

2020 MS4 Summit: Documentation!

Emily Jennings, PE



Survey Results



How does your City/Township conduct its annual MS4 meeting?

Responses (2):

Board Meeting/Council Meeting



How does your City/Township notify the public regarding annual MS4 meetings?

Responses (2):

Public Notice in Local Newspaper



Where are MS4 education materials that are specific to your City/Township available for the public?

Responses (2):

- Brochures at City/Town Hall and City/Town Website
- City/Town Website



Does your MS4 use shared materials or do you develop your own? Which of these do you use most often?

Responses (2):

- Shared materials most often
- Both Use watershed organization materials about 70% of the time



If using shared resources, where are these materials available for the public?

Responses (1):

 Hand-outs from meetings, published content from newspapers or on websites



Who at your City/Township is responsible for MS4 permitting?

Responses (2):

- Clerk/Treasurer
- Engineering Department, Building Department, and Public Works Department



How would you describe your MS4 activities in context of non-MS4 City/Township workflow? Do these tasks balance and blend with each other, or is work flow difficult and sporadic? What would you like to change in this process?

Responses (2):

- Difficult and sporadic. More resources...
- Currently our sewer department inspects and maintains stormwater infrastructure when they have time. Additional stormwater funding and staff would help us to better meet our maintenance requirements. Inspection reporting and communication between departments could be improved.



What is one MS4 area that your City/Township has both: 1) Practical feasibility for improvements 2) Interest and understanding among staff?

Responses (1):

Maintenance of existing structures



What is one MS4 area that your City/Township needs a better understanding of?

Responses (2):

- TMDL Requirements
- TMDL Requirements in the draft MS4 Permit



Survey +

- Public outreach is collaborative
- Public participation is fairly uniform
- Responsibility is wide-spread and this causes difficulties
- There is room for improvement
- Continued education and additional resources would be helpful



Responsibility is Wide-spread and this Causes Difficulties

- Written Procedures
- Documentation
- Focus on MCM 3 6
 - MCM 3: Illicit Discharge Detection and Elimination
 - MCM 4: Construction Site Stormwater Runoff Control
 - MCM 5: Post-Construction Stormwater Management
 - MCM 6: Pollution Prevention/Good Housekeeping For Municipal Operations



Permit Requirements



MCM 3 - Illicit Discharge Detection and Elimination (Draft Permit)

- Ordinance
- ERPs
- Mapping of MS4 (outfalls, BMPs) and Inventory of Priority Areas
- Training Program
- Regular and Priority Areas Inspections
- Spill Response Procedures
- Documentation



MCM 4 - Construction Site Stormwater Runoff Control (Draft Permit)

- Ordinance
- ERPs
- Mapping or Inventory of Active Construction Sites
- Site Plan Reviews
- Regular and Noncompliance Inspections
- Training
- Documentation



MCM 5 - Post-Construction Stormwater Management (Draft Permit)

- Ordinance
- ERPs
- Mapping or Inventory of BMPs not owned by MS4
- Site Plan Reviews
- Training
- Documentation



MCM 6 - Pollution Prevention/Good Housekeeping For Municipal Operations (Draft Permit)

- Mapping or Inventory of Facilities
- Structural and Non-Structural BMPs for Municipal Operations
- Pond Effectiveness Procedures
- Regular Inspections and Maintenance
- Training
- Documentation





