

**COMMONWEALTH**  
**ENGINEERS, INC.**  
A wealth of resources to master a common goal.

# Town of Pendleton

**Stormwater Quality Management Plan**  
**INR040014**  
**December 2022**

**A Wealth of Resources to Master a Common Goal.**

## Stormwater Quality Management Plan Certification

I swear or affirm under penalty of perjury as specified by IC 35-44.1-2-1 and other penalties specified in IC 13-30-10, that the statements and representations in this notification are true, accurate, and complete.

"I hereby certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Chet Babb

MS4 Operator Name

Town Council President

MS4 Operator Title

Chet W. Babb

MS4 Operator Signature

12-22-2022

Date

Jim Cook

MS4 Coordinator Name

Stormwater Manager

MS4 Coordinator Title

[Signature]

MS4 Coordinator Signature

12-22-2022

Date

**TOWN OF PENDLETON**

**STORMWATER QUALITY MANAGEMENT PLAN**

**TABLE OF CONTENTS**

Section 0	Existing Stormwater Quality Management Overview.....	0-1
	0.1 MS4 Boundary Narrative .....	0-2
	0.2 Watersheds .....	0-2
	0.3 Receiving Streams .....	0-2
	0.4 Outfalls .....	0-2
	0.5 Description of Current Structural and Nonstructural BMPs .....	0-3
	0.6 Land Use Classifications .....	0-5
	0.7 Existing Sensitive Areas .....	0-5
	0.8 New Information on Water Quality .....	0-5
	0.9 SWQMP Minimum Control Measures .....	0-6
	0.10 MCM Implementation Schedule.....	0-7
Section 1	Public Education, Outreach, Participation, And Involvement .....	1-1
	1.1 The Madison County Stormwater Quality Partnership .....	1-1
	1.2 Update and Revise Public Education and Involvement Plan.....	1-2
	1.2.1 Identify Target Constituents.....	1-2
	1.2.2 Identify Three (3) Community Wide Stormwater Quality Issues and Present to Target Constituents .....	1-3
	1.2.3 Conduct at Minimum Two (2) Public Events Annually .....	1-3
	1.2.4 Develop Educational Materials for Distribution and Outreach to Constituents .....	1-3
	1.2.5 Provide Annual Training Related to Construction Site Run-Off and Post-Construction MCMs.....	1-4
	1.3 Illicit Discharges Educational Program .....	1-4
	1.4 Annually Update the Stormwater Public Information Web Page .....	1-4
	1.5 Provide an Annual Stormwater Program Update to the Stormwater Board .....	1-5
	1.6 MCM Implementation Schedule.....	1-5
Section 2	Illicit Discharge Detection and Elimination.....	2-1
	2.1 Review and Update Ordinance.....	2-1

Table of Contents

	2.2	Review and Update IDDE Plan.....	2-2
	2.2.1	Identifying and Correcting Problem Areas .....	2-2
	2.2.2	Stormwater Outfall Screening and Schedule of Implementation .....	2-2
	2.2.3	Adding Facilities to the MS4 Map .....	2-2
	2.2.4	Public Activity Participation.....	2-3
	2.2.5	SOP for Investigators Investigating Known Illicit Discharges .....	2-4
	2.3	Development of a MS4 Conveyance Map.....	2-5
	2.4	Annual Training of MS4 Personnel .....	2-5
	2.5	Consistency with the Long-Term Control Plan (LTCP).....	2-6
	2.6	MCM Implementation Schedule.....	2-6
Section 3		Construction Site Stormwater Run-Off Control.....	3-1
	3.1	Updating the Erosion and Sediment Control Ordinance.....	3-1
	3.2	Updating the Erosion and Sediment Control Program .....	3-2
	3.2.1	Reviewing and updating the construction permitting process.....	3-2
	3.2.2	Reviewing and updating the construction site inspection process.....	3-4
	3.2.3	Implementation of a permit inventory .....	3-5
	3.2.4	Reviewing and updating the Pendleton stormwater technical standards .....	3-5
	3.3	Annual Training of MS4 Personnel .....	3-6
	3.4	MCM Implementation Schedule.....	3-6
Section 4		Post-Construction Site Stormwater Run-Off Control.....	4-1
	4.1	Development of a Regulatory Mechanism .....	4-1
	4.2	Post-Construction Standards.....	4-2
	4.3	Description of Current Structural and Nonstructural BMPs .....	4-2
	4.4	Post-Construction Operation and Maintenance Plans .....	4-3
	4.5	Post-Construction Inspections .....	4-4
	4.6	Post-Construction Inspections for MS4-Owned Measures.....	4-4
	4.7	Annual Training of MS4 Personnel .....	4-5
	4.8	MCM Implementation Schedule.....	4-5
Section 5		Municipal Operations Pollution Prevention and Good Housekeeping .....	5-1
	5.1	MS4 Facility Inventory .....	5-1
	5.2	Annual Assessment of MS4 Facilities.....	5-3
	5.3	MS4 Facility SWPPP .....	5-3
	5.4	MS4 Stormwater Infrastructure Operations and Maintenance.....	5-4

Table of Contents

5.5 Flood Management and Stormwater Quality Standards.....5-4  
5.6 Annual Training of MS4 Personnel .....5-5  
5.7 MCM Implementation Schedule.....5-6

**TABLES**

Table 0-1 Town of Pendleton MS4 Watersheds .....0-2  
Table 0-2 Town of Pendleton Structural BMPs.....0-4  
Table 0-3 Town of Pendleton Land Use .....0-5  
Table 0-4 Town of Pendleton Sensitive Areas .....0-5  
Table 0-5 Town of Pendleton TMDL Waters .....0-6  
Table 0-6 Town of Pendleton MCM Implementation Schedule .....0-8  
Table 1-1 Public Education, Outreach, Participation, and Involvement Control  
Implementation Schedule.....1-6  
Table 2-1 Town of Pendleton Industrial Stormwater Permits.....2-3  
Table 2-2 Illicit Discharge Detection and Elimination Control Implementation Schedule....2-7  
Table 3-1 Construction Site Stormwater Run-Off Control Implementation Schedule .....3-7  
Table 4-1 Town of Pendleton Structural BMPs.....4-3  
Table 4-2 Post-Construction Site Stormwater Run-Off Control Implementation  
Schedule.....4-6  
Table 5-1 Town of Pendleton Municipally Owned and Operated Facilities .....5-2  
Table 5-2 Municipal Operations Pollution Prevention and Good Housekeeping  
Implementation Schedule.....5-6

**FIGURES**

Figure 3-1 Permit Application Process .....3-2

## ATTACHMENTS

Attachment A.1 ..... Madison County Stormwater Quality Partnership Press Release

Attachment A.2 .....Madison County Stormwater Partnership Brochure on Water Quality

Attachment A.3 .....Madison County Stormwater Quality Partnership Basic Construction Site  
Operator’s Guide to Erosion and Sediment Control Requirements Brochure

Attachment B ..... Outfall Reconnaissance Inventory Field Sheet

Attachment C ..... MS4 Employee Training Requirements

Attachment D ..... INAFSM Education Resources Help Sheet

Attachment E ..... SWPPP Review Sheet

Attachment F ..... Construction Site Field Inspection Form

Attachment G .....Construction and Post-Construction Permit Inventory and Tracking Sheet

Attachment H .....Post-Construction Field Inspection Form

## SECTION 0

### EXISTING STORMWATER QUALITY MANAGEMENT OVERVIEW

The Town of Pendleton, a Municipal Separate Storm Sewer System (MS4) entity (INR040014), must prepare a Stormwater Quality Management Plan as required by 327 IAC 15-13 (Rule 13). The Town of Pendleton's MS4 boundary covers the corporate boundaries of the Town of Pendleton. The Town of Pendleton has entered into a Memorandum of Understanding with the Madison County Soil and Water Conservation District to inspect construction projects within the Town of Pendleton MS4 boundary. The Town of Pendleton is also a part of the Madison County Storm Water Quality Partnership, which is a county-wide cooperative group codeveloping and implementing the Public Education, Outreach, Participation and Involvement minimum control measure (MCM). Its members include:

- The City of Alexandria (Member)
- The City of Anderson (Member)
- Anderson University (Member)
- The Town of Chesterfield (Member)
- The Town of Edgewood (Member)
- The Town of Ingalls (Member)
- The Town of Pendleton (Member)
- Madison County (Member)
- Madison County Council of Governments (MCCOG) (Associate Member)
- Madison County SWCD (Associate Member)
- White River Watchers of Madison County (Associate Member)

In order to maintain permitted as an MS4 entity under the MS4 General Permit, the Town of Pendleton is required to submit a Notice of Intent (NOI) to the Indiana Department of Environmental Management (IDEM) Office of Water Quality (OWQ). This NOI was submitted to the OWQ's Department of Stormwater Management on June 30, 2022. Following this submittal, the Town of Pendleton must review and/or revise its MS4 SWQMP within 180 days of the NOI submittal to IDEM OWQ. The existing SWQMP was last revised October 25, 2010. As such, the Town of Pendleton has decided to replace the existing SWQMP with this management plan to maintain compliance with the MS4 General Permit.

This section of the Town of Pendleton SWQMP presents the existing Land Uses, Best Management Practices, Sensitive Areas, and Areas Having Reasonable Potential for Causing Water Quality Problems in order to establish a baseline characterization of the waters of the Town of Pendleton. The data within the baseline characterization was evaluated to conclude which identified areas, or specific discharge points, are in need of additional consideration.

**0.1 MS4 Boundary Narrative**

The Town of Pendleton does not own or operate any combined sewers or publicly owned treatment works. The MS4 conveyances may include:

- Roads with drainage systems
- Municipal streets
- Catch basins
- Curbs
- Gutters
- Ditches
- Manmade channels
- Storm drains

Any drainage systems and ditches associated with federal, state, or municipality owned roads within the Town of Pendleton that are not owned and maintained by the Town of Pendleton are not part of the Town of Pendleton MS4.

**0.2 Watersheds**

As was acknowledged in the NOI, three (3) primary watersheds were identified within the MS4 Area Boundary using the Indiana Map Watershed Boundary Dataset. The 12-digit hydrogeological unit codes (HUCs) the watersheds within the Town of Pendleton MS4 boundary are listed in **Table 0-1**:

**Table 0-1  
Town of Pendleton MS4 Watersheds**

Hydrologic Unit Code (12 digit)	Watershed Name
51202010806	Foster Branch
51202010804	Prairie Creek-Fall Creek
51202010808	Flatfork Creek-Fall Creek

**0.3 Receiving Streams**

The following water bodies are identified as receiving streams by the Town of Pendleton’s stormwater outfalls.

- Prairie Creek
- Fall Creek-Pendleton to Lick Creek
- Foster Branch

**0.4 Outfalls**

Open ditches, including roadside ditches and legal drains are classified as conveyances and are therefore portions of the Town of Pendleton MS4. MS4 outfalls include a point source discharge via a conveyance of stormwater run-off into a receiving stream or other

body of water. All outfalls have been geo-located by the Town of Pendleton. A final GIS map is under development.

## **0.5 Description of Current Structural and Nonstructural BMPs**

Structural Best Management Practices (BMPs) may include, but are not limited to, detention ponds and retention basins, or constructed wetlands. The Town of Pendleton owns and maintains two (2) structural BMPs. The Town of Pendleton also inspects twelve (12) structural BMPs within the Town of Pendleton MS4 Boundary. The Town of Pendleton will inspect all BMPs within the MS4 Boundary by the end of the permit cycle. **Table 0-2** summarizes this inventory.

**Table 0-2  
Town of Pendleton Structural BMPs**

Owner	Responsible Party	Location	Coordinates	Purpose
McCarty Storm Drain and Pond	Town of Pendleton	939 S Broadway St to 1,025 ft east of SR 38	39.98995, -85.73773	Detention
Falls Park "Lighthouse" Pond	Town of Pendleton	Falls Park Dr	40.00524, -85.74424	Detention
Pines of Deerfield Homeowners Association	Pines of Deerfield Homeowners Association	Pendleton Ave North	40.01082, -85.74683	Retention
Country Farms Homeowners Association	Country Farms Homeowners Association	Pendleton Ave South	39.98785, -85.74978	Retention
Pendle Pointe Homeowners Association	Pendle Pointe Homeowners Association	Pendleton Ave North & State Rd 67	40.029739, -85.728174	Retention
Tractor Supply	Tractor Supply	320 Enterprise	40.00069, -85.77189	Retention
Steve Paul	Steve Paul	Enterprise Dr East Side	40.00104, -85.76924	Retention
Marsh Supermarket	Marsh Supermarket	State Rd 36 & 300	40.00000, -85.730286	Retention
Guide Corp	Guide Corp	State Rd 38 & I-69		Retention
Huntzinger Farms Homeowners Association	Huntzinger Farms Homeowners Association	State Rd 67 & 9	39.97936, -85.74622	Retention
Ashbury Pointe	Ashbury Pointe	100 Ashwood Dr	39.99436, -85.73561	Detention
CVS / Pharmacy	CVS / Pharmacy	Corner of State Rd 67 & 38	39.99979, -85.73574	Retention
Starbucks / 3 Rivers Credit Union	Starbucks / 3 Rivers Credit Union	Corner of W State Rd 38 & Heritage Way	40.003858, -85.765458	Retention
Carrick Glen Homeowners Association	Carrick Glen Homeowners Association	Pendleton Ave North	40.016023, -85.742198	Retention

The detention and retention ponds are effective in slowing down the discharge rate from its watershed area. Slowing down the discharge rate can prevent erosion from high water velocities downstream. The detention and retention ponds also settle out some solids and, if well vegetated, can filter pollutants. Due to these factors, this BMP can improve water quality by removing pollutants before they leave the detention basin area. Also, this BMP

can improve water quality because it does not create additional pollutants through downstream erosion.

