

What to expect today

- Walk through with examples
- Ask questions
- Understand the process and next steps



MIWATERS

- HAVE YOU CREATED YOUR
 ACCOUNT?
- ACCOUNT USERS
- HAVE YOU SUBMITTED YOUR
 CERTIFIER AGREEMENT FORM?
- WHERE DO I LOCATE THE APPLICATION?



THE APPLICATION





- ALL ONLINE
- ATTACHMENT AND REFERENCE STYLE QUESTIONS
- ***REQUIRED QUESTIONS***

MS4 Individual Permits

Considers permittee type and complexity of the MS4

Builds on existing efforts/activities

Alternatives approved at time of application

Application aligns with audit process

Reissuance Timing

FY18 Basin Year Cycle

October 2016	Application notice letters mailed
April 3, 2017	Application due in MiWaters
After April 2017	Application reviewed and approved Permit issued

Application Format

Application produces a SWMP

- √ 6 minimum control measures
- ✓ Water quality requirements

Complete Application = SWMP



Application Format

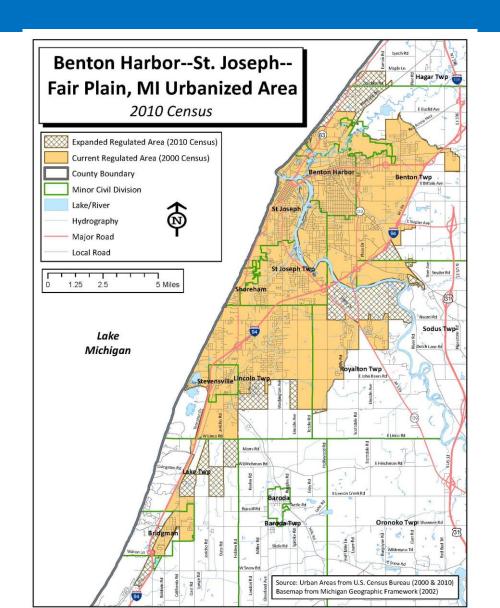
Minimum Control Measures

- Public Participation/Involvement Program
- Public Education Program
- Illicit Discharge Elimination Program
- Construction Stormwater Runoff Control Program
- Post-Construction Stormwater Runoff Program
- Pollution Prevention and Good Housekeeping Program

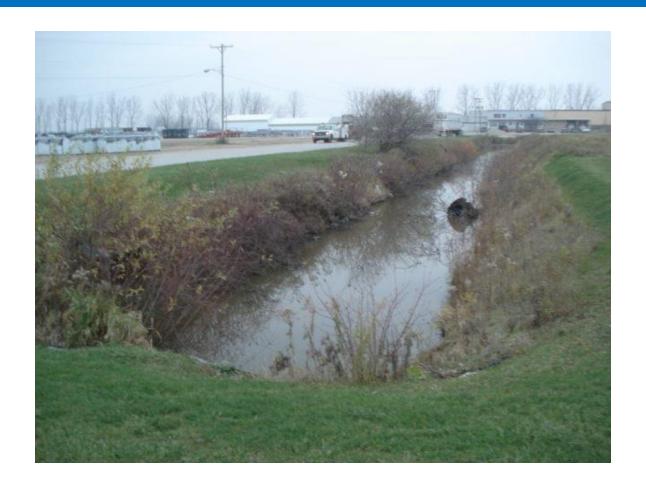
Water Quality Requirements

Total Maximum Daily Load Implementation Plan

Regulated Area



Scope of the MS4 Permit



MS4 or surface water of the state?