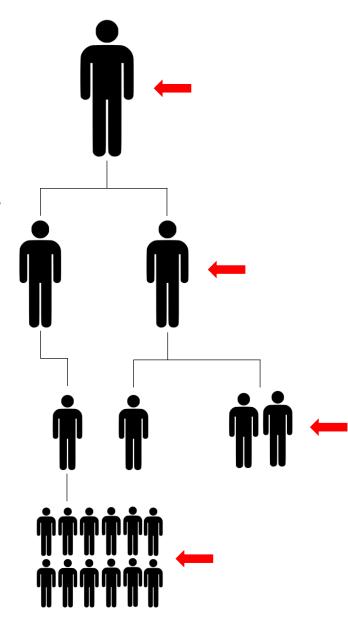


Making It Happen



Understand Workflow

- Illicit Discharge Example, Item 18.11
- The permittee must implement written procedures for investigating, locating, and eliminating the source of illicit discharges. At a minimum, the written procedures must include:
 - a timeframe in which the permittee will investigate a reported illicit discharge;
 - use of visual inspections to detect and track the source of an illicit discharge;
 - tools available to the permittee to investigate and locate an illicit discharge (e.g., mobile cameras, collecting and analyzing water samples, smoke testing, dye testing, etc.);
 - name or position title of responsible person(s) for investigating, locating, and eliminating an illicit discharge.



Understand Workflow

MCM 3: BMP SUMMARY SHEET

Identification of Priority Areas MS4 Permit Section III.D.3.f

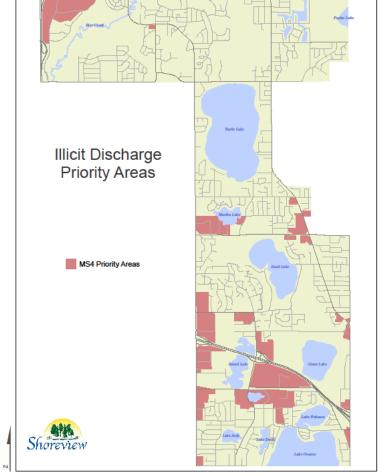
BMP: Identification of Priority Areas

Responsible Person(s): Working Street Foreman

BMP Description: The City of Proctor identifies priority areas likely to have illicit discharges to reduce or eliminate the chance of illicit discharge within the City's MS4.

The City shall pay particularly close attention to these areas when detecting and eliminating illicit discharges and illicit connections through inspections and day to day operations within the City's MS4.

BMP Activity Log								
Priority Area	Land Use	Address	Past Dis	charge				
Priority Area	Lanu Ose	Address	Yes	No				
CN Railroad	Rail yard	2430 Railroad Avenue		\boxtimes				
	•	*	•					

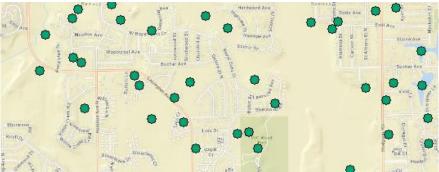






Understand Workflow







Gem Lake Construction Site Storm Water Inspection Report

Date:							
Time:							
Project Name:							
Inspector(s):							
Email(s): Phone:							
Location:							
Permitee:							
Weather Conditions: (check all that apply)							
☐ Clear Skies ☐ Sunny ☐ Cloudy ☐ Rain ☐ Snow ☐ Windy Temperature:							
Last Precipitation Date Amount:							
Types of Inspection: (check all that apply)							
□ Routine □ After Rainfall □ Complaint □ Violation Follow-Up □ Final							
Maintenance							

	Implemented?			Maintenance Required?		
Erosion & Sediment Control BMPs	Yes	No	N/A	Yes	No	Notes:
Stabilization of slopes and disturbed areas not actively being worked						
Protection of natural resources areas (e.g. streams, wetlands)						
Perimeter controls adequately installed and maintained						
Discharge points and receiving waters free of sediment	0	0	0	0		
Protection of storm drain inlets				0		
Construction entrance/exit to minimize sediment tracking				0		
Trashflitter from work areas collected and placed in covered dumpster						
Washout facilities clearly marked and maintained	0			0		
Vehicle fueling and maintenance areas clearly marked and maintained				0		
Potential storm water contaminants are stored inside or under cover	0			0		
Portable toilets are secure	0	0	0	0	0	
Non-storm water discharges (e.g. dewatering) are properly controlled						
Copy of SWPPP present on site						
Amendments made to the SWPPP				0		
Other:				0		
Other:						
Enforcement Actions						
Corrective Actions Taken? Yes No						
If Yes: Verbal Warning Written Warning Stop W	/ork Orde	r 🗖 Ot	her:			•

See Attached Photos and description for violation and correction action.