## 0.6 Land Use Classifications

Land use type categories within the Town of Pendleton MS4 boundaries are summarized in **Table 0-3**. The significant majority of land usage in Pendleton is residential and farmland, making up approximately 38% and 37% of the land use Town of Pendleton MS4 boundary, respectively.

**Table 0-3**  
**Town of Pendleton Land Use**

Land Use Type Category	Acres	Percentage of County
Commercial	546	12%
Farmsteads	1718	37%
Residential	1765	38%
Institutional	215	5%
Industrial	364	8%

## 0.7 Existing Sensitive Areas

The Town of Pendleton does not have any active surface water intakes. The Fall Creek Intake at the Pendleton Correctional Facility is inactive. There are no other waterbodies in the Town of Pendleton which meet the exceptional use classification or the outstanding state resource water classification. Recreation areas with the potential for full body contact recreation use are listed in **Table 0-4**.

**Table 0-4**  
**Town of Pendleton Sensitive Areas**

Facility	Beach	Lake with Swimming	River Name	River Access
Fall Park	No	No	Fall Creek	No
Fall Creek Valley Conservation Club	No	No	Fall Creek	No

## 0.8 New Information on Water Quality

**Table 0-5** summarizes the watersheds contain receiving waters that have an approved IDEM Total Maximum Daily Load (TMDL). These watersheds and their corresponding TMDLs were determined using the IDEM WMP and TMDL Reports Search (WATRS) Tool.

**Table 0-5  
Town of Pendleton TMDL Waters**

Watershed Name (HUC 12)	TMDL Name	Approval Date	Pollutant
Foster Branch	Geist Reservoir/Upper Fall Creek Watershed Management Plan	2011	E. Coli
Flatfork Creek-Fall Creek			
Prairie Creek-Fall Creek			

The 2018 IDEM Section 303(d) list of impaired waters was reviewed to determine if any streams were listed for impairments or water quality deficiencies. The following streams are listed for *E. coli*:

- Fall Creek
- Prairie Creek
- Foster Branch

**0.9 SWQMP Minimum Control Measures**

As established in the MS4 General Permit, the Stormwater Quality Management Plan (SWQMP) must implement programs under the five minimum control measures (MCMs):

- (1) Public Education, Outreach, Participation, and Involvement;
- (2) Illicit Discharge Detection and Elimination;
- (3) Construction Site Stormwater Run-off;
- (4) Post-Construction Run-off Control; and
- (5) Municipal Operations Pollution Prevention and Good Housekeeping.

These minimum control measures aim to preserve, protect, and improve the Town of Pendleton’s water resources with respect to polluted stormwater run-off. This is completed through established goals for the programs within each MCM. The programs, or best management practices (BMPs), direct the Town’s efforts to improving stormwater and water resource quality. The goals of each program are to be achieved by the end of the 5-year MS4 General Permit term:

- **Public Education, Outreach, Participation, and Involvement:** Increase public education of stormwater
- **Illicit Discharge Detection and Elimination:** Reduce the amount of stormwater pollution caused by illicit discharges
- **Construction Site Stormwater Run-off:** Reduce the amount of total suspended solids leaving individual construction sites
- **Post-Construction Run-off Control:** Reduce the amount of total suspended solids leaving any new site development or redevelopment after construction
- **Municipal Operations Pollution Prevention and Good Housekeeping:** Reduce the amount of stormwater pollution currently caused within MS4 owned and operational areas

## **0.10 MCM Implementation Schedule**

**Table 0-6** on the following pages identifies the primary goals of the SWQMP in order to achieve compliance with the MS4 General Permit and to meet the goals of the MCMs as listed above. The MS4 Coordinator will be in charge of monitoring the progress of each program to meet compliance in accordance with the schedule. The SWQMP is required to be reviewed annually and updated under Section 4.1(k) to ensure the program is reflecting the goals set in this implementation schedule.

**Table 0-6  
Town of Pendleton MCM Implementation Schedule**

MCM	General Permit Section	Task	Date
Annual SWQMP Review	4.1(k)	Conduct an annual review of the SWQMP and as necessary update the plan to ensure it reflects the goals of the MS4 program	Annually
Public Education, Outreach, Participation, and Involvement	4.3(a)(1)	<ul style="list-style-type: none"> <li>• Identify three (3) community stormwater issues that can be targeted towards Development and Commercial groups</li> <li>• Evaluate educational material needs for additional stormwater issues. Revise as necessary.</li> </ul>	June 30, 2023
	4.3(a)(3)	Organize at minimum one (1) event which will be targeted to Commercial and/or Development groups	June 30, 2023
	4.3(c)	Institute a Town of Pendleton Stormwater Website to include the following: <ul style="list-style-type: none"> <li>• A link to Town of Pendleton stormwater ordinances and standards</li> <li>• A link to Town stormwater permit fees</li> <li>• A link to the MCSWQP website</li> <li>• An emergency discharge reporting link</li> <li>• Links to the MCSWQP social media page</li> <li>• Update the website to include links to the SWQMP and previous annual reports. Additional resources, such as educational materials, can be included.</li> </ul>	June 30, 2023
	4.3(g)	Implement and assess the program and update as needed	Annually

MCM	General Permit Section	Task	Date
Illicit Discharge Detection and Elimination	4.4(a)	Adopt the LTAP Model Stormwater Management Ordinance	June 30, 2024
	4.4(b)	Update the IDDE Plan to include SOPs for classifying priority areas, updating mapping information, and investigating illicit discharge points	June 30, 2023
	4.4(b)(5)	Update the IDDE Plan to include an inspection SOP	June 30, 2023
	4.4(e)	Update the IDDE Map to include: <ul style="list-style-type: none"> <li>• The longitude and latitude of outfalls to 5 decimal degrees</li> <li>• All receiving waters and indicate those that are on the 303(d) list or in the US EPA approved TMDL</li> </ul>	Annually
	4.4(f)	Update the IDDE Map to identify high priority areas (i.e. restaurants, gas stations, and autobody shops)	Annually
	4.4 (g)	Establish an updated process for documenting annual training for employees	TBD
	4.4(h)	Screen all MS4 owned and operated outfalls	December 17, 2026
	4.4(i)	Review and asses the IDDE program and update as necessary	Annually

MCM	General Permit Section	Task	Date
Construction Site Stormwater Run-off Construction Site Stormwater Run-off	4.5(b)	Adopt the LTAP Model Stormwater Management Ordinance	June 30, 2024
	4.5(f)	Adopt the LTAP Stormwater Technical Standards Manual	June 30, 2024
	4.5(c)	Establish a SOP for permit application review	TBD
	4.5(d)	Review the construction site inspection SOP and revise as necessary	TBD
	4.5(d)(3)	Inspect active construction sites at the following minimum frequencies: <ul style="list-style-type: none"> <li>100% of all new construction sites must be inspected during the initial phase of construction</li> <li>100% of all active construction sites with disturbances greater than 5 acres or considered priority must be inspected biannually</li> <li>50% of active construction sites with disturbance less than 5 acres must have at least 1 acre inspected annually</li> </ul>	Annually
	4.5(g)	Establish a complaint reception and tracking process	TBD
	4.5(i)	Perform an evaluation and an assessment of the program effectiveness and update as necessary	Annually
	4.5 (j)	Establish and updated process for documenting annual training for employees	TBD
	4.5(k)	Comply with the requirements of the Construction Stormwater General Permit for projects owned/operated by the Town	Annually
Post-Construction Site Stormwater Run-Off Control	4.6(b). 4.6(e)	Adopt the LTAP Model Stormwater Management Ordinance	June 30, 2024
	4.6(c)	Adopt the LTAP Stormwater Technical Standards Manual	June 30, 2024
	4.6(f)	Develop a post-construction inspection SOP and tracking system	Annually
	4.6(f)(1)	Develop a post-construction checklist or form	Annually
	4.6(f)(2)	Inspect all MS4-owned BMPs	December 17, 2026
	4.6(f)(3)	Inspect all privately-owned BMPs	December 17, 2026
	4.6(h)	Review and assess the program and update as necessary	Annually
4.6(i)	Implement Training for MS4 Personnel Reporting Form and evaluate additional training modules	Annually	

MCM	General Permit Section	Task	Date
Municipal Operations Pollution Prevention and Good Housekeeping	4.7(b)	Review and Update MS4 facility inventory list	June 30, 2023
	4.7(d)	Review and update general SWPPP as necessary	TBD
	4.7(g)(3)	Complete a surface visual inspection of all catch basins, outfalls, and conveyance systems	December 17, 2026
	4.7(i)	Review and assess the program and update as necessary	Annually
	4.7(k)	Evaluate new flood control structures owned and/or operated by the MS4	TBD
	4.7(l)	Evaluate existing flood control structures owned and/or operated by the MS4	TBD
	4.7(m)	Implement Training for MS4 Personnel Reporting Form	June 30, 2023

## SECTION 1

# PUBLIC EDUCATION, OUTREACH, PARTICIPATION, AND INVOLVEMENT

In accordance with Section 4.3 of the MS4 General Permit, the MS4 must implement a public education, outreach, and participation and involvement program with measurable goals and a timetable for implementation to inform identified constituent groups about the impacts of stormwater run-off. The goals of this minimum control measure (MCM) have been updated to meet the requirements of the MS4 General Permit, and will include the following:

- **Section 4.3(a):** Update and revise the Public Education, Outreach, Participation, and Involvement Plan
- **Section 4.3(b):** Develop and implement a program for educating public employees, schools, businesses, and the general public about illicit discharges and proper disposal of waste
- **Section 4.3(c):** Update the stormwater public information web page or links to direct the public to a location that contains the required information
- **Section 4.3(d):** Maintain a list of all public education materials developed and used throughout the permit cycle
- **Section 4.3(e):** Report stormwater program updates to elected officials or an advisory board annually
- **Section 4.3(g):** Implement and assess the program annually and update goals as necessary

### 1.1 The Madison County Stormwater Quality Partnership

The Town of Pendleton is a member of the Madison County Storm Water Quality Partnership (MCSWQP), a county-wide group of MS4 communities and interested parties which implements the Public Education, Outreach, Participation, and Involvement requirements of the MS4 General Permit. The partnership groups include:

- The City of Alexandria (Member)
- The City of Anderson (Member)
- Anderson University (Member)
- The Town of Chesterfield (Member)
- The Town of Edgewood (Member)
- The Town of Ingalls (Member)
- The Town of Pendleton (Member)
- Madison County (Member)
- Madison County Council of Governments (MCCOG) (Associate Member)
- Madison County SWCD (Associate Member)
- White River Watchers of Madison County (Associate Member)
- East Central Indiana Solid Waste District (Associate Member)

This agreement was renewed in a Memorandum of Understanding (MOU) in 2022 and will remain in effect until the expiration of the current MS4 General Permit. As such, the Town of Pendleton implements its Public Education, Outreach, Participation, and Involvement plan via the MCSWQP.

## **1.2 Update and Revise Public Education and Involvement Plan**

The current public education and involvement goal is to increase public education of the MS4 program and stormwater impacts on local receiving stream health. In order to increase public education and involvement, the SWQMP has been updated to meet the standards of the MS4 General Permit Section 4.3(a). The planned programs, summarized below, are:

- Identify target constituents
- Identify at minimum three (3) community wide stormwater quality issues
- Conduct a minimum of two (2) public events annually
- Develop educational materials for distribution
- Provide annual training for builders/developers related to the Construction and Post-Construction MCMs

### **1.2.1 Identify Target Constituents**

At present, all MS4 education materials and outreach events conducted by the MCSWQP are targeted to the general public and school-age children. This has allowed for the greatest distribution of education materials and participation from the constituents of the partnership entities. In order to maintain compliance with Section 4.3(a)(1) of the MS4 General Permit, the MCSWQP has updated its education and involvement targets to be one of three categories:

- Residents
- Industrial and Commercial Users
- Construction and Development Entities

Residents of the MS4 will include residents of Pendleton and the MS4 communities within its boundaries. Industrial and commercial users will include those entities with individual stormwater permits as well as entities within areas that discharge stormwater to any MS4 partner of the MCSWQP. Construction and development users will be entities which require stormwater permitting for projects within the participating partnership MS4 areas.

Altering the target constituents of the MCSWQP's education and involvement plan will require further alterations to materials distributed and targeted events for the different constituents. Additional details on these changes follows.

### **1.2.2 Identify Three (3) Community Wide Stormwater Quality Issues and Present to Target Constituents**

At present, the MCSWQP is a sponsor and participant in the White River Watchers Annual Cleanup Event to educate residents on the hazards of dumping garbage and debris in public waterways.

