and copies of all applicable NJDEP permits will be kept in the Department of Public Works. Past repairs will be inspected annually to ensure scouring has not resumed. Appropriate repairs will be made at those outfall locations where such resumption has occurred.

5. Municipal Outfall Inspections – Illicit Discharge Detection and Elimination
Describe the program in place for conducting visual dry weather inspections of municipally owned or operated outfalls. Include a description of the equipment and techniques used.
Record cases of illicit discharges using the DEP's Illicit Connection Inspection Report Form from the Department's main stormwater webpage.

The Township of Verona has a number of outfalls. We inspect at least 20% of the total outfalls per year. We check for dry weather discharges (72 hours after rain event), intermittent non-stormwater flow, and discoloration or inappropriate debris (such as toilet paper) in an immediately downstream of the outfall.

If complaints are reported or if any outfalls are found to have suspected illicit discharge, we reinspect within 30 days and sample in accordance with NJDEP's MS4 Guidance to determine if an illicit connection exists.

If an illicit discharge is detected, the Township will begin the work to identify the source within 30 days. We fill out and submit the NJDEP Illicit Connection Inspection Report Forms for each suspected illicit discharge to submit within our Annual Report.

If the source is identified, the Township will notify the property owner(s) of their violation of the Illicit Connection Ordinance and will have the connection eliminated immediately. If we are unable to locate the source of the illicit connection within eleven months, the Township will notify the NJDEP Enforcement Inspector and the MS4 case manager within one month of the situation and to request an extension of the investigation period.

Any time we identify a new outfall (due to expansion or a change to our conveyance system or one we hadn't inventoried before), we inspect it, and check if for illicit discharge within 30 days of identification.

6. Other Municipal Infrastructure

List the types of MS4 infrastructure in your Township that require inspection but are not noted above in items 1-5. Describe when and how you conduct inspections of this infrastructure and the criteria used to determine when they need to be maintained and/or cleaned.

The Township operates the following:

Howell Drive Retention Basin

The stormwater facility is inspected regularly, cleaned, and maintained to ensure that it is functioning properly. In high-risk areas, preventative maintenance will be performed to ensure that it does not begin to fail.

7. Stormwater Facilities Not Owned or Operated by the Municipality

Describe your program for ensuring adequate long-term cleaning, operation, and maintenance of stormwater facilities not owned or operated by the municipality. This should include your plan for ensuring annual inspections are being done on these private properties and describe how you record the locations and logs associated with private infrastructure.

For all other stormwater infrastructure, each December, Township of Verona sends out a form to all private stormwater facility owners for them to complete and return to the Township by January 15th for the previous year. The form requires the location and type of each stormwater facility on the property and the dates and details of inspections, maintenance, cleaning and repairs that were performed. The form requires certification by the property owner that the stormwater facilities are functioning as designed, approved maintenance plans were followed (where appropriate) and has an area to explain if this is not the case.

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In instances where the owners do not perform the necessary maintenance, the Township may perform the maintenance and bill the owner.

When we receive the forms, we update our database. If we do not receive responses from an owner by the end of January, we will follow up with them by the end of the first quarter.

8. Infrastructure Records

Indicate the location of records related to stormwater infrastructure inspection, cleaning, maintenance, and repair activities.

Township of Verona keeps an inventory list of all stormwater infrastructure (municipal and private) with records of inspections, cleanings, routine maintenance work, investigations of illicit connections and scouring near outfalls, and repairs that have been done as well as those projected for completion each year. These records are kept in the DPW office.

Department of Public Works 10 Commerce Court Verona, NJ

	Inlet Cleaning Log Catch Basin # Inspector Date Inspected Cleaned Repaired Labeled Comments								
atch Basin #	Inspector	Date	Inspected	Cleaned	Repaired	Labeled	Comments		
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Outfall Inspection Form

This form is provided to assist MS4 permittees with appropriate recordkeeping for their routine outfall inspections as required by the current MS4 NJPDES permit. Initial illicit connection inspections must be performed during dry weather, which is at least 72 hours after the previous precipitation or snowmelt event.