If you feel any information on this report is inaccurate, please respond to the Inspector listed above.



Working with Contractors

>/= 1 Acre

- State and Local Requirements
- Site Plan Reviews
- CSW Permittee must inspection once every 7 days and following rainfall event >/= 0.5 in as required by State permit
- MS4 Permittee must inspect at an appropriate frequency to determine compliance with ordinance or other regulatory mechanism
- Documentation

< 1 Acre

- Local Requirements
- Site Plan Reviews
- Permittee must inspect based on local requirements
- MS4 Permittee must inspect at an appropriate frequency to determine compliance with ordinance or other regulatory mechanism
- Documentation



Working with Contractors

- Stormwater Pollution Prevention Plans (SWPPP)
- Templates developed for state requirements
- Example CSW Permit Item 9.17
 - Permittees must preserve a 50 foot natural buffer or, if a buffer is infeasible on the site, provide redundant (double) perimeter sediment controls when a surface water is located within 50 feet of the project's earth disturbances and stormwater flows to the surface water

VLAWMO Buffer Rules

Management Class	Base Buffer Width (ft)	Minimum Applied Buffer Width (ft)
Manage 3: Storm Ponds	20	16
Manage 2	30	24
Manage 1	40	34
Preserve	75	67



- Paper Trails
- Point of Contact
- Early Collaboration
- Common Goal



Consistency

- Checklists
- Draft Permit

											ite Plan Review ecklist: Version B Projects ≥ 1 Acre
								1.1 Project/Site Information			
								Permit No:			
					2.1 Sto	rmwater Po	llution (ontrol Plan Content			
					Inc	orporated		Cor	itent		Ī
					Yes	No N/	A	COI	itelit		
				ſ			Has	the Stormwater Pollution Control Plan b			omplete
	3.1 Co	nstruct	ion Site	Stormwater Runoff (Controls				tting an Excavation/Fill Permit App	olication	icomplete
ļ		orpora				Content			tivities.	ot applicable	
	Yes	No	N/A						clude the items required and ident	от аррисавие	
						ution Control Plan incorporated appropriate erosion prevention			ıcluding at a minimum: /ities		
			l	practices to elimina	te or rec	reduce erosion and protect waters of the state? Addressing at a			: Responsibility		
rements						. Doubling (BMDs) to contest waters of the state			Responsibility	06 2020	
	Content	. –				: Practices (BMPs) to protect waters of the state designated not to be disturbed are to be clearly marked			res	e of Owner Notification	
								have been addressed	ements been incorporated into the	e	
				ment? (Post construc	tion ,			ilized within set timeframe	uments? Including at a minimum:	-	
				one (1) or more acre(s	i) of ,			time frames, if applicable			-
tion act	ivity or	redeve	opmen	projects of one or m				e channels, if applicable			-
						nt drainage	ditches o	r swales, if applicable			-
				dered and been given n, and PUD	a	ately address	ed				
				e/harvesting, green ro				directed to vegetated areas			e of Owner Notification
vapoura	nspirat	ion, wa	erreus	e/narvesung, green re		on Control Plan incorporated appropriate sediment control					e of Owner Notification
and re	tricted	areas a	slisted	n Construction		nent and other pollutants from entering surface waters,			within one (1) mile		
red?		0.000		iii construction	l e	ems? Addressing at a minimum:					
	rates match or are reduced from pre-development				-						
	100-year, 24 hour storm events at each discharge point				iles						
,	,				1	ies					
ed and	address	ed?				nt basins					l
nd appr	priate	modeli	ng been	completed to show		tion and preserve topsoil			clude stormwater pollution preven		e of Owner Notification
r quality	and vo	olume c	ontrol r	equirements?		if applicable			or other required reviews?	ition	
n criteri	been :	used in	the des	gn and analysis of	п	nts, if applicable			Idress karst areas, if applicable?		1
nveyance systems?						tion Control Plan properly address dewatering and basin				-	
een completed?]			Idress impaired waters and TMDLs	ir.	-
						ion Control	Plan prop	erly address the use of temporary	es putriants and is past of the Rum	Divor	
				discharge points of th					ss nutrients and is part of the Rum	RIVE	
ot excee	ot exceed the predevelopment rate to the west.					tion Control Plan include incorporate pollution prevention					
tration BMP					reduce the probability of spills, leaks, and discharges of					_	
tration	DIVIP					minimum:		lan landa adlianata			
								Il to leach pollutants izers, treatment chemicals, and			
							ues, ierti	izers, creatment themicals, and			
	landscaping materials □ □ • Hazardous materials and toxic waste • Solid waste										
					Jive textite						
				 Portable to 	ilets						
				 Fuel and ch 	nemical	loading and	unloadin	g operations			
				 Vehicle and 	dequipn	ment washin	g				
			 Engine degreasing is not allowed 								
ļ					nd other washout operations, including signage				_		
ļ			×					de appropriate final stabilization?	_		
	×				er Pollut	ion Control	Plan ade	uately require site inspections and BMP			
- 1				maintenance?					4		
									1		
	Notes							nt controls when a 50 foot buffer is not			