As part of Section 4.3(a)(2), the MCSWQP is required to develop and promote a total of three (3) stormwater quality issues to promote at events for each of the three (3) target constituents. These issues will need to be presented to each of the target constituents at least once during the permit cycle.

In order to develop these issues, the MCSWQP will utilize the Indiana Association for Floodplain and Stormwater Management (INAFSM) Community Stormwater Issues Help Sheet to identify stormwater issues and create focused education materials for distribution during events. Development of these materials and their use through the permit cycle at events satisfies Section 4.3(a)(2) of the MS4 General Permit.

### **1.2.3 Conduct at Minimum Two (2) Public Events Annually**

The MCSWQP has scheduled to attend at least one (1) annual event, the White River Watchers Cleanup. This does not meet the MS4 General Permit Section 4.3(a)(3) requirement of two events per year. The Town of Pendleton and the MCSWQP representatives will need to add at least one other public event per year to satisfy the requirements.

### **1.2.4 Develop Educational Materials for Distribution and Outreach to Constituents**

The MCSWQP utilizes three (3) different educational materials and handouts to distribute to the general public at events throughout the year. The number of materials handed out during events is recorded for inclusion in the Town of Pendleton's annual report.

The Town of Pendleton is also a member of the Upper White River Watershed Alliance, which participates in educational outreach to local communities. The Town of Pendleton sponsors "Clear Choices Clean Water" which is a campaign by the Alliance to increase public awareness about choices and impacts on streams and lakes. Water friendly practices such as landscaping with native plants, using less fertilizer, managing yard and pet wastes, maintaining septic systems, fostering soil health, and using less water are emphasized. Typically, this information is posted on the Town of Pendleton's Facebook page.

The current educational materials used by the MCSWQP include:

- Madison County Stormwater Quality Partnership Press Releases

- “Your Guide to Cleaner Water” Brochure
- “Basic Construction Site Operator’s Guide to Erosion and Sediment Control Requirements” Brochure
- [Madison County Storm Water Quality Partnership Facebook Page postings](#)
- [Town of Pendleton Upper White River Watershed Alliance Facebook Page postings](#)

The educational brochures can be found in **Attachment A**. The educational materials used will be reviewed for content that is applicable to the conditions of the MS4 program. At present the materials used satisfy the requirements of Sections 4.3(a)(4) and 4.3(d) of the General Permit. Additional materials will be generated with a focus on the three (3) targeted issues previously identified in the plan cycle.

### **1.2.5 Provide Annual Training Related to Construction Site Run-Off and Post-Construction MCMs**

As a part of the Memorandum of Understanding between the Town of Pendleton and the Madison County Soil and Water Conservation District (SWCD), the Madison County SWCD currently participates in required kickoff meetings with builders, developers, contractors, engineers, and other entities to outline the Construction and Post-Construction MCMs and design criteria for projects under the County’s MS4 program jurisdiction. These meetings are logged in each project file for reference during inspections and compliance with project Construction Permits. Attendance at this meeting will not change as a part of the construction permitting process and is to be used to target developers with MS4 related materials. These meetings with developers accounts for compliance under Section 4.3(a)(5) of the MS4 General Permit.

### **1.3 Illicit Discharges Educational Program**

As described above, the MCSWQP has developed three (3) different educational materials, which include one (1) related to illicit discharges to stormwater conveyance systems and receiving streams. This brochure contains contact information to the MCSWQP website where visitors can report these issues for corrective action.

The amount of material distributed is recorded after every event. The materials presented at annual events satisfies the requirements of the MS4 General Permit 4.3(b).

### **1.4 Annually Update the Stormwater Public Information Web Page**

The [Madison County Stormwater Quality Partnership Website](#) has been implemented and periodically updated by the Madison County Council of Governments. At present, the Town of Pendleton utilizes the MCSWQP website for educational material distribution and does not have its own website. The MCSWQP Stormwater Website includes the following content:

- Spills or Dumping Reporting link
- Construction Best Management Practices Page

In order to meet compliance with the MS4 General Permit Section 4.3(c), the Town of Pendleton must develop a Stormwater Website with the following information:

- Either a link to the MCSWQP website or a repository of educational material for site visitors
- County MS4 stormwater ordinances to educate the public of current stormwater rules
- Stormwater fees and rate structure for community reference
- MS4 program information, including:
  - NOIs
  - SWQMPs
  - Water Quality Characterization Reports (WQCRs)
  - Annual Reports
  - The MS4 map
  - Links to social media accounts operated by the MCSWQP

The Town of Pendleton MS4 website as described above will be developed according to the implementation schedule from the date of the SWQMP acceptance.

## **1.5 Provide an Annual Stormwater Program Update to the Stormwater Board**

At present, the MS4 Coordinator presents updates to the Board of Stormwater Management at least once per month during public meetings. The presentation is a review of the tasks performed by the Town's MS4 program to meet compliance with the General Permit and provides an opportunity for the Pendleton MS4 Coordinator to outline their implementation strategy for the following year. The presentations satisfy the MS4 General Permit Requirement 4.3(e) of updating the Stormwater Management Board at minimum once per year.

## **1.6 MCM Implementation Schedule**

In order to achieve compliance with the requirements of the MS4 General Permit, the Public Education, Outreach, Participation, and Involvement program will be updated according to the following schedule in **Table 1-1**.

**Table 1-1  
Public Education, Outreach, Participation, and Involvement Control  
Implementation Schedule**

General Permit Section	Task	Date
4.3(a)(1)	<ul style="list-style-type: none"> <li>• Identify three (3) community stormwater issues that can be targeted towards Development and Commercial groups</li> <li>• Evaluate educational material needs for additional stormwater issues. Revise as necessary.</li> </ul>	June 30, 2023
4.3(a)(2)	Organize at minimum one (1) event which will be targeted to commercial and/or development groups	June 30, 2023
4.3(c)	Institute a Pendleton Stormwater Website to include the following: <ul style="list-style-type: none"> <li>• A link to Town of Pendleton stormwater ordinances and standards</li> <li>• A link to county stormwater permit fees</li> <li>• A link to the MCSWQP website</li> <li>• An emergency discharge reporting link</li> <li>• Links to the MCSWQP social media page</li> <li>• Update the website to include links to the SWQMP and previous annual reports. Additional resources, such as educational materials and the WQCR, can be included.</li> </ul>	June 30, 2023
4.3(g)	Implement and assess the program and update as needed	Annually

## SECTION 2

### ILLICIT DISCHARGE DETECTION AND ELIMINATION

In accordance with the MS4 General Permit, the MS4 must develop and implement an Illicit Discharge Detection and Elimination (IDDE) program. The program must detect, address, and eliminate illicit discharges into the MS4 conveyance system in order to achieve the requirements of the MS4 General Permit. The goals of this minimum control measure have been updated to meet the requirements of the MS4 General Permit, and include the following:

- **Section 4.4(a):** Review and update ordinances which prohibit illicit discharges into the MS4 conveyance system
- **Section 4.4(b):** Review and update the IDDE Plan
- **Section 4.4(d) and Section 4.4(e):** Map all stormwater outfalls and conveyance systems
- **Section 4.4(f):** Review and update the stormwater map to identify high priority areas for administering the IDDE Plan
- **Section 4.4(g):** Develop and implement a training program for employees involved in the implementation of the IDDE Plan
- **Section 4.4(h):** Conduct dry weather screening for illicit discharges for elimination for all mapped outfalls
- **Section 4.4(i):** Review and assess the program and update as necessary

#### 2.1 Review and Update Ordinances

The Town of Pendleton does not have a codified IDDE ordinance. Due to the requirements of the MS4 General Permit, an ordinance must be in place to meet the requirements of the MS4 General Permit. As such, the Town of Pendleton plans to codify the Local Technical Assistance Program's (LTAP) Model Stormwater Management Ordinance. The LTAP model ordinance is being used because it was developed to be consistent with the MS4 General Permit requirements. The new IDDE ordinance will be adopted by the Town of Pendleton within 730 days (two years) of the submittal of the Notice of Intent for coverage under the MS4 General Permit to IDEM. Adoption of the new ordinance will be in compliance with Section 4.4(a) of the General Permit.

The ordinance will include the following provisions:

- Prohibited Discharges and Connections
- Exempted Discharges and Connections
- Storage of Hazardous or Toxic Material
- Spill Reporting
- Inspections and Monitoring
- Enforcement

## **2.2 Review and Update IDDE Plan**

At present, the Town of Pendleton does not currently have an IDDE plan. As a part of Section 4.4(b) of the MS4 General Permit, the IDDE plan will be developed and implemented by the MS4 coordinator and MS4 staff. The IDDE plan will provide MS4 employees with reference and inspection materials. The IDDE Plan will be developed with the following SOPs:

- Identifying and Correcting Problem Areas
- Stormwater Outfall Screening and Schedule of Implementation
- Adding Facilities to the MS4 Map
- Public Activity Preparation
- Illicit Discharge Investigation Procedures

### **2.2.1 Identifying and Correcting Problem Areas**

If an outfall appears to have an illicit discharge, Town employees or contractors will move up the drainage system to detect the source(s) of illicit discharge. Once the source is determined, the following steps will occur to report the discharge for corrective action:

- Date, time, and estimated volume of the discharge
- Detailed description of the composition of the discharge
- Narrative description of the events leading up to the discharge and the believed cause of the discharge
- All measures taken to correct or cease the discharge
- All contact information for the reporting party, as well as information from parties involved in the discharge and its clean up.

### **2.2.2 Stormwater Outfall Screening and Schedule of Implementation**

The Town of Pendleton will conduct dry weather screening for approximately 25% of all its outfalls every year. Outfall inspections will grade the condition of the outfall and determine if maintenance is necessary. The condition of each outfall inspection will be recorded on the Outfall Reconnaissance Inventory Field Sheet (**Attachment B**). A new inspection schedule has been developed below in accordance with Section 4.4 (b)(2).

The Town of Pendleton plans to screen all owned and operated outfalls by the end of the five-year MS4 General Permit cycle, in accordance with Section 4.4(h) of the MS4 General Permit.

### **2.2.3 Adding Facilities to the MS4 Map**

Currently, the Town of Pendleton has three (3) industries discharging to the stormwater conveyance system under 327 IAC 15-6 (Rule 6), which are listed in Table 2-1.

**Table 2-1  
Town of Pendleton Industrial Stormwater Permits**

NPDES Permit No.	Permit Name	Latitude	Longitude	Address
INRM00275	Newco Metals Incorporated	39.998444	-85.839178	7268 S SR 13
INRM01246	Fall Creek Waste Water Treatment Plant	39.964794	-85.796181	9378 S CR 650 W
INRM01876	Pendleton Correctional Facility	39.982292	-85.758931	4490 W REFORMA TORY RD

In order to maintain compliance with Section 4.4(b)(3) of the MS4 General Permit, any industry discharging to the MS4 must be included in a database, which will be reviewed and updated as needed throughout the permit cycle. The database collects the following details from the industrial facilities:

- Facility name
- Facility address
- Facility permit number
- Permit expiration date
- Permit status (sufficient, deficient, exempt, or terminate)
- The Standard Industrial Classification (SIC) Code

For the SWQMP update and IDDE Plan update, the industrial database will be used as reference for updating the Town of Pendleton’s MS4 mapping service. This information will be included with each industry’s metadata. Additional documentation, such as permits and inspection documents, will be included.

The industrial facilities list may also be updated from the Rule 6 permit to an Industrial Stormwater General Permit. If any industries within the Town of Pendleton obtain this permit, the industrial facilities database will be updated accordingly.

Updating the SOP for mapping industrial users satisfies Section 4.4(b)(3) of the MS4 General Permit.

## 2.2.4 Public Activity Preparation

Currently, the Town of Pendleton participates in multiple public activities promoting clean stormwater conveyance and healthy receiving streams as a part of the Madison County Stormwater Quality Partnership. As a member of the partnership, the Town of Pendleton and town residents have participated in the White River Watchers Cleanup event, which promotes stream health by annually cleaning up stretches of the White River in Madison County.

Additional coordination, including the providing of cleaning materials, monitoring equipment, and training may be necessary and should be scheduled with partnership staff prior to the event day. Following the above SOP for events will be sufficient for Section 4.4(b)(4) of the MS4 General Permit.

### **2.2.5 SOP for Investigators Investigating Known Illicit Discharges**

The investigator's current SOP outlines the tasks to be completed by the investigator through the removal or correction of the discharge. Presently the majority of IDDE problems are located when a spill occurs during a town project, or when the public reports illicit spills and dumping by calling the **Town of Pendleton Public Works Department [(765) 778-2173]**. The reporting number is included on a number of the informational brochures and flyers handed out at public events and is linked on the Stormwater Webpage.