It is recommended to attach photo(s) of the inspection of the outfall to this form.

documentation.						
documentation. Upon discovery of any possible illicit connections, you MUST use "Illicit Connection Inspection Report Form."						
SECTION 1: PERMITTEE INFORMATION						
MS4 Permittee: NJPDES #: NJG0						
SECTION 2: OUTFALL SUMMARY INFORMATION						
If this outfall is newly identified, be sure to add it to your electronic outfall pipe map.						
Outfall ID:Outfall Location Description:						
Municipality:County:						
Receiving Waterbody:						
Describe the type of conveyance(s) that delivers the stormwater to the receiving waterbody (concrete or corrugated pipe, concrete channel, etc.):						
If the ultimate discharge into the receiving water is from an enclosed pipe , is any part of the end of the pipe fully or partially submerged? *If 'Sometimes' or 'Always,' describe submerged conditions and condition at time of inspection:						
If the ultimate discharge into the receiving water is not from an enclosed pipe , what is the approximate distance between the end of the last enclosed stormwater conveyance pipe to the receiving waterbody (ft): Do any other NJPDES permittees discharge through this MS4 outfall?						
If 'YES', please contact your MS4 Case Manager.						
SECTION 3: INSPECTION CONDITIONS						
Date of current inspection:/ Date of previous inspection://						
Latest precipitation/snowmelt event:// Amount of Precipitation (in.):						

Outfall condition: PROPER CONDITION NEEDS MAINTENANCE NEEDS REPAIR If applicable, describe the type of maintenance or repair needed:
Bank Stability around outfall: ☐ GOOD ☐ FAIR ☐ NEEDS STABILIZATION If applicable, describe problem and the work needed to stabilize the outfall:
Is there a dry weather flow present at the outfall or other evidence that a previous illicit discharge may have occurred? (If the outfall is partially or fully submerged, dry weather flow observations must be made at the next upstream point (e.g. manhole) above the influence of the receiving surface waterbody.)
☐ PRESENT ☐ EVIDENCE ☐ NEITHER
If applicable: Manhole ID: Approximate distance upstream from outfall (ft.):
If a dry weather flow is present at the outfall or there is other evidence that a previous illicit discharge may have occurred, the permittee must document the illicit discharge investigation on the "Illicit Connection Inspection Report Form" at the link above.
SECTION 4: STREAM SCOURING
Is stream scouring present? $\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$
If you answered 'YES,' you must document sources of stormwater that contribute to the outfall. The Department has created the "Stream Scouring Investigation Record Keeping Form" for your use at the link above.
SECTION 5: INSPECTOR INFORMATION
Inspector's Name:
Title: Affiliation:
Signature: Date:

Illicit Connection Inspection Report Form

For additional information regarding illicit discharge investigations, refer to Chapter 3.6 of the <u>Tier A Guidance</u>

<u>Document.</u>

If a dry weather flow or other evidence of an intermittent illicit discharge is observed, this form shall be used to document the illicit discharge investigation in accordance with the current MS4 NJPDES Permit. This completed form shall be uploaded with the permittee's Annual Report and Certification and be kept with the permittee's SPPP as per the recordkeeping requirements of the permit. Initial illicit connection inspections must be performed during dry weather, which is at least 72 hours after the end of the previous precipitation or snowmelt event.

It is required to attach photos of the investigation to this form.

Illicit discharges must be reported immediately to the NJDEP Hotline at 1-877-WARNDEP (1-877-927-6337).

SECTION 1: PERMITTEE INFORMATION						
MS4 Permittee: NJPDES #: NJG0						
SECTION 2: OUTFALL SUMMARY INFOR	MATION					
If this outfall is newly iden	tified, be sure to add it to your electron	ic outfall p	ipe map.	ŧ		
Outfall ID:	Outfall Location Description:					
Municipality:	County:					
Receiving Waterbody:						
Describe the type of conveyance(s) that corrugated pipe, concrete channel, etc.):	delivers the stormwater to the rece	iving wate	erbody (c			
If the ultimate discharge into the receiving partially submerged?				pe fully or * ALWAYS*		
*If 'Sometimes' or 'Always,' describe sub	omerged condition at time of inspec	tion:				
If the ultimate discharge into the receiving distance between the end of the last end (ft.):	100 M	e				
Do any other NJPDES permittees dischar	ge through this MS4 outfall?	☐ YES*	□NO	□ UNKNOWN		
*If 'YES', list Permittee Name(s), NJPDES	#(s), and Location of Connection:					
If 'YES'. pl	lease contact vour MS4 Case Manac	aer.				