MS4

System designed or used to collect or convey stormwater

Enclosed pipes, road side ditches, swales, roads, and parking lots

Structural controls



Surface Waters of the State

Lakes, rivers, streams, wetlands, and open drains

Not a system constructed solely to convey stormwater



Outfalls and Points of Discharge

Outfall
Discharge from an MS4
directly to surface waters

Point of Discharge
Discharge from an MS4 to
another MS4



Nested Jurisdictions

Nested Jurisdictions: Permit holder assumes responsibility for permit requirements

Answer application requirements to include nested MS4





Stormwater Management Program

Structural and nonstructural BMPs to be implemented during the permit cycle

Designed to reduce the discharge of pollutants to the maximum extent practicable (MEP)



Collaborative Efforts

Option to collaborate:

- PPP
- PEP
- IDEP
- Construction Storm Water
- TMDL Implementation Plan



SAW grant funding supports collaborative efforts

Options Available

Option to prioritize:

- PEP
- IDEP
- Pollution Prevention & Good Housekeeping

Alternative options included:

- IDEP
- Post-Construction



Measurable Goals

Include a measurable goal for each BMP

- Schedule for implementation (months and years)
- Interim milestones



Frequency of the BMP

Measurable Goals

Measure of Assessment

May use the same assessment to measure several BMPs





Measurable Goals

Measure success of the BMP at reducing pollutants to the MEP?

- ✓ Changes in behavior
- ✓ Track number of BMPs
- ✓ Documented water quality improvements

EPA guidance document

"Measurable Goals Guidance for Phase II Small MS4s"

What is a Procedure?



Referenced Information

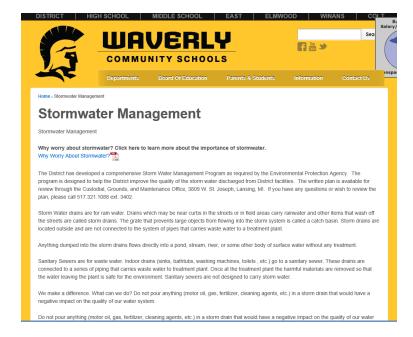
MiWaters continues to allow:

- Referenced information in any format
- Prompts applicant to include a specific reference within the procedure/ordinance/regulatory mechanism

Public Participation/Involvement Program

Procedure: Make SWMP available for public inspection and comment





Public Participation/Involvement Program

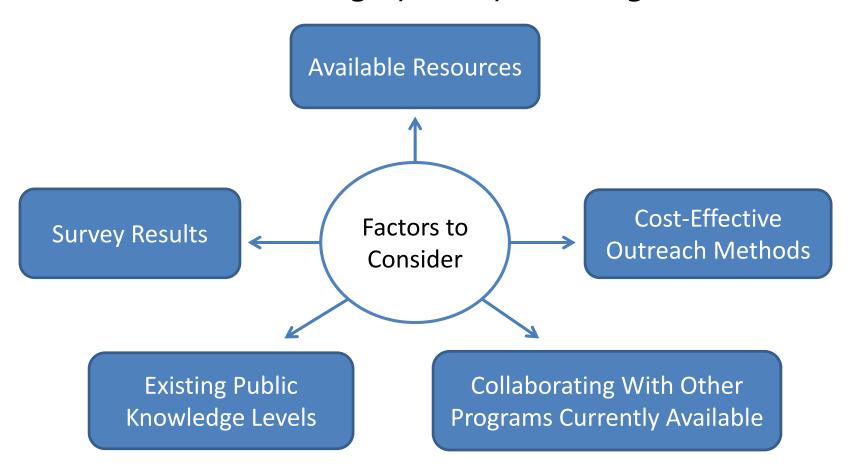
Procedure: Invite the public to participate in the implementation and review of the SWMP

- ✓ Website
- ✓ Meetings
- ✓ Watershed Groups



Public Education Program

Assessment of high priority and targeted issues



Public Education Program

- 10 topics
- Some topics not applicable for permittee type
- Option to prioritize: high, medium or low



Public Education Program

Procedure for evaluating and determining effectiveness

- Method for assessing changes in public awareness/behavior
- Process for modifying the PEP to address ineffective implementation





Enforcement Response Procedure

Procedure: Expected response to violations to compel compliance with IDEP and Post-Construction ordinances or regulatory mechanisms

- ✓ Written notices
- ✓ Citations
- ✓ Fines



Enforcement Response Procedure

Describe a method for tracking the following information:

- ✓ Name of the person/entity responsible for violation
- ✓ Date of violation
- ✓ Location of violation
- ✓ Description of the violation
- ✓ Description of the enforcement response used
- ✓ Schedule for returning to compliance
- Date violation was resolved



What is an illicit discharge?
Who can cause or contribute to one?