Currently, the SOP is as follows:

- Find the source, typically through visual inspection, tracing discharges upstream, or using dye or smoke testing
- Remove or correct illicit connections

In order to meet the compliance requirements within the MS4 General Permit, the investigator's SOP will be updated to include the requirements of Section 4.4(b)(5). The new SOP will include the following:

- After receiving notification of an illicit discharge, an investigation will be scheduled within two (2) business days of receiving the notice.
- The investigator will begin a new compliance file for the investigative process. This will include:
  - Date and time notice was received
  - Date and time of investigation
  - Location of discharge
  - Condition of discharging material
  - Source of discharge if different than location
  - Analysis of cause, scheduling of follow-up inspection date
- The inspector will refer to any additional documentation as necessary, including the above SOPs, to determine the source of discharges
- After determining the source of the discharge, the investigator will assess elimination responsibility and prepare a report outlining the responsibilities for elimination.
- The MS4 team will develop a tracking and prioritization system for investigations

If any flows are judged to be an immediate threat to human health or the environment, the MS4 will report such discharge to the IDEM emergency spill line at either:

- Toll free – (888) 233-7745
- Local – (317) 223-7745

### **2.3 Development of a MS4 Conveyance Map**

The Town of Pendleton currently uses a mapping system to track its MS4 system, mapping known outfalls and ditches discharging to receiving streams throughout the town within the MS4 jurisdiction. The current map includes:

- Outfalls, identified with an alphanumeric identifier
- Ditches 24" or greater
- Storm mains
- Storm structures

The current MS4 map is used to identify outfalls for annual screening and to identify impacted conveyance systems during inspections. The map is also used to identify high priority areas within the MS4 to focus inspection efforts and to eliminate illicit discharges.

To meet compliance with Section 4.4(e) of the General Permit, the map must be updated to include:

- The longitude and latitude of each outfall to 5 decimal degrees
- Receiving waters, including water quality characteristics like the inclusion of being on the 303(d) impaired waters list or having a TMDL.

To meet compliance with Section 4.4(f) the General Permit, the Town of Pendleton intends to plot all outfalls and conveyances by the end of the permit cycle. A prioritization system and locations of industrial facilities.

### **2.4 Annual Training of MS4 Personnel**

Town of Pendleton MS4 employees are trained on handling testing equipment, inspection procedures, and the illicit discharge reporting process. The current annual training for MS4 employees is:

- Current employees are given annual refresher courses on testing equipment, inspection procedures, and reporting requirements.
- New employees are trained within the first sixty (60) days of employment on monitoring equipment, inspection processes, and reporting requirements

The training received will be recorded on the Training for MS4 Personnel Reporting Form, which tracks the date training was received, the names of the employees trained, the employee's department, name of the trainer, and the event the training was completed. Implementation of this MS4 Personnel Form will meet the requirements of Section 4.4(g) of the General Permit.

According to the MS4 General Permit Section 4.1(d), MS4 staff responsible for implementing the MS4 program must receive 12 hours of annual training with at least eight (8) of the twelve (12) hours of training distributed amongst the specific minimum control measures (MCMs) for which they are responsible for administering. Using this guidance, the Town of Pendleton has developed a training guidance document for all MS4 employees and non-MS4 employees involved in the application of the Illicit Discharge Detection and Elimination program in **Attachment C**.

In order to meet the requirements of the MS4 General Permit, additional training is available for MS4 employees at the [Indiana Association for Floodplain and Stormwater Management \(INAFSM\) Website](#) and the attached INAFSM Educational Resources Help Sheet (**Attachment D**). Additional training modules for specific MCMs and the General Permit are being evaluated and adopted as necessary to meet the requirements of Section 4.4(g).

## **2.5 Consistency with the Long-Term Control Plan (LTCP)**

The Town of Pendleton does not own or operate a wastewater treatment system and is not a combined sewer system entity. As such, no CSO Long-Term Control Plan nor Combined Sewer Overflow Operational Plan has been developed. Therefore, the efforts of this SWQMP are not in conflict with either document.

## **2.6 MCM Implementation Schedule**

In order to achieve compliance with the requirements of the MS4 General Permit, the Illicit Discharge Detection and Elimination program will be updated according to the following schedule in **Table 2-2**

**Table 2-2  
Illicit Discharge Detection and Elimination Control  
Implementation Schedule**

<b>General Permit Section</b>	<b>Task</b>	<b>Date</b>
4.4(a)	Adopt the LTAP Model Stormwater Management Ordinance	June 30, 2024
4.4(b)	Update the IDDE Plan to include SOPs for classifying priority areas, updating mapping information, and investigating illicit discharge points	June 30, 2023
4.4(b)(5)	Update the IDDE Plan to include an inspection SOP	June 30, 2023
4.4(e)	Update the IDDE Map to include: <ul style="list-style-type: none"> <li>• The longitude and latitude of outfalls to 5 decimal degrees</li> <li>• All receiving waters and indicate those that are on the 303(d) list or in the US EPA approved TMDL</li> </ul>	Annually
4.4(f)	Update the IDDE Map to identify high priority areas	Annually
4.4(g)	Establish an updated process for documenting annual training for employees	TBD
4.4(h)	Screen all MS4 owned and operated outfalls	December 17, 2026
4.4(i)	Review and assess the IDDE program and update as necessary	Annually

## SECTION 3

### CONSTRUCTION SITE STORMWATER RUN-OFF CONTROL

For the General Permit, the construction site stormwater run-off MCM is administered through an erosion and sediment control program which conducts site plan reviews and construction site inspections. The goals of this program have been updated to meet the requirements of the MS4 General Permit and will include:

- **Section 4.5(b):** Updating and revising the ordinance(s) codifying the erosion and sediment control plan
- **Section 4.5(c):** Update the construction permitting procedures
- **Section 4.5(d):** Update construction site inspection SOPs.
- **Section 4.5(e):** Update enforcement language in ordinance
- **Section 4.5(f):** Review and update stormwater standards and specifications
- **Section 4.5(g):** Update inquiry and complaint SOPs
- **Section 4.5(i):** Evaluate and assess the effectiveness of the construction site run-off control program and update as necessary
- **Section 4.5(j):** Review employee training procedures
- **Section 4.5(k):** Comply with the requirements of the Construction Stormwater General Permit (CSGP) for MS4-owned projects
- **Section 4.5(l):** Maintain an inventory of all construction site projects under the CSGP, the MS4 ordinance, and those operated by the MS4

To meet the requirements of the MS4 General Permit, the SWQMP has updated and outlined the programs' goals and measures to be administered through the MS4 General Permit.

#### 3.1 Updating the Erosion and Sediment Control Ordinance

The Town of Pendleton's Stormwater Site Construction and Post-Construction Ordinance was passed on March 11, 2021 under [Ordinance 21-05](#). Due to the updated requirements of the MS4 General Permit, the ordinance must be updated or replaced to meet the requirements of the MS4 General Permit. The Town of Pendleton plans to codify the Local Technical Assistance Program's (LTAP) Model Stormwater Management Ordinance. The LTAP model ordinance is being used because it was developed to be consistent with the MS4 General Permit requirements. The new construction site stormwater run-off ordinance will be adopted by the Town of Pendleton within 730 days (two years) of the submittal of the Notice of Intent for coverage under the MS4 General Permit to IDEM. Adoption of the new ordinance will be in compliance with Sections 4.5(b) and 4.5(e) of the General Permit.

## 3.2 Updating the Erosion and Sediment Control Program

### 3.2.1 Reviewing and Updating the Construction Permitting Process

The Town of Pendleton's [Ordinance 21-05](#) contains the following construction permitting requirements:

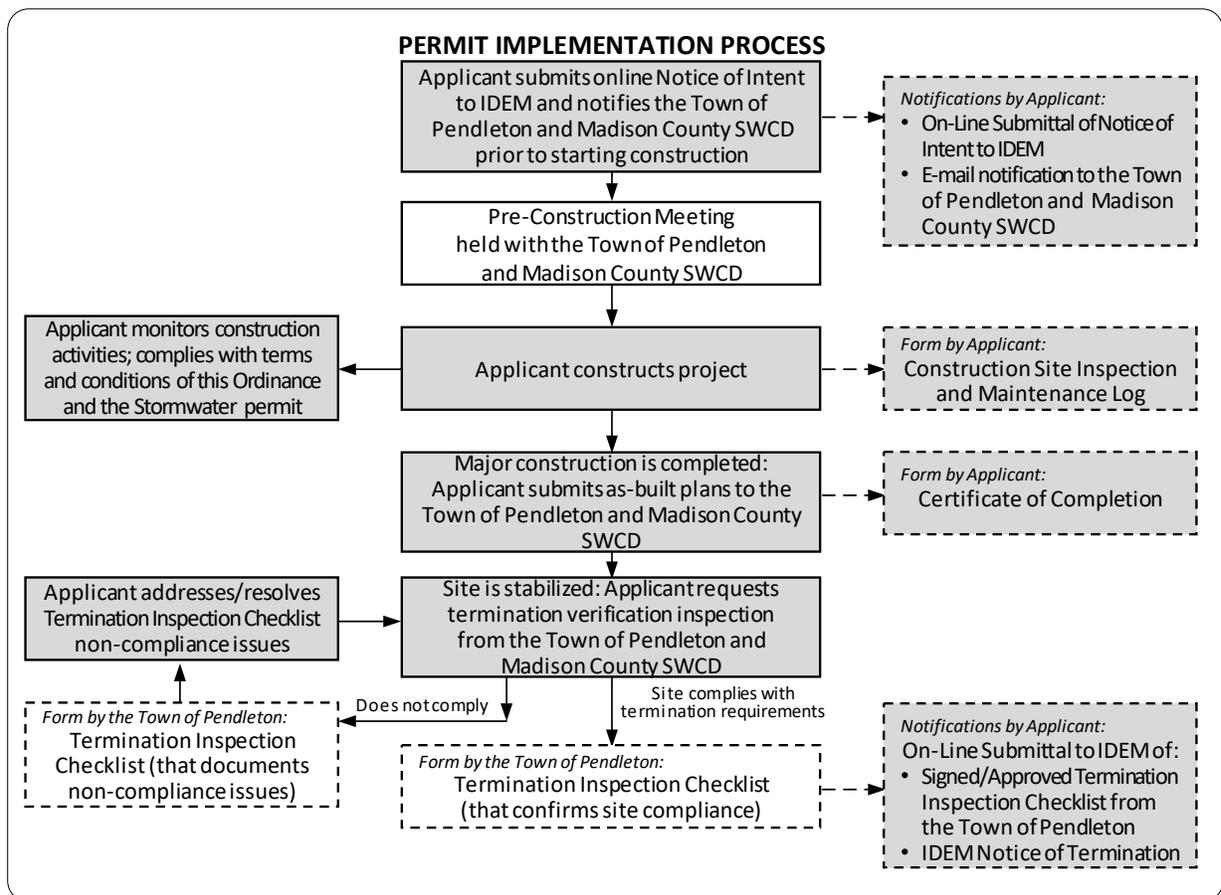
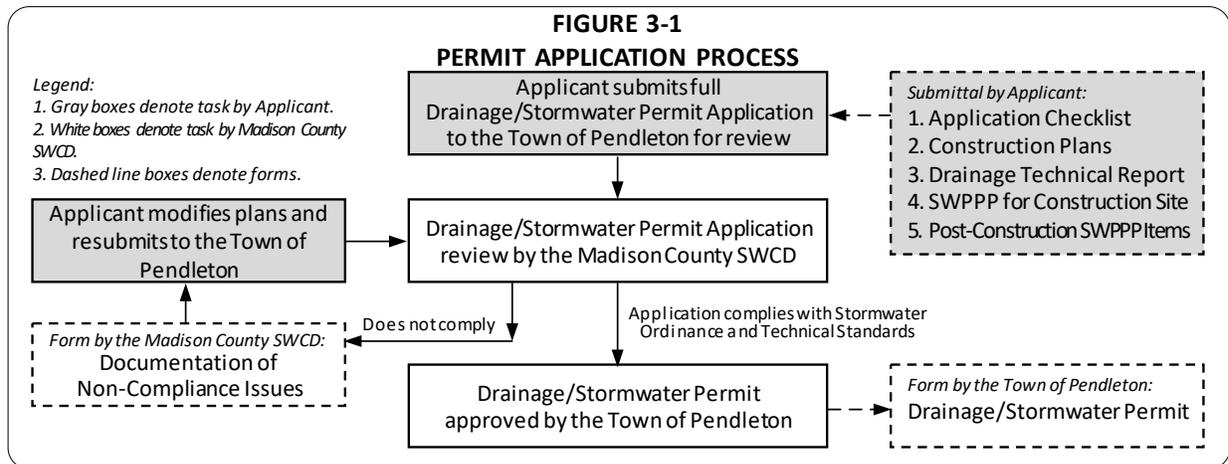
- Submit a technical review and comment form
- Submit a complete erosion and sediment control plan and stormwater pollution prevention plan

The above construction permit process has been compared to the proposed replacement ordinance and will be amended as necessary as the new ordinance is implemented. The process should include:

- Submission of a permit application, which includes:
  - Stormwater Construction Permit Application form
  - Title Sheet
  - Existing Site Conditions
  - Proposed Site Conditions
  - Erosion and Sediment Control Plan
  - Storm Sewer Plan and Profile
  - Standard Detail Sheets
  - Calculation of square footage of pervious and impervious area
  - Easement Dedication documents
  - Post-Construction Submittal
  - Record Drawings
- Covenants and declarations have been executed, as required
- Easements have been dedicated
- All applicable permit fees have been paid in full
- All other applicable permits have been obtained
- Issuance of a Storm Water Management Permit

A construction permit process will be implemented with the new proposed LTAP ordinance. The permit process will also include a review checklist for reviewers to follow to determine if the application adheres to the requirements of the Construction Stormwater General Permit (CSGP) (**Attachment E**). The permitting process will be reviewed annually for compliance and effectiveness under the MS4 General Permit. Implementing the construction permitting process will be in compliance with Sections 4.5(c) and 4.5(g) of the MS4 General Permit.