SECTION 3: OUT	FALL INSPECTION
Date of current	inspection:/
Latest precipitat	tion/snowmelt event:/ Amount of Precipitation (in.):
	er flow or other evidence of an intermittent illicit discharge was first discovered://
List the date(s)	of previous inspection(s) and describe the actions taken, if applicable:
SECTION 4: PHY	SICAL OBSERVATIONS
	either partially or fully submerged, dry weather flow observations must be made at the next tream point (e.g. manhole) above the influence of the receiving surface waterbody.
If applicable: M	anhole ID: Approximate distance upstream from outfall (ft.):
The permittee s	hall use the table below to describe 1) the observed dry weather flow and/or 2) when there
are indications of	of intermittent illicit discharges present.
	(Potential illicit discharge sources are listed in parentheses.)
Odor	□ None
	☐ Sewage (stale/septic sanitary wastewater)
	☐ Petroleum/Gas (petroleum refineries, vehicle maintenance facilities, petroleum
	product storage)
	Rancid/Sour (food preparation facilities, e.g. restaurants, hotels, etc.)
	☐ Sulfide (industries discharging sulfide compounds or organics, e.g. meat packers, canneries, dairies, etc.)
Colon	☐ Other:
Color	☐ Brown (meat packers, printing plants, metal works, concrete or stone operations,
	fertilizer facilities, and petroleum refining facilities)
	☐ Gray (dairies, sewage)
	☐ Yellow (chemical plants, textile and tanning plants)
	☐ Red (meat packers)
	☐ Other:
Turbidity	□ Clear
	☐ Cloudy (sanitary wastewater, concrete or stone operations, fertilizer facilities, and
	automotive dealers)
	Opaque (food processors, lumber mills, metal works, pigment plants)
Floatable	Floatables of industrial origin may include animal fats, spoiled foods, solvents, sawdust, foams, packing materials, or fuel. Floatables in sanitary wastewater include fecal matter,
Matter (Does	toilet paper, sanitary napkins, and condoms.
not include	□ None
litter)	☐ Sewage (toilet paper, etc.)
	□ Suds
	☐ Petroleum (oil sheen)
	□ Other:

Deposits and Stains within	Coatings, residues or fragments of material may be indicators of a potential intermittent									
outfall	non-storm ☐ None	nwater discharge								
Jutian		Plack (leather temperies)								
	☐ Grayish-Black (leather tanneries) ☐ White crystalline powder (Nitrogenous fertilizers)									
	☐ White crystalline powder (Nitrogenous fertilizers) ☐ Excessive sediments (construction sites)									
		sidues (petroleum refineries, storage facilities, vehicle service areas)								
	☐ Olly res	siddes (petroleum reimeries, storage facilities, verificie service areas)								
Vegetation		red to surrounding Riparian bank and/or stream vegetation								
	☐ Normal									
	☐ Excessi	ve growth and/or algal presence (Food processing plants)								
		ed Growth (Industrial operation effluent, CAFOs)								
of the water of vegetation surr sourc	*If the Physical Observations have been conducted and it was determined there was no odor, no discoloration of the water or no deposits and stains left on the outfall, turbidity was clear, no floatable matter, and the vegetation surrounding outfall appears normal, then the dry weather discharge is likely from a groundwater source, but the "Field Monitoring" section below must still be completed for verification.									
		analyses in Sections 5 & 6, the source may be traced back upstream in the storm e location by various methods, such as opening manholes, using a camera and/or performing dye tests or smoke tests.*								
SECTION 5: FIELD	D MONITO	RING								
Field c	alibrate ins	truments in accordance with manufacturer's instructions prior to testing.								
Estimated Dry Flow Ra		The Tier A guidance document recommends taking the estimate flow rate during the physical observations. GPM								
Deterge Examples include		Potential discharge types include sewage, washwater, industrial or commercial liquid waste								
and methylene b substances (I	olue active	Measurement: mg/L								
Temperature weather dis	2. 5 .	Temperatures >70°F may indicate cooling water discharges depending on the season Measurement:°F								
Pro	ceed to Sec	tion 6 in accordance with the Guidance Document recommendations.								
SECTION 6: DRY	WEATHER	FLOW ANALYSIS - WATER QUALITY								
* Based on the potential discharge types determined in the 'Physical Observation' and 'Field Monitoring' sections, <u>further testing must be conducted</u> using the appropriate subset of parameters below. The following parameters are recommended by the EPA for specific types of discharges as noted in the table below. For more information, refer to Chapter 12 of the EPA's Illicit Discharge Detection and Elimination guidance document (https://www3.epa.gov/npdes/pubs/idde manualwithappendices.pdf). Indicate the location of your measurements (e.g. outfall, manhole number, etc.):										
-										