Location of up-to-date storm sewer map

- ✓ Do not submit
- ✓ Could be many maps



Dry-Weather Screening Options:

- 1. Screen all outfalls and points of discharge
- 2. Prioritize screening in areas with high illicit discharge potential
- 3. Alternative

Opportunity to collaborate on all options

Prioritization Criteria	Key Characteristics to Consider for Prioritization
Poor Dry Weather Water Quality	Areas where TMDLs have been developed to address pollutants that could originate from illicit discharges or where the available data shows dry-weather water quality criteria are exceeded two or more times in a year are high priorities.
Density of Aging On-Site Disposal Systems (OSDS)	Older septic systems that have exceeded their design life may have failure rates of 25 to 30 percent or more. Areas where the OSDS designs would not be permitted today because of poor soils or small lot sizes, but where older OSDS are still in operation, have a high illicit discharge potential.
Aging or Failing Sewer Infrastructure	Areas where sewer age exceeds its design life; and where clusters of pipe breaks, spills, overflows, or infiltration and inflow are known problems should be given a high priority.
Discharge Complaints and Reports	Any MS4s owned or operated by the permittee with a history of discharge complaints should be given a high priority.
Age and Density of Industrial Operations	Older industrial operations often have floor drains, waste handling areas, gray water, and sanitary facilities connected to storm sewers. Industrial areas also commonly have storm water pollutants related to poor housekeeping practices, so a higher density of industrial operations increases the likelihood of contaminated discharges.
Age of Development	Areas where the average age of the majority of the development exceeds 50 years should be given a higher priority.
Sewer Conversion Areas	Areas where sanitary sewers were added in the last 30 years, and people switched from septic systems, have a high potential for illicit taps of sanitary water to MS4s.
Historic Combined Sewer Systems	Sewer systems that were once combined, but were subsequently separated, have a high illicit discharge potential if oversight of the projects was not documented.
Type of Commercial Activity	Businesses not regulated by industrial storm water permits, especially those that handle liquids, including oils and greases (e.g., auto maintenance, food service, and carpet cleaners) may remain unaware of storm water pollution concerns from improper waste disposal and "hopper juice" from the trash bins and compactors they operate.
Other Potential Pollutant Generating Sites	Conditions unique to the permittee's jurisdiction should be considered.

Excerpted From:

Illicit Discharge Detection
and Elimination:
A Guidance Manual for
Program Development and
Technical Assistance

Up-to-date storm sewer map



Narrative

- 2015 17 Mud Lake Drain outfalls
- 2016 13 Sycamore Creek outfalls and 3 Reynolds Drain outfalls
- 2017 18 Red Cedar River outfalls

Procedure for performing field *observations*

- Submit a field sheet with the observations
- Include a schedule for the permit cycle
 - % of outfalls and points of discharge screened each year
 - Specific areas to be screened



Optional Interagency Agreement

IDEP Compliance Assistance Document available at www.michigan.gov/deqstormwater

Procedure for performing field screenings, include indicator parameters

Procedure for performing source *investigation*



Include a schedule for implementing (e.g., 24 hours or within 2 business days)

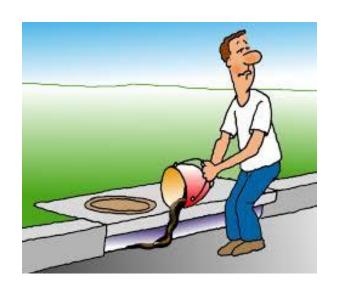


- Procedure for responding to illegal dumping/spills
- If prioritizing, **procedure** for responding to illicit discharges outside of priority areas

Include a schedule:



- ✓ Responding to complaints
- ✓ Performing field observations and follow-up field screening and source investigations



Procedure for reporting a release of polluting materials from the MS4 to surface/groundwaters of the State

Do you store polluting materials above the Part 5 threshold management quantities?