The updated erosion and sediment control permitting process will follow a similar structure as outlined in **Figure 3-1** on the following page:



### 3.2.2 Reviewing and Updating the Construction Site Inspection Process

At present, the Town of Pendleton has signed a Memorandum of Understanding with the Madison County Soil and Water Conservation District which establishes that the Madison County Soil and Water Conservation District will conduct the following duties on behalf of the Town of Pendleton:

- Receive SWPPPs from all developers subject to CSGP regulations.
- Receive fees for review of SWPPPs and on-site inspections.
- Maintain records and files of all current CSGP projects.
- Conduct review, comment, approval and denial of SWPPPs. The SWCD will have 14 days to complete Erosion and Sediment Control Plan SWPPP reviews for “large sites” 5+ acres disturbance. The SWCD will have 10 days to complete SWPPP reviews for “small sites” 1-5 acres disturbance.
- Immediately upon completion of plan review, the SWCD will submit review forms to the Town and the developer.
- Conduct site inspections to verify adequate implementation of SWPPPs. The site inspections must be completed as necessary and/ or at least once monthly until project termination.
- Complete site visit report for initial on-site site visit. Submit site visit report to the Town and developer.
- If a negative review of SWPPPs or on-site reviews are issued, communicate with developer and the Town on how to improve the site condition to gain compliance.
- Organize annual information/awareness presentations targeted at owners, builders and developers regarding CSGP compliance.

The above agreement will be reviewed and updated based on the requirements of the MS4 General Permit. This review will include the inspection SOPs used by the Madison County Soil and Water Conservation District to determine compliance with the CSGP.

If necessary, the Town of Pendleton and the Madison County Soil and Water Conservation District will update the inspection SOPs. The updated inspection SOP will include the following:

- Contact information for the project owner, on-site administrator of the CSGP controls, and inspector
- A checklist, form, or other document to track controls implemented and compliance.
- A list of priority sites for inspection based on the extent of construction, topography, complaints, and threat to degrade water quality.
- The date and location of the inspection
- Determination of compliance with the approved stormwater management plan

- Variations from the approved construction specifications
- Any violations that exist
- A timetable for conducting inspections and notifying the site owner of compliance with the CSGP.

The construction site inspection process will be reviewed annually and updated based on new training or information. A site inspection form can be found in **Attachment F**. Updating the construction permitting process will be in compliance with Section 4.5(d) of the MS4 General Permit.

### 3.2.3 Implementation of a Permit Inventory

A permitted project inventory is kept up to date when permits are filed with the Town of Pendleton. The permit inventory includes:

- Project name
- Permit number
- Permit date
- Project address
- The name of the permit holder
- Project representative and address

In order to update the list to meet the requirements of the MS4 General Permit, the permit inventory will also include:

- Latitude and longitude of project as applicable
- Receiving water(s)
- Project start date
- Status of project (Active or terminated)
- An indication of compliance status including enforcement actions undertaken
- Coordination with other departments within the MS4

An example of the project inventory to be kept for permitted projects is found under **Attachment G**. Updating the construction permitting process will be in compliance with Section 4.5(l) of the MS4 General Permit.

### 3.2.4 Reviewing and Updating the Town of Pendleton Stormwater Technical Standards

At present, the Town of Pendleton utilizes the Indiana Stormwater Quality Manual and NRCS Field Office Technical Guide for their technical standards for erosion and sediment controls and post-construction stormwater quality control BMPs. The Indiana Stormwater Quality Manual was last updated in 2007.

In order to meet the requirements of the MS4 General Permit and the Construction Site General Permit, the Town of Pendleton has decided to adopt the LTAP Stormwater Technical Standards Manual. The LTAP Technical Standards Manual was developed to adhere to the standards of the MS4 General Permit, the CSGP, and modern stormwater management standards and technologies.

### 3.3 Annual Training of MS4 Personnel

MS4 employees must attend an annual training event for the construction site stormwater control MCM. At present, MS4 employees are required to attend at minimum one of the following events:

- MS4 Annual Meeting
- IWEA Conference
- INAFSM inspector group meetings/training

The training received will be recorded on the Training for MS4 Personnel Reporting Form, which tracks the date training was received, the names of the employees trained, the employee's department, name of the trainer, and the event the training was completed. Implementation of this MS4 Personnel Form will meet the requirements of Section 4.5(j) of the General Permit.

According to the MS4 General Permit Section 4.1(d), MS4 staff responsible for implementing the MS4 program must receive 12 hours of annual training with at least eight (8) of the twelve (12) hours of training distributed amongst the specific minimum control measures (MCMs) for which they are responsible for administering. Using this guidance, the Town of Pendleton has developed a training guidance document for all MS4 employees and non-MS4 employees involved in the application of the Construction Site Stormwater Run-Off Control program in **Attachment C**.

In order to meet the requirements of the MS4 General Permit, additional training is available for MS4 employees at the [Indiana Association for Floodplain and Stormwater Management \(INAFSM\) Website](#) and the attached INAFSM Educational Resources Help Sheet (**Attachment D**). Additional training modules for specific MCMs and the General Permit are being evaluated and adopted as necessary to meet the requirements of Section 4.5(j).

### 3.4 MCM Implementation Schedule

In order to achieve compliance with the requirements of the MS4 General Permit, the Construction Site Stormwater Run-Off Control program will be updated according to the following schedule in **Table 3-1**.

**Table 3-1  
Construction Site Stormwater Run-Off Control  
Implementation Schedule**

General Permit Section	Task	Date
4.5(b)	Adopt the LTAP Model Stormwater Management Ordinance	June 30, 2024
4.5(f)	Adopt the LTAP Stormwater Technical Standards Manual	June 30, 2024
4.5(c)	Establish a SOP for permit application review (SWPPP Review form – <b>Attachment E</b> )	TBD
4.5(d)	Review the construction site inspection SOP and revise as necessary	TBD
4.5(d)(3)	Inspect active construction sites at the following minimum frequencies: <ul style="list-style-type: none"> <li>• 100% of all new construction sites must be inspected during the initial phase of construction</li> <li>• 100% of all active construction sites with disturbances greater than 5 acres or considered priority must be inspected biannually</li> <li>• 50% of active construction sites with disturbance less than 5 acres must have at least 1 acre inspected annually</li> </ul> (Inspection Form – <b>Attachment F</b> )	Annually
4.5(g)	Establish a complaint reception and tracking process	TBD
4.5(i)	Perform an evaluation and an assessment of the program effectiveness and update as necessary	Annually
4.5(j)	Establish an updated process for documenting annual training for employees	TBD
4.5(k)	Comply with the requirements of the Construction Stormwater General Permit for projects owned/operated by the Town	Annually

## SECTION 4

### POST-CONSTRUCTION SITE STORMWATER RUN-OFF CONTROL

In the MS4 General Permit, the post-construction site stormwater run-off MCM is a monitoring program to ensure completed construction projects are adhering to the municipal ordinances to uphold water quality and are implementing effective stormwater control structures. The requirements of the MS4 General Permit include:

- **Section 4.6(b):** Update and revise the post-construction ordinance
- **Section 4.6(c):** Review and update performance standards for stormwater quantity and quality
- **Section 4.6(d):** Review and update operations and maintenance plans
- **Section 4.6(e):** Review and update the post-construction inspection program
- **Section 4.6(f):** Review and update inspections for MS4-owned and operated measures
- **Section 4.6(h):** Review and assess the program annually and update as necessary
- **Section 4.6(i):** Review and update employee training for post-construction measures

To meet the requirements of the MS4 General Permit, the SWQMP has updated and outlined the programs' goals and measures to be administered through the MS4 General Permit.

#### 4.1 Development of a Regulatory Mechanism

The Town of Pendleton's post-construction stormwater runoff ordinance is codified in [Ordinance 21-05](#), which was signed into effect on March 11, 2021, by the Town of Pendleton Town Council. However, the current ordinance must either be updated or replaced to meet the requirements of the MS4 General Permit due to the lack of the following requirements:

- Establish design criteria to reduce pollutants according to the Construction Stormwater General Permit (CSGP)
- Establish requirements to address stormwater quantity and quality

As such, the Town of Pendleton is replacing the current [Ordinance 21-05](#) with the Local Technical Assistance Program's (LTAP) Model Stormwater Management Ordinance. The LTAP model ordinance is being used because it was developed to be consistent with the MS4 General Permit requirements. The new post-construction site stormwater run-off ordinance will be adopted by the Town of Pendleton within 730 days (two years) of the submittal of the Notice of Intent for coverage under the MS4 General Permit to IDEM.

## 4.2 Post-Construction Standards

The post-construction stormwater run-off controls standards used by the Town of Pendleton are found in the Town of Pendleton's Storm Drainage Standards. The standards include applicable design criteria and information for water quality best management practices (BMPs). The requirements include:

- Anticipated Total Suspended Solids (TSS) removal rates for BMPs
- Designing treatment for water quality volume (WQv) or the first flush runoff
- Pre-approved structural BMPs

As with the Post-Construction Site Stormwater Run-off Ordinance, the Stormwater Development Manual is deficient in meeting the requirements of the MS4 General Permit and CSGP. As such, the stormwater Development Manual will be replaced with the LTAP Stormwater Technical Standards Manual. This manual addresses the following topics omitted from the current Stormwater Development Manual:

- Conventional approach BMPs
- Low Impact Development (LID) approach BMPs
- BMP Performance Criteria
- Provisions for "Hot Spot" land uses
- Construction sequencing considerations
- Inspection and maintenance requirements
- BMP sizing methodology
- Agreements for the construction, maintenance and repair of structural BMPs

The new stormwater standards manual will be adopted by the Town of Pendleton within 730 days (two years) of the submittal of the Notice of Intent for coverage under the MS4 General Permit to IDEM.

## 4.3 Description of Current Structural and Nonstructural BMPs

The Town of Pendleton inspects and/or maintains fourteen (14) structural BMPs within the Town of Pendleton MS4 Boundary. The Town of Pendleton will inspect all BMPs within the MS4 Boundary by the end of the permit cycle. **Table 4-1** summarizes this inventory.

**Table 4-1  
Town of Pendleton Structural BMPs**

Owner	Responsible Party	Location	Coordinates	Purpose
McCarty Storm Drain and Pond	Town of Pendleton	939 S Broadway St to 1,025 ft east of SR 38	39.98995, -85.73773	Detention
Falls Park "Lighthouse" Pond	Town of Pendleton	Falls Park Dr	40.00524, -85.74424	Detention
Pines of Deerfield Homeowners Association	Pines of Deerfield Homeowners Association	Pendleton Ave North	40.01082, -85.74683	Retention
Country Farms Homeowners Association	Country Farms Homeowners Association	Pendleton Ave South	39.98785, -85.74978	Retention
Pendle Pointe Homeowners Association	Pendle Pointe Homeowners Association	Pendleton Ave North & State Rd 67	40.029739, -85.728174	Retention
Tractor Supply	Tractor Supply	320 Enterprise	40.00069, -85.77189	Retention
Steve Paul	Steve Paul	Enterprise Dr East Side	40.00104, -85.76924	Retention
Marsh Supermarket	Marsh Supermarket	State Rd 36 & 300	40.00000, -85.730286	Retention
Guide Corp	Guide Corp	State Rd 38 & I-69		Retention
Huntzinger Farms Homeowners Association	Huntzinger Farms Homeowners Association	State Rd 67 & 9	39.97936, -85.74622	Retention
Ashbury Pointe	Ashbury Pointe	100 Ashwood Dr	39.99436, -85.73561	Detention
CVS / Pharmacy	CVS / Pharmacy	Corner of State Rd 67 & 38	39.99979, -85.73574	Retention
Starbucks / 3 Rivers Credit Union	Starbucks / 3 Rivers Credit Union	Corner of W State Rd 38 & Heritage Way	40.003858, -85.765458	Retention
Carrick Glen Homeowners Association	Carrick Glen Homeowners Association	Pendleton Ave North	40.016023, -85.742198	Retention

#### 4.4 Post-Construction Operation and Maintenance Plans

At present, the post-construction operation and maintenance plans are submitted as part of the construction permit process. The submitted operation and maintenance plans are

reviewed by the Town of Pendleton MS4 Coordinator. The post-construction management plan must include:

- A description of potential pollutant sources from land use
- Location, dimensions, detailed specifications and construction details of all installed stormwater quality measures
- Description of measures that will be installed to control pollutants
- Sequence of installation measures
- Measures to remove or minimize pollutants
- Measures to prevent or minimize adverse impacts to stream or riparian habitat
- Description of maintenance guidelines for measures, including:
  - Facilitates proper long-term function
  - Availability to future parties whom will be responsible for operation and maintenance of measures

The above management plan is listed in the current Ordinance No. 21-05, Section 2(B) – Policy on Stormwater Quality Management. Additionally, operations and maintenance plans have been kept with the project permit file for reference. The use of these tools by the Town of Pendleton MS4 program satisfies 4.6(d) of the General Permit.