Parameter	Potential Discharge Type (EPA Guidance)	Discharge Measurement
Ammonia	Sewage, washwater	mg/L
Potassium	Sewage, industrial or commercial liquid waste	mg/L
Boron	>0.35 mg/L likely indicates sewage or washwater	mg/L
Chlorine	Industrial or commercial liquid waste	mg/L
Conductivity	Sewage, washwater, and industrial or commercial liquid waste	S/m
E. coli (FW & PL waters)**	>12,000 Count/100 mL is likely Sanitary Wastewater	Count/100 mL
Enterococci (SC & SE1 waters)**	>5,000 Count/100 mL is likely Sanitary Wastewater	Count/100 mL
Fecal Coliform (SE2 & SE3 waters)**	Sewage	Count/100 mL
Fluoride	Distinguishes potable water from natural or irrigation water	mg/L
pH of Dry Weather Discharge	Washwater	SU
surface waterbody where the Coastal, SE=Saline Estuary. Months. Months	SC, SE 1, SE2, and SE3 refer to the surface water quality classe outfall discharges, as defined in N.J.A.C. 7:9B. FW=Freshwa Map coverage of these classifications is available on NJ-GeoWom/apps/webappviewer/index.html?id=02251e521d97454a ce Water Quality Classification.'	ater, PL=Pinelands, SC=Saline /eb
	omplete until the source of the dry weather flow is foun eliminated.* from the investigation, including the results in Sections	

Describe the broad-site of the feedback and the late of the feedback and t	
Describe the investigation, including the methods that were/will be used to identify the suspected source of	
the illegal discharge, or conclude there was no illicit discharge, along with the timeline of the steps of the	
investigation. Attach additional pages if necessary.	
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	2
	-
CECTION C. HUICIT DISCUADOS SUBMINATION	
SECTION 8: ILLICIT DISCHARGE ELIMINATION	
If it was an illicit discharge, has the source been eliminated?	`
If it was an illicit discharge, has the source been eliminated?	ו
Describe the plan of action that was/will be followed to eliminate the illicit connection. This plan should	
detail who is/was responsible for the discharge, what methods were/will be used to fix it, how long it	
took/will take, and how removal was/will be confirmed and rechecked:	
	-
	-
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	-
	-
	-
	_
SECTION 9: INSPECTOR INFORMATION	
nspector's Name:	
Title: Affiliation:	
	•
Signature: Date:	

Stream Scouring Investigation Recordkeeping Form

This form is provided to assist MS4 permittees with appropriate recordkeeping throughout the investigation process of outfall stream scouring. This form is to be kept with the permittee's SPPP, as per the recordkeeping requirements of the MS4 NJPDES permit. It is recommended to attach photo(s) of the outfall and scouring to this form.

SECTION 1: PERMITTEE INFORMATION	
MS4 Permittee:	NJPDES #: NJG0
SECTION 2: OUTFALL SUMMARY INFORMATION	
If this outfall is newly identified, be s	sure to add it to your electronic outfall pipe map.
Outfall ID: Outfa	all Location Description:
	*
Municipality:	County:
Receiving Waterbody:	
corrugated pipe, concrete channel, etc.):	the stormwater to the receiving waterbody (concrete or
	r is from an enclosed pipe, is the end of the pipe fully or
partially submerged?	□ NEVER □ SOMETIMES* □ ALWAYS*
*If 'Sometimes' or 'Always,' describe submerged	conditions and condition at time of inspection:
	r is not from an enclosed pipe, what is the approximate comwater conveyance pipe to the receiving waterbody
Do any other NJPDES permittees discharge throu	ugh this MS4 outfall? ☐ YES* ☐ NO ☐ UNKNOWN
*If 'YES', list Permittee Name(s) or NJPDES #(s):	
If 'YES', please con	tact your MS4 Case Manager.
SECTION 3: INSPECTION CONDITIONS	
When was the stream scouring first identified?	/
Date of current inspection:/	Date of previous inspection:/
Latest precipitation/snowmelt event:/	_/ Amount of Precipitation (in.):