Salt 5 tons 1000 gallons Oil 1320 gallons in AST

Immediately report spills above threshold reporting quantities:

Salt 50 pounds 50 gallons Oil – Any quantity that causes unnatural turbidity, color, visible sheens, oil films, foams, solids, or deposits in the receiving waterbody

Equivalent Alternative Approaches

- Option to propose an alternative approach
- Demonstrate how the approach provides an equivalent or greater level of protection as the dryweather screening application requirements

Procedure for responding to illicit discharges when source identified

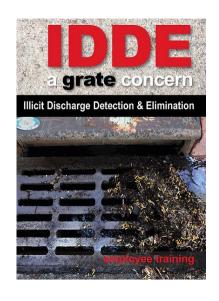
- ✓ Specify expected corrective action
- ✓ Include a schedule to eliminate the illicit discharge and pursue enforcement actions
- ✓ Address illegal spills/dumping

Consider a schedule of 30 days to eliminate *most* illicit discharges

IDEP training program

Staff: Part of their normal job responsibilities may come into contact with an illicit discharge

Schedule: Once during the permit cycle and new hires within first year of hire





Procedure for evaluating and determining effectiveness

- ✓ Prioritization process
- ✓ Different detection methods
- ✓ Different enforcement methods
- ✓ Program efficiency

Include a schedule for evaluating (e.g., annual review)



In effect ordinance or regulatory mechanism

- ✓ Prohibits non-stormwater discharges
- ✓ Regulates the contribution of pollutants
- ✓ Prohibits illicit discharges, illicit connections, and direct dumping/disposal
- ✓ Establishes authority to inspect, investigate, and monitor suspected discharges
- ✓ Requires and enforces the elimination of illicit discharges

Ordinance or Regulatory Mechanism?

	Oramanee or regu	/
	Cities and villages	Primary Legal Authority: Ordinance
>	Townships with a more complex MS4 (e.g., a township that owns or operates roads)	Secondary Legal Authority: Policies and procedures for staff to implement IDEP activities
>	County agencies	Primary Legal Authority: Regulatory Mechanism
>	Townships with a regulated MS4 limited to township-owned property	
>	Public institutions (e.g., school systems and universities)	

Non-stormwater discharges that do not need to be prohibited (Application Requirements #21-22)

Firefighting Activities

Not a significant contributor of pollutants to surface waters

Other Non-Stormwater

<u>Discharges or Flows</u>

Not a significant contributor to violations of WQS



Questions focus on identifying existing efforts under other qualifying local programs

Are you a Part 91 agency?

- County Enforcing Agency
- Municipal Enforcing Agency
- Authorized Public Agency
- Rely on another Part 91 Agency

Procedure: Notifying the Part 91 agency or appropriate staff when soil and sediment is discharged to the MS4 from a construction activity

- Complaints
- Notification requirements
- Internal and/or external process





Procedure: Notify the DEQ when soil, sediment, or other pollutants are discharged to the MS₄ from a construction activity



Applicant determines when and under what circumstances the DEQ will be contacted

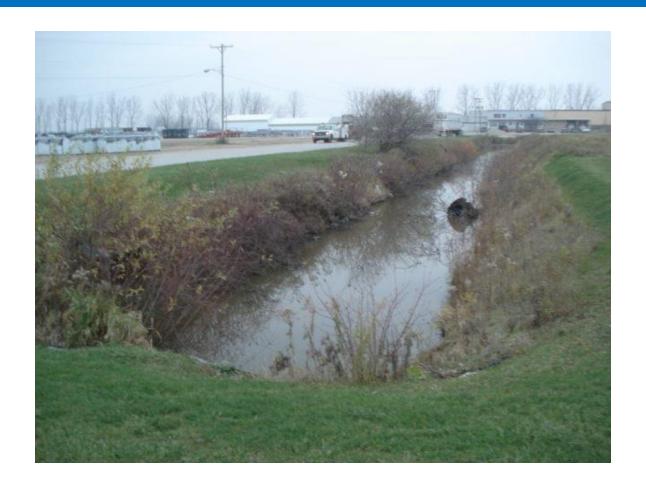


Procedure: Construction activity ≥ 1 acre with the potential to discharge to the MS4 obtains a Part 91 permit or is conducted by an approved APA

Procedure: Advise the landowner or recorded easement holder of the State of Michigan Permit by Rule



Scope of the MS4 Permit



MS4 or surface water of the state?