4.1 Post-Construction Stormwater Management Requirements Incorporated Yes No N/A 5.1 Special or Impaired Waters Incorporated Does the site drain to the following special or Additional BMPs required for Yes No N/A impaired waters? special and impaired waters? Prohibited Special Waters 23.9. 23.10. 23.11. 23.13 and 23.14 23.9, 23.10 and 23.11 Impaired Water w/o TMDL or w/ TMDL and no WLA 29.9 and 29.10 \boxtimes Impaired Water w/ TMDL and WLA 29.9 and 29.10 Redundant BMPs (See Permit \boxtimes Wetland Yes No N/A If yes, have the additional BMP requirements been met? Permittees must immediately initiate stabilization of exposed soil areas, as described in item 8.4, and complete the stabilization within seven (7) \boxtimes 23.9 calendar days after the construction activity in that portion of the site temporarily or permanently ceases. [Minn. R. 7090] Permittees must provide a temporary sediment basin as described in Section 14 for common drainage locations that serve an area with five (5) or more \boxtimes acres disturbed at one time. [Minn. R. 7090] Permittees must include an undisturbed buffer zone of not less than 100. linear feet from a special water (not including tributaries) and must maintain this buffer zone at all times, both during construction and as a permanent feature post construction, except where a water crossing or other iltration B encroachment is necessary to complete the project. Permittees must fully document the circumstance and reasons the buffer encroachment is necessary in the SWPPP and include restoration activities. This permit allows replacement of existing impervious surface within the buffer. Permittees must minimize all potential water quality, scenic and other environmental impacts of these exceptions by the use of additional or redundant (double) BMPs and must document this in the SWPPP for the project. [Minn. R. 7090] Permittees must conduct routine site inspections once every three (3) days 23.13 as described in item 11.2 for projects that discharge to prohibited waters. If discharges to prohibited waters cannot provide volume reduction equal to one (1) inch times the net increase of impervious surfaces as required in item 15.4 and 15.5, permittees must develop a permanent stormwater \boxtimes treatment system design that will result in no net increase of TSS or phosphorus to the prohibited water. Permittees must keep the plan in the Redundant BMPs at a minimum for discharge to wetland areas. If there are wetland impacts associated with this project, they shall be permitted under \boxtimes \boxtimes Wetlands WCA, DNR, US Army Corps Compliance with MN Rule 7050.0186 is documented and approved by MPCA Include information on if a wetland delineation has been conducted. See comments above on receiving waters

Have a Common Location

- Compliance Guide
- Electronic Folder
- Filing Cabinet



Putting the Pieces Together

- Annual Assessment (Self-Audit)
- Annual Report
- Annual Training
- Collaboration!



Questions?

ejennings@sehinc.com

651-302-7669