Provide a description of the stream scouring and outfall condition:
Describe investigation and findings, including suspected sources and action(s) being taken to reduce the volume or rate of flow from the sources contributing stormwater to the outfall, including dates of actions taken:
Was stream scouring identified during the previous inspection? ☐ YES* ☐ No *If 'YES', describe previous actions taken:
Since the date of last inspection, has the stream scouring worsened? *If 'YES', describe any potential causes, including new source(s) contributing stormwater to the MS4 discharging at this outfall since previous inspection (e.g. new housing developments, commercial plazas, etc.):
SECTION 4: SCHEDULING OF STREAM REMEDIATION
Description of the remediation project:
List milestones and dates of remediation (i.e. applied for permit, advertised for bid, awarded bid for project completed project, etc.):

SECTION 5: PERMITS OBTAINED (Flood Hazard, Freshwater Wetlands, Soil Conservation District, etc.)								
Permit Type	Permit Authorization #	Application date	Authorization date					
	3 ·	/	/					
	. —————————————————————————————————————		/					
		//	//					
SECTION 6: INSPECTOR INFORMATI	ON							
Inspector's Name:								
Title:	Affiliation:							
Signature:		Date:						

																		Address				
																		Coordinates	-			
																		Inspector		N.		
																		Yes	Inspe	Municipal Stormwater Facility Inspection Log		
																-		o Yes		rmwater F		
																		No	Repair	acility Inspe		
																		Date	,	ection Log		
																		Maintenance	Preventative/Corrective			
																		Findings				

Form 8 – Community-wide Measures Part IV.F.2.

1. Herbicide Application Management

Describe your program for preventing herbicides from being washed into the waters of the State and to prevent erosion caused by de-vegetation.

Township of Verona does not apply herbicides at all. We do all de-vegetation by mowing or clipping and have not experienced erosion because of this practice.

2. Excess Deicing Material Management

Describe your program for ensuring that excess salt piles are removed in a timely manner after storm events.

Township of Verona's DPW staff are trained to sweep up excess salt piles that remains on roadways and parking areas within three days (72 hours) after the storm is over, conditions permitting.

3. Roadside Vegetative Waste

Describe your program for ensuring proper pickup, handling, storage, and disposal of wood waste and yard trimmings generated by the permittee along municipal roads or on municipal properties (trimming trees, mowing, etc.).

The Township of Verona maintains all roadside vegetation by trimming (leave in place). All areas of uncurbed roadside vegetation are monitored for erosion problems from vehicular traffic. Monthly inspections are performed to ensure that the Best Management Practices of the Permit are being executed.

4. Roadside Erosion Control

Describe your program to detect and repair erosion along municipal roadways.

As DPW staff perform annual storm drain inlet inspections as noted above, they also check for erosion of shoulders, embankments, ditches, and soils along roads. If they notice any such erosion or sedimentation collecting in areas, including in the waters near the road, they log it in the maintenance schedule and fix the issue within three months. We either plant vegetation or use other methods, such as riprap in areas prone to erosion along roads to promote soil stabilization as described in the Standards for Soil Erosion and Sediment Control. We will contact our MS4 Case Manager for guidance for cases where planting will not remedy this issue.

Form 9 – Municipal Maintenance Yards & Other Ancillary Operations Part IV.F.5.

Please complete a separate Form 9 for each yard or site. Indicate the number of yards/sites the municipality owns or operates: 1

1. Site Name and Address

Department of Public Works Garage, Yard & Recycling Center 10 Commerce Court Verona, NJ 07044

2. Monthly Site Inspections

Describe the nature of inspections conducted at this site and the location of inspection logs.

Daily inspections are conducted by DPW crew during daily operations. A trained DPW crew member walks the whole site at least once each month to ensure that all materials and machinery stored outside are stored in such a way that minimizes exposure to stormwater, ensuring the materials are on impervious surfaces as requires, and completely covered. Remedial actions taken during inspection, as well as those that are still needed are noted in the inspection log. Follow-up actions are scheduled for completion within one week. Specifically, we check if outdoor containers are covered and placed on spill platforms or clean pallets and labels are in good condition. We check that spill kits are accessible near liquid transfer areas. We check if bulk liquids are protected with secondary containment and that all accessories (hoses, valves, etc.) are in good condition and within containment area. We check that all outdoor refuse containers and dumpsters are always covered. We keep all inspection records in the DPW office.