Ordinance or regulatory mechanism to address stormwater runoff from new development and redevelopment projects

- Private, commercial & public projects
- Projects that disturb ≥1 acre projects,
 < 1 acre that are part of a larger
 common plan of development



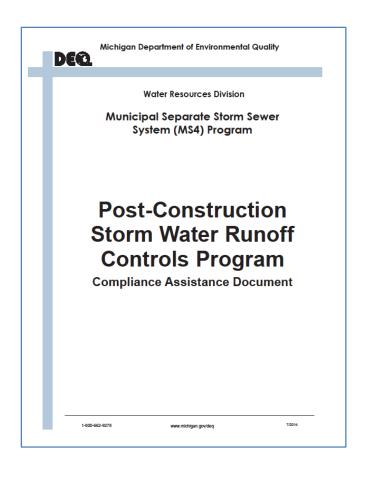


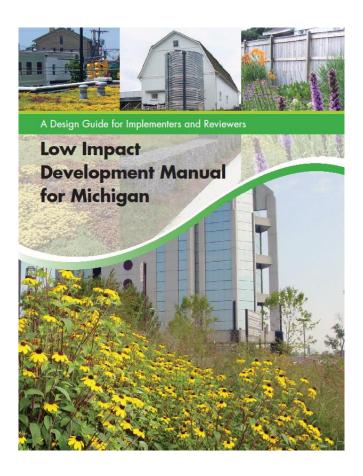
Ordinance or Regulatory Mechanism Due

- October 1, 2017
- Option for compliance schedule to place ordinance into effect (cities and villages)



Available Resources





Ordinance or Regulatory Mechanism?

Likely Scenarios for Applicability of Ordinance and Other Regulatory Mechanisms Other Regulatory					
		Ordinance	Mech Local	anism Internal	
Pe	ermit Applicant Type		Permit Program	Written Policy	
City		+		•	
Village	Village			•	
Township	With private discharges to its regulated MS4	•		•	
	Without private discharges to its regulated MS4			•	
County Road Commission			Both		
County Dr	ain Commissioner		Both		
County Ad	ministration		Both		
Public Insti	tution			+	

Format Options

Reference other technical documents

 Submit a combination of ordinances and regulatory mechanisms



Water Quality Treatment Performance Standard



- Treat the first 1" of runoff from the entire project site and/or
- Treat runoff generated from 90% of all runoff-producing storms for the project site

Treatment: BMPs **designed** to reduce total suspended solids loadings by 80% or achieve a discharge concentration not to exceed 80 mg/l





Channel Protection Performance Standard

Post-construction runoff rate and volume of discharges not exceed the pre-development rate and volume for all storms up to the 2-year, 24-hour storm at the

project site

Predevelopment: Last land use prior to the planned new development or redevelopment

Example Linear Projects						
Project	Development or Redevelopment?	Disturbance Area				
New road (which may include new adjacent trails or sidewalks)	Development	Linear area of new road project (including any new adjacent trails or sidewalks)				
New trail or sidewalk (without a change to an existing adjacent road)	Development	Linear area of new trail or sidewalk project				
Re-pave; with re- construction to the subbase layer and a change in drainage	Redevelopment	Linear area of reconstruction plus any new additional impervious surface				
Re-pave; overlay with no milling and no increase in impervious area or removal of surrounding vegetation or mill and overlay to the existing subbase layer with no change in drainage	Neither	Not applicable				
Pave existing gravel shoulders; no additional center-road work	Redevelopment	Linear area of the shoulder paving (center-road excluded)				
Convert raised center island in a boulevard to bioretention (no other changes to boulevard)	Neither. This would be considered a retrofit.	Not applicable				