#### **4.5 Post-Construction Inspections**

Within the current [Ordinance 21-05](#), Section 5, following project completion, the Town of Pendleton assumes responsibility for having annual inspections of the stormwater quality facilities completed. Inspections are to demonstrate compliance with the approved permit, the post-construction ordinance, and the Stormwater Development Manual. Entities requiring inspections are tracked in the post-construction inventory form in **Attachment G**. Inspections are logged in the post-construction field inspection form, found in **Attachment H**.

Under the adopted LTAP Model Stormwater Management Ordinance, the Town of Pendleton retains the authority to conduct inspections to ensure full compliance with the adopted ordinance, the Stormwater Technical Standards Manual, the approved Stormwater Pollution Prevention Plan (SWPPP), and terms and conditions of the approved permit and standards.

The post-construction inspection program will be reviewed annually for compliance and effectiveness under the MS4 General Permit. As such, the post-construction inspection program is satisfactory under 4.6(e) of the General Permit.

#### **4.6 Post-Construction Inspections for MS4-Owned Measures**

At present, the current [Ordinance 21-05](#), Section 5, requires the above detailed annual inspection completed for all publicly owned stormwater quality facilities. As such, following project completion, the Town of Pendleton assumes responsibility for having annual inspections of the stormwater quality facilities completed. Inspections are to demonstrate

compliance with the approved permit, the post-construction ordinance, and the Stormwater Development Manual.

Inspections of MS4-owned measures will utilize the same standards and forms as those performed for privately owned measures. MS4-owned measures will under the post-construction inspection program will be reviewed annually for compliance and effectiveness under the MS4 General Permit. As such, the MS4-owned measures inspection program meets the requirements of Section 4.6(f).

#### **4.7 Annual Training of MS4 Personnel**

MS4 employees must attend an annual training event for the post-construction site stormwater control MCM. At present, MS4 employees are required to attend at minimum one of the following events:

- MS4 Annual Meeting
- IWEA Conference
- INAFSM inspector group meetings/training

The training received will be recorded on the Training for MS4 Personnel Reporting Form, which tracks the date training was received, the names of the employees trained, the employee's department, name of the trainer, and the event the training was completed. Implementation of this MS4 Personnel Form will meet the requirements of Section 4.6(i) of the General Permit.

According to the MS4 General Permit Section 4.1(d), MS4 staff responsible for implementing the MS4 program must receive 12 hours of annual training with at least eight (8) of the twelve (12) hours of training distributed amongst the specific minimum control measures (MCMs) for which they are responsible for administering. Using this guidance, the Town of Pendleton has developed a training guidance document for all MS4 employees and non-MS4 employees involved in the application of the Post-Construction Site Stormwater Run-Off Control program in **Attachment C**.

In order to meet the requirements of the MS4 General Permit, additional training is available for MS4 employees at the [Indiana Association for Floodplain and Stormwater Management \(INAFSM\) Website](#) and the attached INAFSM Educational Resources Help Sheet (**Attachment D**). Additional training modules for specific MCMs and the General Permit are being evaluated and adopted as necessary to meet the requirements of Section 4.6(i).

#### **4.8 MCM Implementation Schedule**

In order to achieve compliance with the requirements of the MS4 General Permit, the Post-Construction Site Stormwater Run-Off Control program will be updated according on the following schedule in **Table 4-2**.

**Table 4-2  
Post-Construction Site Stormwater Run-Off Control  
Implementation Schedule**

<b>General Permit Section</b>	<b>Task</b>	<b>Date</b>
4.6(b), 4.6(e)	Adopt the LTAP Model Stormwater Management Ordinance	June 30, 2024
4.6(c)	Adopt the LTAP Stormwater Technical Standards Manual	June 30, 2024
4.6(f)	Develop a post-construction inspection SOP and tracking system (Inspection Form - <b>Attachment G</b> )	Annually
4.6(f)(1)	Develop a post-construction checklist or form (SWPPP Checklist – <b>Attachment E</b> )	Annually
4.6(f)(2)	Inspect all MS4-owned BMPs	December 17, 2026
4.6(f)(3)	Inspect all privately-owned BMPs	December 17, 2026
4.6(h)	Review and assess the program and update as necessary	Annually
4.6(i)	Implement Training for MS4 Personnel Reporting Form and evaluate additional training modules	Annually

## SECTION 5

# MUNICIPAL OPERATIONS POLLUTION PREVENTION AND GOOD HOUSEKEEPING

In accordance with the General Permit, the comprehensive pollution prevention and good housekeeping program must be reviewed for content that is in compliance with the General Permit. The goals of this program will be reviewed and updated as necessary as required under the General Permit requirements of:

- **Section 4.7(b):** Maintain an inventory of MS4 owned and operated facilities
- **Section 4.7(c):** Complete an annual assessment of all MS4-owned and operated facilities
- **Section 4.7(d):** Update and revise MS4-owned and operated facilities' Stormwater Pollution Prevention Plans (SWPPPs)
- **Section 4.7(f):** Perform facility inspections
- **Section 4.7(g):** Review and update operation and maintenance plans for MS4 owned and operated stormwater infrastructure
- **Section 4.7(i):** Review and assess the program and update as necessary
- **Section 4.7(k):** Provide written documentation that new flood control structures are assessed for their impacts on water quality and quantity
- **Section 4.7(l):** Evaluate existing and new flood control structures for their impact on water quality within the MS4
- **Section 4.7(m):** Review and update the employee training program as necessary

### 5.1 MS4 Facility Inventory

The Town of Pendleton owns and operates six (6) facilities across its jurisdiction, which are listed in **Table 5-1** below. The Town of Pendleton Maintenance building has an individual facility Stormwater Pollution Prevention Plans (SWPPP). The remaining facilities are operated under a General SWPPP.

**Table 5-1  
Town of Pendleton Municipally Owned and Operated Facilities**

Facility Name	Address	Stormwater Pollution Potential <sup>1</sup>	Facility Contact
Town of Pendleton Maintenance Building	537 N. Pendleton Ave, Pendleton, IN	Improbable	MS4 Coordinator (765) 778-2173
Town of Pendleton Water Department	315 Water Tower Drive, Pendleton, IN	Improbable	Water Department Supervisor (765) 778-2173
Town of Pendleton Fire Department	100 S Broadway St, Pendleton, IN	Improbable	Fire Chief (765) 778-2400
Town of Pendleton Police Department	550 North Pendleton Avenue Pendleton, IN	Improbable	Police Chief (765) 778-3933
Town of Pendleton Parks Department	299 Falls Park Dr, Pendleton, IN	Improbable	Town Manager (765) 778-2222
Fall Creek Golf Club	250 Reformatory Rd, Pendleton, IN	Improbable	Town Manager (765) 778-2222

1 – rankings for potential are incredible (unlikely to ever occur), improbable (unlikely but may occur), occasional (may occur sometimes, probable (likely to occur), and frequent (frequent occurrence). Rankings are on consideration of history and controls in place at the site.

All Town of Pendleton SWPPPs include the following information:

- Facility name
- Street address
- Department contact information
- Pollution prevention team and responsibilities
- Site description
- Potential pollutant sources
- Spill prevention and response
- Plan implementation
- Associated maps of each facility

The SWPPPs do not contain the following information:

- Controls or maintenance practices
- Inspections and reporting

Due to the omission of the above information, the Town of Pendleton will need to revise the implemented SWPPPs to be in compliance with Section 4.7(b) of the General Permit.

## 5.2 Annual Assessment of MS4 Facilities

According to the SWPPPs, a comprehensive annual assessment will be performed each year by the facility Pollution Prevention Team. Each inspection includes observations relating to the discharge of pollutants from each facility, BMPs needed for maintenance, BMPs which failed to operate as designed, locations where additional BMPs are needed, corrective actions taken, and any updates to the SWPPPs. Each annual inspection has to be documented in a “Site Inspection Checklist”.

As noted in Section 5.1, the SWPPPs include a list of potential pollutants stored and used at each facility, housekeeping activities to prevent stormwater pollution, and maps of each facility detailing management measures in place for pollutant sources.

With the implemented Inspection Checklists and the SWPPPs, the annual assessment of the MS4 facilities satisfies Section 4.7(c) of the General Permit.

## 5.3 MS4 Facility SWPPP

The Town of Pendleton has implemented a general SWPPP for its owned and operated facilities. These facilities store and use hazardous pollutants which have the potential to degrade water quality if discharged. As with the General SWPPP, each individual SWPPP includes:

- Facility name
- Street address
- Department contact information
- Pollution prevention team and responsibilities
- Site description
- Potential pollutant sources
- Controls or maintenance practices
- Spill prevention and response
- Inspections and reporting
- Plan implementation
- Associated maps of each facility

The SWPPPs are reviewed during annual inspections to determine if updates or changes are necessary. A copy of the Site Inspection Checklist is kept with the SWPPP. As such, the current SWPPPs are in compliance with General Permit Section 4.7(d).

A copy of each facility’s SWPPP can be found in the main office of the facility, in accordance with the General Permit Section 4.7(e).

Facility inspections are completed monthly, which meets the frequency of Section 4.7(f) of the General Permit.

## 5.4 MS4 Stormwater Infrastructure Operations and Maintenance

The following pollution prevention and good housekeeping measures include procedures for inspection, waste material removal, and record keeping for the Town of Pendleton.

- Street Sweeping
- Stormwater structure and conveyance cleaning, inspection, and maintenance
- Automotive Fluid Recycling

Materials and debris gathered during these activities are disposed of at the landfill in accordance with applicable solid waste disposal regulations. All maintenance activities are reported with the date of the activity, location, work performed, type of work completed, and amount of debris removed. These procedures for waste removal meet the requirements in Section 4.7(g)(1) of the General Permit, and the procedures for maintenance documentation meet the requirements of Section 4.7(g)(2).

In order to achieve compliance with the MS4 General Permit Section 4.7(g)(3), a surface visual inspection of all catch basins, outfalls, and conveyance systems must be completed by the end of the five (5) year permit period, with a minimum of 15 percent completed annually. When the inspections indicate erosion occurring at the outfall or conveyance, work orders are generated to ensure corrective action is taken, which meets the requirements of Section 4.7(g)(4).

Currently, the Town of Pendleton Street Department has a street sweeping schedule, street and parking lot maps, and procedures to properly remove and dispose of waste from these areas, including procedures for cleanup after Town events. The MS4 Coordinator has access to and reviews this documentation for street sweeping regularly. As such, the Town is in compliance with Section 4.7(g)(5) of the MS4 General Permit.

Contractors and third-party entities hired by the MS4 to perform maintenance or other operation activities associated with the stormwater system are required to follow procedures in the project contract documents and specifications, which prevent the discharge of pollutants that degrade water quality. This meets the requirements of Section 4.7(j) of the General Permit.

## 5.5 Flood Management and Stormwater Quality Standards

At present the Town of Pendleton reviews stormwater quality structures on a case-by case basis, adding stormwater quality structures or features where appropriate. For private development, projects greater than one (1) acre require stormwater quality structures. These structures are to be reviewed as a part of the permitting process prior to a permit being issued. Please refer to the construction and post-construction sections of this SWQMP for more information regarding permitting and post-construction inspections. Evaluation of new flood control structures retains compliance with Section 4.7(k) of the General Permit.

In order to achieve compliance with the MS4 General Permit Section 4.7(l), existing flood control structures owned by the Town of Pendleton need to be evaluated for options to modify the structure to improve water quality.

## **5.6 Annual Training of MS4 Personnel**

At present, staff from all Town departments which supervise or conduct field operations attend training presentations for the following topics:

- Common stormwater pollutants
- Pollutant impacts on local waters
- Management of stored materials
- Proper disposal and transportation
- Spill Response
- Proper spill reporting and response procedures
- Identification of illicit connections and practices
- Hazardous waste identification
- Hazardous waste generator statuses
- Proper street maintenance procedures
- Proper lawn and landscaping procedures

MS4 employees also attend multiple annual training from the following events:

- Annual MS4 Conference
- Annual IWEA Conference
- Road School

According to the MS4 General Permit Section 4.1(d), MS4 staff responsible for implementing the MS4 program must receive 12 hours of annual training with at least eight (8) of the twelve (12) hours of training distributed amongst the specific minimum control measures (MCMs) for which they are responsible for administering. Using this guidance, the Town of Pendleton has developed a training guidance document for all MS4 employees and non-MS4 employees involved in the application of the Municipal Operations Pollution Prevention and Good Housekeeping program in **Attachment C**.

In order to meet the requirements of the MS4 General Permit, additional training is available for MS4 employees at the [Indiana Association for Floodplain and Stormwater Management \(INAFSM Website\)](#), and the attached INAFSM Educational Resources Help Sheet (**Attachment D**). Additional training modules for specific MCMs and the General Permit are being evaluated and adopted as necessary to meet the requirements of Section 4.7(m).

The training received will be recorded on the Training for MS4 Personnel Reporting Form, which tracks the date training was received, the names of the employees trained, the employee's department, name of the trainer, and the event the training was completed.

Implementation of this MS4 Personnel Form will meet the requirements of Section 4.7(m) of the General Permit.