3. Inventory List List all materials and machinery that are potentially exposed to stormwater. Materials Machinery/Equipment Pickup Trucks Sand Crushed Stone Clay Winter mix

4. Discharge of Stormwater from Secondary Containment

Describe the process in place for discharging stormwater from secondary containment areas where outdoor containers are stored.

Non-applicable. No material stored outside of the garage is held within secondary containment.

5. Fueling Operations

Does fueling occur on site? If so, describe the BMPs in place to minimize contamination of stormwater from fueling activities. If not, explain where fueling takes place.

Yes, fueling occurs on site. The maintenance yard has one (1) 2,000-gallon gasoline and one (1) 2,000-gallon diesel double walled aboveground fuel storage tank. All fueling operations are performed in accordance with the Best Management Practices. Drip pans are placed under hoses and pipe connections, inlets are block, and safety operations are posted during bulk fuel transfer. Equipment is immediately replaced or repaired when leaking or disrepair is discovered.

6. Vehicle/Equipment Maintenance and Repair

Do you perform maintenance and repair on site? Is this conducted indoors or outdoors? If outdoors, describe the BMPs in place to minimize contamination of stormwater from maintenance and repair activities.

All maintenance is performed inside. However, any maintenance or repairs that are performed outdoors include the use of tarps and drip pans to collect motor vehicle fluids.

7. Wash Wastewater Containment

Do you wash vehicles on site? If so, describe the BMPs in place to minimize contamination of stormwater from these activities. Note that on site containment structures require annual inspections by a NJ licensed professional engineer. If not, explain where vehicle washing takes place.

All DPW pickup trucks are washed off site at a private facility. All equipment and vehicle washing performed on site are hosed down only. Equipment and vehicle washing is performed in accordance with the Best Management Practices.

8. Salt and Other Granular De-icing Materials

Do you store salt and other granular deicing materials on site? If so, describe how they are stored and the BMPs in place to minimize contamination of stormwater from these materials. If not, explain where these materials are stored.

The Township is in the process of installing a salt storage shed (to be complete by the upcoming Winter season). The Township does not store any brine or liquid calcium.

9. Aggregate Material, Wood Chips, and Finished Leaf Compost

Do you store these materials on site? If so, describe how they are stored and the BMPs in place to minimize contamination of stormwater from these materials. If not, explain where these materials are stored.

All aggregate material, wood chips, and leaf compost are stored in block bins. These containers are stored outside with more than a 50-foot setback from any stormwater inlet and outside of any regulated area (including but not limited to coastal areas, wetlands, and floodplains) in accordance with the Best Management Practices. Wood Chips and leaf compost are brought directly hauled off for proper disposal weekly in accordance with Best Management Practices.

10. Cold Patch Asphalt

Do you store these materials on site? If so, describe how they are stored and the BMPs in place to minimize contamination of stormwater from these materials. If not, explain where these materials are stored.

The Township does store cold patch asphalt (bulk) in a concrete bin that is tarped.

11. Street Sweepings and Storm Sewer Cleanout Materials

Do you store these materials on site? If so, describe how they are stored and the BMPs in place to minimize contamination of stormwater from these materials. If not, explain where these materials are stored.

All street sweeping, catch basin clean out, and other material are stored in a 30-yard roll off container and hauled off for proper disposal weekly in accordance with Best Management Practices.

12. Construction and Demolition Waste, Wood Waste, and Yard Trimmings

Do you store these materials on site? If so, describe how they are stored and the BMPs in place to minimize contamination of stormwater from these materials. If not, explain where these materials are stored.

All construction and demolition waste, wood waste and yard trimmings are temporarily stored in 30-yard roll offs and hauled off weekly for proper disposal in accordance with the Best Management Practices.

13. Scrap Tires

Do you store these materials on site? If so, describe how they are stored and the BMPs in place to minimize contamination of stormwater from these materials. If not, explain where these materials are stored.

The Township does store scrap tires in a concrete bin (tarped).

14. Inoperable Vehicles and Equipment

Do you store inoperable vehicles or equipment on site? If so, describe how they are stored and the BMPs in place to minimize contamination of stormwater. If not, explain where they are stored.

The Township does not store, accept or collect inoperable vehicles.

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Stormwater Permit Compliance

DPW YARD/RECYCLING YARD MONTHLY INSPECTION RECORD

Municipality Name:	Year
The permittee shall inspect the entire site, including site perip	hery, monthly (under 30th day and set conditions when possible) and identify conditions that would contribute to stormwater contamination, illicit discharges or negative
impacts to the municipalities MS4.	