Options:

- Green infrastructure toolbox
- Extended detention for tight soils
- Off-site and payment in lieu

<u>Utilize: LGROW Green Calculator</u> <u>(to be designed)</u>

- Rain Garden
- Bio-Swales
- · Infiltration trenches
- Pervious Pavement
- Green Roof
- Landscaping
- Transpiration-Tree Selection
- Storage and reuse



Washtenaw County Water Resources Commissioner

Rules and Guidelines

Procedures & Design Criteria
For Stormwater Management Systems

Issued - August 6, 2014

Off-Site Mitigation: Developer implements BMPs at another

location

Payment in Lieu: Developer pays a fee to the applicant

that is applied to a public stormwater

management project

Offsets

- 10 digit HUC
- Within urbanized area
- Offsets constructed with 24 months

Off-site mitigation and payment in lieu to address:

- Redevelopment in ultra-urban areas
- Contaminated sites
- —Tight soils
- Applicant establishes criteria for determining the availability of these options
- Offset ratio required

Above and beyond the application requirements

- Regulate project sites <1 acre
- Direct discharges to surface water

Requires tracking and maintaining in perpetuity





Procedure for reviewing the use of infiltration BMPs in areas of contaminated soil or groundwater (Part 201 and 213 sites)

Describe coordination with DEQ staff





Ordinance or regulatory mechanism requiring BMPs to address the associated pollutants in potential hot spots

- ✓ Commercial vehicle maintenance/repair
- ✓ Gas stations
- ✓ Auto recyclers
- ✓ Scrap yards
- ✓ Public water supply intakes





Ordinance or regulatory mechanism requirement to submit a site plan for review and approval of post-construction BMPs

Procedure for site plan review and approval

 Process for determining how the developer meets the performance standards and ensures long-term O&M

Ordinance or regulatory requirement requiring longterm O&M of all BMPs to meet the performance standards in perpetuity

Ordinance or regulatory mechanism requirement for a maintenance agreement



Maintenance agreement to allow the applicant to:

- ✓ Inspect structural and vegetative BMPs
- ✓ Perform the necessary maintenance
- ✓ Track the transfer of O&M responsibility



Inventory of applicant owned/operated facilities and stormwater structural controls



5 Detention Basins



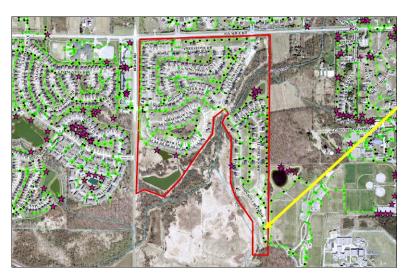
200 Catch Basins



5 Rain Gardens

Location of up-to-date map that identifies each facility and structural control

Procedure for updating and revising the inventory and map (suggested timeframe = 30 days)



Procedure for assessing each facility for the potential to discharge to surface waters

Community Halls



DPW Yards



List of prioritized facilities based on the assessment

- ✓ High, medium or low potential to discharge pollutants
- ✓ Fleet maintenance and storage yards have high potential





Fleet	A group of vehicles owned or operated as a unit
Maintenance	Adding/changing vehicle fluids, fueling, painting, mechanical repairs, vehicle/equipment washing
Storage Yard	Areas where: Vehicles stored longer than overnight/weekend Road maintenance materials stored Vehicle maintenance materials stored Chemicals in bulk stored Catch basin cleaning wastes are stored Maintenance equipment stored

Site-specific SOP for each facility designated with a **high** potential to discharge

- ✓ Retain at the facility
- √ Identify person responsible
- ✓ List significant materials, handling/storage requirements, potential to discharge
- ✓ Identify good housekeeping practices
- ✓ Description/schedule for conducting routine maintenance and inspections
- ✓ Comprehensive site inspection at least once every 6 months

Procedure identifying current or future BMPs to be implemented at *medium and low facilities*