Training for non-MS4 personnel may be required for individuals which perform tasks which fall under the MS4 MCMs. This may include tasks performed by employees of the Street Department, Water Department, or Wastewater Department. Non-MS4 employee training may include, but is not limited to:

- Spill prevention and clean up
- Facility inspections
- Site-specific stormwater issues
- Permitting requirements
- New technology

New full-time and part-time employees must be trained within the first two months (60 days) of their hire date. Seasonal employees are to be trained within the first month (30 days) of their hire date.

## 5.7 MCM Implementation Schedule

In order to achieve compliance with the requirements of the MS4 General Permit, the Municipal Operations Pollution Prevention and Good Housekeeping program will be updated according to the following schedule in **Table 5-2**.

**Table 5-2**  
**Municipal Operations Pollution Prevention and Good Housekeeping**  
**Implementation Schedule**

General Permit Section	Task	Date
4.7(b)	Review and Update MS4 facility inventory list	Annually
4.7(d)	Review and update facility SWPPPs	Annually
4.7(f)	Perform MS4 facility inspections, at minimum quarterly	Monthly
4.7(g)(3)	Complete a surface visual inspection of all catch basins, outfalls, and conveyance systems	June 30, 2023
4.7(i)	Review and assess the program and update as necessary	Annually
4.7(k)	Evaluate new flood control structures owned and/or operated by the MS4	TBD
4.7(l)	Evaluate existing flood control structures owned and/or operated by the MS4	TBD
4.7(m)	Implement Training for MS4 Personnel Reporting Form	June 30, 2023



**Attachment A.1**

**Madison County Stormwater Quality Partnership Press Release**



## Madison County Storm Water Quality Partnership

### Press Release

### “April is Storm Water Awareness Month”

April is Storm Water Awareness Month throughout Madison County. Storm water run-off occurs when precipitation from rain or snowmelt flows over the ground. Impervious surfaces like driveways, parking lots, sidewalks and streets prevent storm water from naturally soaking into the ground. Storm water can pick up trash, cigarette butts, chemicals, dirt, debris and other pollutants and flow into a storm system or directly into local lakes, rivers, streams, and wetlands. This can have many adverse effects on plants, fish, animals, and people.

The Environmental Protection Agency (EPA) requires designated communities, counties, and entities to create a plan form storm water to protect the environment, ensure public health, and protect receiving waters at the point of introduction of pollution. This plan focuses on six key areas:

- Public Education and Outreach
- Public Participation and Involvement
- Illicit discharge detection and elimination
- Construction site storm water run-off management
- Post construction storm water run-off control
- Good housekeeping and pollution prevention

The Madison County Storm Water Quality Partnership includes the City of Anderson, Anderson University, the City of Alexandria, the Town of Chesterfield, the Town of Pendleton, the Town of Edgewood, the Town of Ingalls, the East Central Indiana Solid Waste District, Madison County, White River Watchers, the Madison County Council of Governments (MCCOG) and the Madison County Soil and Water Conservation District (SWCD) working together to focus our efforts on educating the community about the importance of protecting our environment and local waterways by providing information and resources to help them increase their own stewardship efforts.

Visit [www.mcstormwater.org](http://www.mcstormwater.org) or look for Emmis, the storm water awareness frog, on Facebook, to learn more about the MCSWQP and how to use simple steps to improve storm water quality in your community.

Keep a look out for Emmis at local festivals, Anderson Speedway events and the Madison County 4-H Fair. Emmis says, **“Stay on top of every drop, know where it flows.”**



**Attachment A.1**

**Madison County Stormwater Quality Partnership  
Brochure on Water Quality**



## Madison County Storm Water Quality Partnership

<http://www.mcstormwater.org/>

The Environmental Protection Agency estimates that the single biggest factor affecting water quality today is the pollution that comes from stormwater runoff. When pollutants are carelessly spilled onto hard surfaces and washed away by rains into storm drains, the contaminants eventually enter our rivers and streams where much of our drinking water comes. Making this polluted water safe for consumption is expensive to treat and results in higher water bills for all of us.

*Did you know...*

**Polluted stormwater is the  
#1 cause of water pollution  
in the United States.**

*Look inside to learn about  
what you can do to help!*

Image and Publication Credit: Approved for use by Middle Tennessee State University's WaterWorks Program. Altered for use from original design by MTSU. Funding from TN Dept. of Agriculture's Nonpoint Source Program and US Environmental Protection Agency under Agreement #C9994674-03-0. Image and publication cannot be used, revised or modified without consent from [www.MTSU.edu/WaterWorks](http://www.MTSU.edu/WaterWorks).

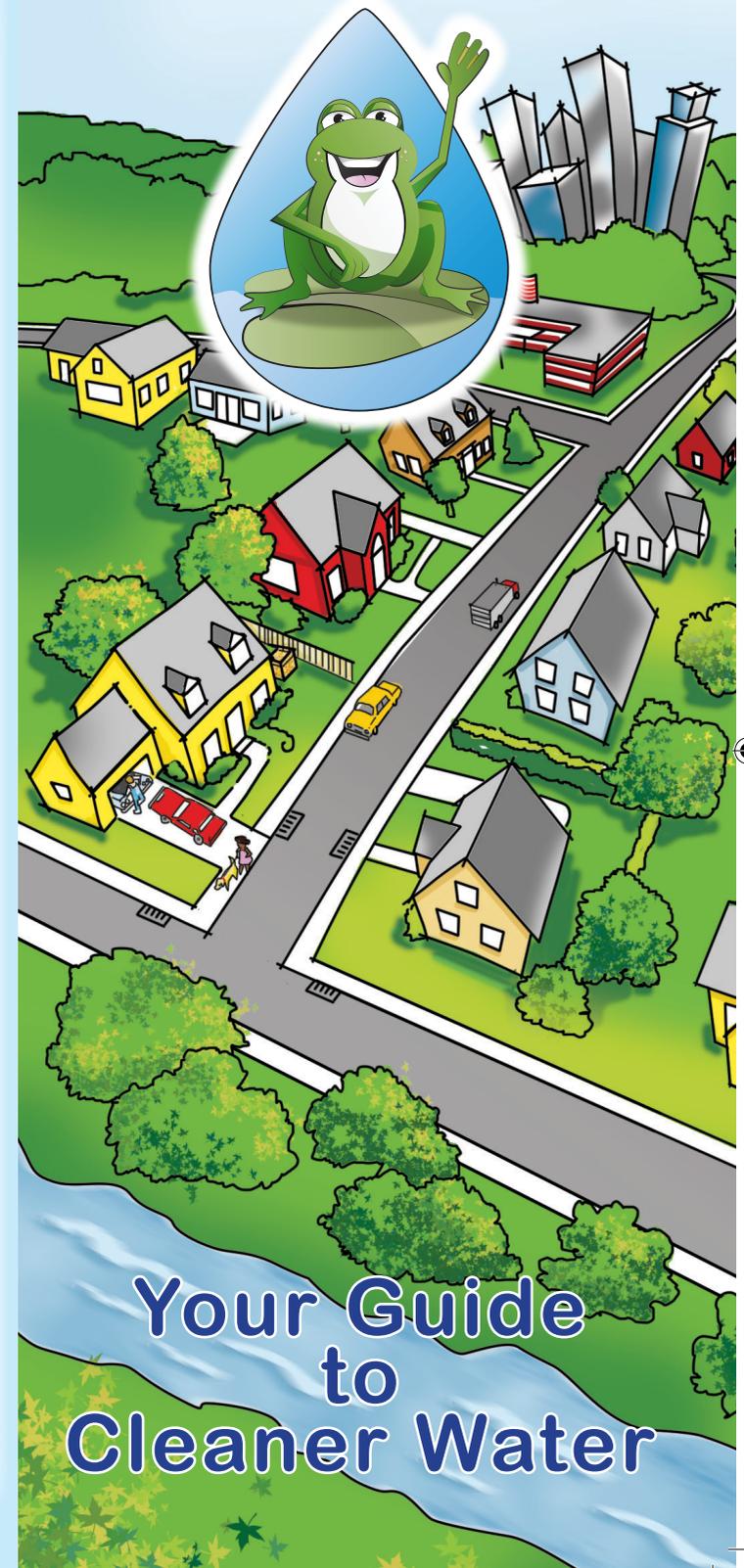
This project is funded by the Madison County Stormwater Quality Partnership, which consists of 12 members who implement activities of public education, outreach, participation, and involvement; detection and elimination of illicit discharges; controlling construction site and post-construction stormwater runoff; and municipal operations pollution prevention and good housekeeping.

***Please contact your local stormwater manager  
for questions or to report a violation or concern:***

Anderson University, Physical Plant  
1100 E. 5th St., Anderson, IN 46012 • (765) 641-4240  
City of Alexandria, Storm Water Superintendent  
125 North Wayne St., Alexandria, IN 46001 • (765) 724-4633  
City of Anderson  
120 E. Eighth St., Anderson, IN 46016 • (765) 648-6118  
Madison County, Drainage Board  
16 East 9th St., Anderson, IN 46016 • (765) 641-9687  
Town of Chesterfield  
17 Veterans Blvd, Chesterfield, IN 46017 • (765) 378-3331  
Town of Edgewood  
3405 Nichol Ave., Edgewood, IN 46011 • (765) 649-5534  
Town of Ingalls  
308 N. Meridian St., Ingalls IN 46048 • (317) 485-4321  
Town of Pendleton, Public Works Department  
100 West State St., Pendleton, IN 46064 • (765) 778-4100

Other Partnership members include:

White River Watchers  
P.O. Box 84, Anderson, IN 46017  
[whiteriverwatchers@comcast.net](mailto:whiteriverwatchers@comcast.net)  
Madison County Soil and Water Conservation District  
182 W 300 N, Anderson, IN 46012 • (765) 644-4249 ext. 3  
Madison County Council of Governments  
739 Main St, Anderson, IN 46016 • (765) 641-9482  
East Central Indiana Solid Waste District  
2031 Mounds Rd, Anderson, IN 46016 • (765) 640-2535



✓ **Don't litter!** Litter on our streets and parking lots can go to the waterway!

Have your septic tank pumped and septic system inspected regularly.

Check car for leaks and recycle used motor oil. Never pour it on the ground or into a storm drain.



Minimize pesticides and herbicides; use low-impact, alternative approaches for control.



Compost leaves and grass or direct them back onto the lawn when mowing!



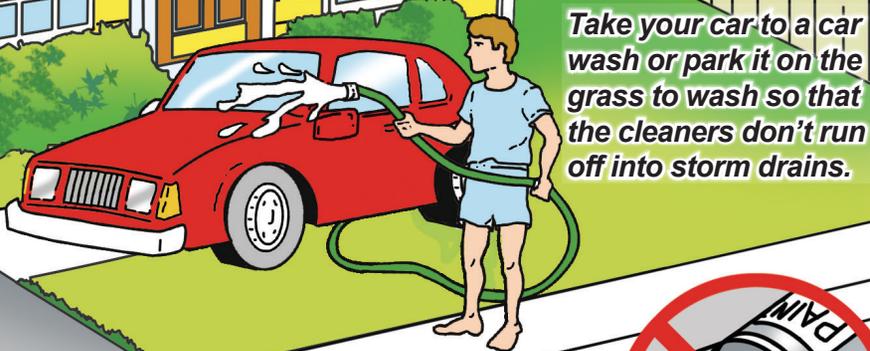
Direct downspouts onto lawns and away from paved surfaces. Or collect and reuse in a rain barrel.



Plant grass or plants on the bare spots in your yard.



Follow directions on fertilizer labels and sweep off driveways, sidewalks, and roads so that the chemicals won't get into storm drains.



Take your car to a car wash or park it on the grass to wash so that the cleaners don't run off into storm drains.



Pick up after your pet. Don't let pet waste wash into storm drains.

NEVER pour any kind of waste into storm drains.

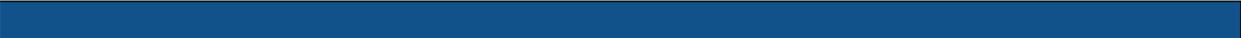


"Please contact your local stormwater utility for more information or to report a violation or concern."

**"Only Rain Down the Drain!"**  
**Clean water begins at home...**  
<http://www.mcstormwater.org/>



"Emmis the Frog"



**Attachment A.1**

**Madison County Stormwater Quality Partnership  
Basic Construction Site Operator's Guide to Erosion and Sediment Control  
Requirements Brochure**

## Tips for Erosion & Sediment Control

### Fit the development to the existing terrain.

Assess the physical characteristics of the site, including topography, soils, and drainage, to determine how best to develop it with minimal environmental damage. Utilize the existing topography to minimize grading. Utilize the natural drainage patterns where possible. Preserve any existing wetland in accordance with the applicable law.

### Develop an erosion and sediment control plan before land-disturbing activities begin, then follow it.

If necessary, get professional help in developing such a plan. The plan should identify the areas where erosion and sedimentation problems are apt to occur on the construction site and specify the measures to reduce those problems.

### Retain existing vegetation.

If existing vegetation must be cleared, retain and protect it until the area must be disturbed. Maintain a buffer strip of existing vegetation around the perimeter of the site to reduce off-site erosion and sedimentation.

### Minimize the exposure of bare soil.

Use staged clearing and grading (scheduling) to reduce the amount of bare soil and other disturbed area. Use stabilizing measures, such as seeding temporary or permanent vegetation, sod, mulching, sediment basins, erosion control blankets, or other protective practices after the land has been disturbed.