Inspection Criteria	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Notes/Corrective Actions
Uncontaminated stormwater discharge 1 from fuel/chemical storage secondary containment													
2 Fueling Operations													
3 Vehicle/Equipment Maintenance and Repair													
4 Vehicle-wash wastewater containment													
5 Salt and Other Granular De-icing Materials													
6 Aggregate Material/Wood Chips/Finished Leaf Compost													
7 Cold Patch Asphalt													
8 Street Sweepings and Storm Sewer Cleanout Materials													
9 Construction and Demolition Waste/Wood Waste/Yard													
10 Scrap tires													
11 Inoperable Vehicles and Equipment													
12 Other Non Compliance with MS-4 Permit													
13 Inspector's Initials													
14 Date													
15 Time													

Form 10 - Training

Part IV.F.6-10.

Stormwater Program Coordinators

Describe the training provided for the municipal Stormwater Program Coordinator.

The Stormwater Program Coordinator (SPC) for the Township of Verona attends NJDEP training every permit cycle. Training covers the SPC responsibilities, permit conditions, annual reporting, and required submissions and documentation.

Topic	Municipal Employees
· F	Examples: in-person or virtual group sessions, e-Learning, field trainings, and videos
	Describe the training provided for municipal staff.
SPPP	Township of Verona trains staff whose job duties support the stormwater program. Training on the site-specific details in the SPPP, review MS4 permit requirements, and record-keeping is conducted annually via combined in-person/virtual training. This and all these training modules listed below are also recorded and made available for informational purposes for staff to re-review certain material presented, and for any absent or new staff, or staff that takes on new responsibilities prior to the next training session.
Construction Site Stormwater Runoff	Staff responsible for inspections of construction projects that disturb one acre of soil or more, are trained annually on relates MS4 permit conditions. Property owners must obtain a 5G3 permit from NJDEP prior to commencement of construction activities and must comply with their approved soil erosion and sediment plan.
Post-Construction Stormwater Management in New and Redevelopment	Staff responsible for implementing stormwater permit requirements receive an annual review of the fundamentals of the municipality's post-construction stormwater management program to address stormwater runoff. Training explains the municipality's definition of major development and the interconnection among the Stormwater Management rules at N.J.A.C. 7:8, the Township of Verona SCO, stormwater permit conditions, the Department's BMP Manual, and Guidance Documents.
Community-wide Ordinances	Staff responsible for implementing and/or enforcing stormwater-related ordinances receive annual training on related MS4 permit conditions and to review the purpose of each ordinance and what steps to take if violations are reported.

Community-wide Measures	Staff responsible for conducting activities associated with community-wide stormwater management measures attend annual training to discuss the MS4 permit requirements and Township specific measures employed to comply with the street sweeping, storm drain inlets (labeling, retrofitting, and installations), herbicide application, de-icing operations, roadside vegetative waste, and roadside erosion control requirements. Information is also presented regarding current best management practices, safety equipment and procedures, frequency of activities, and proper documentation of work
Stormwater Facilities Maintenance	Staff responsible for conducting activities associated with inspections, maintenance and repair of stormwater infrastructure attend annual training on the MS4 related permit requirements. This training details what infrastructure is to be maintained according to approved manufacturer's maintenance plans, versus the remaining infrastructure that is to be maintained according to the NJDEP's BMP Manual. Training also includes requirements for current BMPs, safety equipment and procedures, frequency of activities, and proper documentation of work.
	All types of stormwater infrastructure in the Township are addressed in the training, which includes but is not limited to storm drain inlets, catch basins, piped and open swale MS4 conveyances, stormwater infiltration basins, and manufactured treatment devices.
Municipal Maintenance Yards and Other Ancillary Operations	Staff responsible for conducting activities associated with our municipal maintenance yard attend annual training to discuss MS4 permit conditions, current best management practices, safety equipment and procedures, frequency of activities, and proper documentation of work.
MS4 Mapping	Boswell Engineering who prepared and submit our electronic mapping of stormwater infrastructure attend annual training to review the MS4 permit requirements for electronic mapping.
Outfall Stream Scouring	Staff responsible for conducting inspections and repairs of stormwater outfalls attend annual training to discuss how to identify, remediate, and document cases of stream scouring as described in the MS4 permit. Training also includes current best management practices, safety equipment and procedures, frequency of activities, and proper documentation of work.
Illicit Discharge Detection and Elimination	Staff responsible for conducting inspections and repairs of stormwater outfalls attend annual training to discuss how to identify, remediate, and document cases of illicit discharge as described in the MS4 permit. Training also includes the current best management practices, safety

equipment and procedures, frequency of activities, and proper documentation of work.