- ✓ Proper salt storage (bagged salt)
- ✓ Garbage
- ✓ Minimal Chemical Storage





Procedure for prioritizing catch basins for inspection, maintenance, and cleaning

 Process for updating/revising priority level based on inspection results and citizen complaints

Narrative description/map of catch basins in each priority level





Procedure for inspecting, cleaning, and maintaining catch basins



Procedure for dewatering, storage and disposal of materials extracted from catch basins

- Combined solid and liquid waste stream from cleaning catch basins is a liquid industrial waste
- Consider referencing the <u>Catch Basin Cleaning</u> <u>Activities Guidance Document</u>

Procedure for inspecting and maintaining other stormwater structural controls

- ✓ Description and schedule for inspecting and maintaining
- ✓ Disposal process for maintenance waste materials
- ✓ Process for updating/revising the procedure

Refer to inventory in application requirement #60



NEW water quantity facilities/structural controls will be designed and implemented in accordance with post-construction performance standards

- Your own flood storage projects
- Simple statement that these projects will meet the standards





Assess applicant's O&M activities for the potential to discharge pollutants and the BMPs being implemented to prevent or reduce pollutant runoff

- ✓ Road, parking lot and sidewalk maintenance
- ✓ Bridge maintenance
- ✓ Right-of-way maintenance
- ✓ Unpaved road maintenance
- ✓ Cold weather operations
- ✓ Vehicle washing and maintenance



Procedure for prioritizing street sweeping activities

- Assign priority levels and associated cleaning schedule
- Process for updating/revising the priority level

Narrative description or map of streets, parking lots, and other impervious surfaces



Procedure identifying sweeping methods used

Procedure for dewatering and disposal of street sweeper waste

Consider referencing the <u>Catch Basin Cleaning Activities</u>
 Guidance Document



Pesticide applicator to be certified by the State



Require contractors to comply with P2/GH program



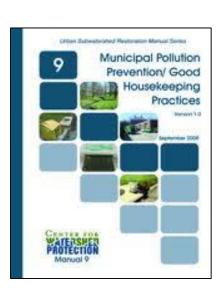
- Consider including requirements in contract language (e.g., comply with the SWMP)
- Process for providing oversight of contractor activities

Employee training program to train employees involved in P2/GH

 Staff trained once during the permit cycle and new hires within first year of hire date







Total Maximum Daily Load (TMDL) Implementation Plan

Making progress towards achieving the TMDL pollutant load reduction goal

Procedure for identifying and prioritizing BMPs

Process for reviewing/updating/revising BMPs

List of prioritized BMPs

 Include reference to targeted TMDL pollutant (e.g., sediment, E. coli, phosphorus)

Total Maximum Daily Load (TMDL) Implementation Plan

Making progress towards achieving TMDL pollutant load reduction goal

Monitoring plan for assessing effectiveness of BMPs

- Schedule for completing monitoring
- Conducted at least two times during the permit cycle

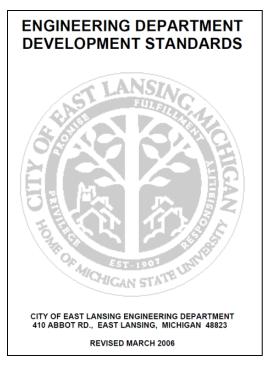




Final Submittal

Final application submittal may be lengthy if entire documents are submitted

Example
Entire development
standards document
submitted with only portions
referenced in application



Individual Permit Process

- Application reviewed by District Staff
- When the SWMP appears to meet the minimum requirements, the individual permit is drafted
 - ✓ Draft permit sent to applicant for review
 - ✓ Proposed permit is public noticed for 30 days
- Decision is made on the permit
- Permit is in effect for 5 years, on average

Individual Permit

- Permit requires implementation of the approved SWMP
- Opportunity to individualize permit language
- Part II Boilerplate Language
- Progress reports due 2 times during permit term
- Opportunity to modify SWMP
- View other SWMPs available in MiWaters

Application Assistance