Stormwater Management Design Reviewers

Describe the training provided for individuals responsible for reviews and approvals of stormwater management designs.

Individuals who review and approve stormwater management designs for major developments on behalf of the municipality are required under the MS4 permit to attend the mandatory NJDEP Stormwater Management Design Review course at least once every 5 years. They are required by the MS4 permit to also attend mandatory NJDEP training on amendments to the stormwater management rules at N.J.A.C. 7:8.

Municipal Board and Governing Body Members

Describe the training provided for members of the planning/zoning board and municipal council.

Within 6 months of joining Township council or the planning or zoning board, each member is required under the MS4 permit to watch the NJDEP video tilted, Asking the Right Questions in Stormwater Review https://nj.gov/dep/stormwater/asking the right questions.html.

Each term thereafter, members are required to watch another NJDEP video from the choices provided on the stormwater training webpage:

Stormwater Management Rules Applicability http://nj.gov/dep/stormwater/training.htm

Stormwater Management Rules Planning http://nj.gov/dep/stormwater/training.htm

Stormwater Management Rules Design & Performance http://nj.gov/dep/stormwater/training.htm

Stormwater Management Rules Safety http://nj.gov/dep/stormwater/training.htm

Stormwater Management Through General Permit for MS4s http://nj.gov/dep/stormwater/training.htm

Training Records

Indicate the location of training records for the above required training.

Logs of all training including the type of training, date conducted, attendees and trainers are kept in the DPW office.

×	Ti	ier A Stormwater	Training	
	Trainer:	X		
	Location:			N
	Class Name:			5
	Trainer:			
Name		Date Completed		Signature
0.1				
8				
Additional Notes/Topics	Covered:			
Additional Notes/Topics	covered.			
2				
	5			
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1		*		

Form 11 – MS4 Mapping

Part IV.G.1.

1. Provide a link to the most current MS4 outfall/infrastructure map.				
https://www.veronanj.org/stormwater				
2. Indicate the total of each type of MS4 infrastructure listed below (due 01 Jan 2026).				
a. MS4 outfalls	TBD			
b. MS4 ground water discharge points (basins or overland	TBD			
flow infiltration areas)				
c. MS4 interconnections	TBD			
d. MS4 storm drain inlets	TBD			
e. MS4 manholes	TBD			
f. Length of conveyance (channels, pipes, ditches, etc.)	TBD			
g. MS4 pump stations	TBD			
h. MS4 stormwater facilities (any that are not listed above)	TBD			
i. Maintenance yard(s) and other ancillary operations	TBD			
3. Describe how the municipality's outfall/infrastructure map is reviewed and updated to				

DPW staff coordinate with the Township Engineer to discuss any new major development projects happening around the Township throughout the year. All infrastructure being built for those projects are then mapped, and the corresponding data is submitted to our MS4 Case Manager.

basin is constructed, ownership of an outfall has changed, etc.).

reflect any new or newly identified MS4 infrastructure (e.g., an outfall is closed, a new

4. Describe how the municipality will create and update its MS4 Infrastructure Map.

We plan to continue working to complete the MS4 Infrastructure Map. Our staff will work to locate and map all stormwater infrastructure around the Township until all infrastructure is mapped. Data will be converted into Shape files and submitted to our MS4 Case Manager before the mapping deadline of 01 Jan 2026.

Form 12 – Watershed Improvement Plan *Part IV.H.*

1. Describe how your municipality is developing its Watershed Improvement Plan.

The Township of Verona is gathering data to meet the requirements for the phase 1, Watershed Inventory Report, which is due and will be posted on our stormwater webpage by 01/01/2026

We have been expanding on our stormwater infrastructure map to include these requirements. We have included the Township of Verona Environmental Commission and other stakeholders in our discussions to identify opportunities for public participation and education sessions.

2. Describe any regional projects or collaboration efforts with other municipalities.

The Township does not collaborate with any other municipalities.

3. Indicate the location of records related to all public information sessions and meetings for discussions of the Watershed Improvement Plan.

Logs of all comments received during public information sessions and minutes from meetings will be kept in the municipal clerk's office.