### Keep sediment on the construction site.

Retain sediment from unavoidable erosion onsite by trapping it with sediment basins or by filtering it out of runoff with vegetative or manmade barriers. Install any needed sediment traps and basins before construction activities begin.

### If possible, divert off-site runoff.

Use diversions, perimeter dikes, and waterways to intercept offsite run-off and divert it away from the construction site. Install these measures before clearing and grading to reduce the potential for erosion.

### Minimize length and steepness of slopes.

Use stair-step grading, diversions, and sediment barriers to break up long, steep slopes. Design measures to slow run-off and allow deposition of sediment.

### Keep runoff velocity low.

Reduce runoff velocity by maintaining vegetative cover, preserving a vegetated buffer strip around the lower perimeter of the land disturbance, and installing perimeter controls.

### Inspect and maintain erosion control measures.

Inspect all measures for damage after each storm event, or once every seven calendar days. Repair any damaged measure, such as sediment barriers, silt fences, filters, dikes, or sediment traps.

### ADDITIONAL INFORMATION:

Madison County Soil and Water Conservation District: (765) 644-4249 Ext. 3, or, <http://www.madisonswcd.org/rule5.html>

City of Anderson Department of Storm Water Management: (765) 648-6129

IDEM's Storm Water Quality Manual: <http://www.in.gov/idem/4899.htm>

IDEM Storm Water Quality Manual exhibits and worksheets: <http://www.in.gov/idem/4899.htm>



## Basic Construction Site Operator's Guide to Erosion and Sediment Control Requirements



## Your Work Site May Need Coverage Under Indiana's Rule 5 Permit

*Prepared by Madison County Soil & Water Conservation District, Madison County, and the City of Anderson*

## Does my construction site require a Rule 5 Permit?

-Does your construction project site disturb one acre or more of land through removing vegetative cover, clearing, grading, excavating, or stockpiling of fill material? Remember to count the entire acreage within the project limits.

-Is your construction project less than one acre, but part of a larger common plan of development or sale?

If you answered yes to either of these Questions, you will need permit coverage.

## Why do I have to get permit coverage?

327 IAC 15-5 (Rule 5) is an Indiana State regulation administered by the Indiana Department of Environmental Management (IDEM) and is designed to reduce pollutants that are associated with construction and/or land disturbing activities. The requirements of Rule 5 apply to all persons who are involved in construction activity that includes clearing, grading, excavation and other land disturbing activities. The purpose of this regulation is to establish requirements for storm water discharges from construction activities so public health, existing water uses and aquatic life are protected.

## If I need a Rule 5 permit, what should I do?

1. Determine the reviewing entity in the area where your project will take place. The reviewer in Madison County is the Madison County Soil and Water Conservation District (MCSWCD).

2. Develop Erosion and Sediment Control and Storm Water Pollution Prevention Plans and submit to the MCSWCD. Some private consulting firms provide the type of assistance needed to prepare these plans.

3. Submit the required Erosion and Sediment Control Plans to the MCSWCD and the City/Town/County.

4. After approval by the MCSWCD, submit your Notice of Intent, Proof of Publication and fees to IDEM. Submit copies of these documents to the MCSWCD.

5. Implement the Erosion and Sediment Control Plans on your site. Conduct regular inspections as required ensuring erosion control practices are functioning properly.

6. After completion of your project, stabilize the areas and remove Erosion and Sediment Control Measures no longer needed.

7. Submit a Notice of Termination to the MCSWCD.

## Am I required to install erosion and sediment control measures if my land-disturbing activity does not require a Rule 5 permit?

YES – Contact the City/Town/County where the work is being done to get their regulations for Erosion and Sediment Control.

For projects in the City of Anderson, go to the City of Anderson Operation MS4 website:

<http://www.operationms4.com/cityofanderson/>

Click on **Packet C** to submit a waiver and to obtain a copy of the City's Erosion and Sediment Control Requirements.

## Why is storm water runoff an issue?

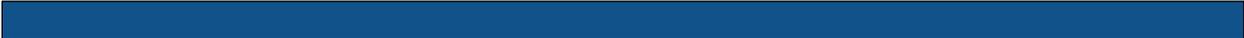
Runoff from rainstorms and snowmelt picks up pollutants like sediment, oil and grease, pesticides, herbicides and other pollutants and carries them into storm drains or directly into bodies of water. Because most storm drain systems do not provide any treatment to the water they collect, preventing contamination of stormwater is critically important, or polluted runoff will be discharged untreated into the bodies of water we use for swimming, fishing, and drinking water.

## Why is sediment harmful to a body of water?

Too much sediment in a body of water can cloud the water and make it difficult or impossible for aquatic plants to receive the sunlight they need to grow. Excess sediment also smothers aquatic habitat, clogs fish gills, and impedes navigation in our waterways, which can lead to expensive dredging.

Madison County Soil & Water Conservation District





**Attachment B**

**Outfall Reconnaissance Inventory Field Sheet**

## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID:	
Today's date:		Time (Military):	
Investigators:		Form completed by:	
Temperature (°F):	Rainfall (in.):	Last 24 hours:	Last 48 hours:
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera:		Photo #s:	
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other: _____	
<input type="checkbox"/> Commercial		Known Industries: _____	
Notes (e.g., origin of outfall, if known):			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input type="checkbox"/> Circular <input type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: _____	In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____	
<input type="checkbox"/> In-Stream	<b>(applicable when collecting samples)</b>			
Flow Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow?  Yes  No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 – Faint	<input type="checkbox"/> 2 – Easily detected	<input type="checkbox"/> 3 – Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 – Faint colors in sample bottle	<input type="checkbox"/> 2 – Clearly visible in sample bottle	<input type="checkbox"/> 3 – Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 – Slight cloudiness	<input type="checkbox"/> 2 – Cloudy	<input type="checkbox"/> 3 – Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 – Few/slight; origin not obvious	<input type="checkbox"/> 2 – Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present?  Yes  No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

### Section 6: Overall Outfall Characterization

<input type="checkbox"/> Unlikely <input type="checkbox"/> Potential (presence of two or more indicators) <input type="checkbox"/> Suspect (one or more indicators with a severity of 3) <input type="checkbox"/> Obvious
---

### Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow	<input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes	<input type="checkbox"/> No    If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



**Attachment C**  
**MS4 Employee Training Requirements**

## MS4 EMPLOYEE TRAINING REQUIREMENTS

Under the MS4 general permit, MS4 staff are to undergo annual training for the programs which they are responsible for implementing. All full-time MS4 personnel are required under Section 4.1(d), to complete twelve (12) hours of annual training, with at least eight (8) of these training hours distributed amongst specific MCMs that they are responsible to administrate. The following MCM training requirements are summarized:

- **Section 4.4(g):** IDDE training requirements
- **Section 4.5(j):** Construction site stormwater run-off training requirements
- **Section 4.6(i):** Post-construction stormwater run-off training requirements
- **Section 4.7(m):** Municipal Operations Pollution Prevention and good housekeeping training requirements

To meet the requirements of the MS4 General Permit, the SWQMP has outlined training requirements and resources to be utilized for the implementation of training for MS4 employees. The first two sections of this document detail the training requirements of MS4 employees and non-MS4 employees, while Sections 3 through 6 reiterate the training requirements as stated in the MS4 General Permit.

### 1 MS4 Employee/Coordinator Training Requirements

According to Section 4.1(d) of the MS4 General Permit, MS4 staff (including the MS4 Coordinator) responsible for implementing the MS4 program must receive twelve (12) hours of annual training. At least eight (8) hours of the twelve (12) hours of training is to be distributed across the specific minimum control measures for which the employee is responsible for administering.

MS4 Staff are any employees who are responsible for administering an MCM and provide oversight of the MS4 program. Non-MS4 employees are any employees who perform tasks related to an MCM, but are not responsible for administering the MCM or providing oversight of the MS4 program.

For MS4 Employees and the MS4 Coordinator, the twelve (12) hours of training must be divided among the four (4) MCMs with training requirements:

- MCM 2 – Illicit Discharge Detection and elimination
- MCM 3 – Construction Site Stormwater Run-off Control
- MCM 4 – Post-Construction Site Stormwater Run-off Control
- MCM 5 – Municipal Operations Pollution Prevention and Good Housekeeping

If the twelve (12) hours were to be distributed evenly among the above MCMs, each MCM would require three (3) hours of training for each MS4 employee. Additionally, MS4 overview or general training can also be utilized. To break this down further, as an example, please refer to **Table 1** which has been created to demonstrate the number of hours required for MS4 employees and the MS4 Coordinator.

**Table 1**  
**Example MS4 Employee/Coordinator Training Requirements**

<b>Category</b>	<b>Example 1 - Training Hours</b>	<b>Example 2 - Training Hours</b>
General MS4	-	2
Illicit Discharge Detection and Elimination	3	2
Construction Site Stormwater Run-off	3	3
Post-Construction Site Stormwater Run-off Control	3	3
Municipal Operations Pollution Prevention and Good Housekeeping	3	2
<b>Total Hours</b>	<b>12</b>	<b>12</b>

All training completed by MS4 employees must be documented to include:

- Staff names,
- Staff Title,
- Program responsibilities,
- Training Title,
- Content overview,
- Training Provider/Speakers,
- Date, and
- Duration

This documentation must also include professional certifications employees have earned or maintain.

## **2 Non-MS4 Employee Training Requirements**

Non-MS4 employees are any employees who perform tasks related to an MCM, but are not responsible for administering the MCM. According to the IDEM OWQ Stormwater Section, non-MS4 employees who have normal responsibilities relating to an MCM are required to undergo annual training with no specified time requirements. It is then recommended that the MS4 coordinator facilitates training concurrently with the

employee's annual safety training requirements. Training videos may be brief (under 15 minutes) and training topics should directly relate to an employee's responsibilities such as the examples found at the beginning of this document.

All seasonal, part time, and full-time new hires are required to undergo annual Municipal Operations Pollution Prevention & Good Housekeeping training with no specified time requirements as further outlined in Section 6 of this document.

All training completed by non-MS4 employees must be documented to include:

- Staff names,
- Staff Title,
- Program responsibilities,
- Training Title,
- Content overview,
- Training Provider/Speakers,
- Date, and
- Duration

### **3 IDDE Training Requirements**

In accordance with Section 4.4(g) of the MS4 General Permit, an IDDE employee (non-MS4 or MS4) training program must be implemented no later than 180 days after submittal of the updated SWQMP. Annual training must be provided to employees responsible for investigating an illicit discharge or illicit connection to the stormwater conveyance system. At a minimum, documentation of training must adhere to the requirements outlined in Section 1 and Section 2 of this document, respective to their role as either MS4 Staff or Non-MS4 Staff.

### **4 Construction Site Stormwater Run-Off Training Requirements**

Employees and/or contractual staff (non-MS4 or MS4) responsible for administering the Construction Site Stormwater Run-Off MCM must complete annual training specific to their responsibilities, which may include:

- Plan reviews
- Inspections
- Compliance
- Enforcement

At a minimum, documentation of training must adhere to the requirements outlined in Section 1 and Section 2 of this SWQMP, respective to their role as either MS4 Staff or Non-MS4 Staff. Documenting this training satisfies the requirements of Section 4.5(j) of the MS4 General Permit.

## 5 Post-Construction Site Stormwater Run-Off Training Requirements

Employees (non-MS4 or MS4) administering the Post-Construction Site Stormwater MCM must complete training relevant to their responsibilities. These responsibilities may include:

- Plan reviews
- Inspections
- Compliance
- Enforcement

At a minimum, documentation of training must adhere to the requirements outlined in Section 1 and Section 2 of this SWQMP, respective to their role as either MS4 Staff or Non-MS4 Staff. Documenting this training satisfies the requirements of Section 4.6.(i) of the MS4 General Permit.

## 6 Municipal Operations Pollution Prevention & Good Housekeeping Training Requirements

According to Section 4.7(m) of the MS4 General Permit, the MS4 must develop an annual training program for **ALL employees involved in implementing good housekeeping for MS4 owned and/or operated infrastructure and facilities**. Training topics must be directly related to the employee's responsibilities and may include, but are not limited to:

- New technology
- Operations
- Fueling spill prevention and clean-up
- Additional responsibilities
- Site specific stormwater run-off issues
- Staff-specific permit requirements
- SWPPP reviews

Training for the Municipal Operations Pollution Prevention & Good Housekeeping MCM must be provided to full-time, part-time, and seasonal employees according to the following schedule:

- Full time and part-time employees must be trained within the first two months (60 days) of their hire date.
- Seasonal employees must be trained within the first thirty (30) days

At a minimum, documentation of training must adhere to the requirements outlined in Section 1 and Section 2 of this SWQMP, respective to their role as either MS4 Staff or Non-MS4 Staff. Documentation of employee training satisfies Section 4.7(m)(3) of the MS4 General Permit.



**Attachment D**

**INAFSM Education Resources Help Sheet**



Prepared by the INAFSM Stormwater Committee

## EDUCATIONAL RESOURCES FOR MS4s

The Stormwater Committee has compiled various webinars, videos, and other resources for MS4s to use for elected officials, administrative personnel, municipal operations employees, and construction/post-construction personnel.

**Tippecanoe County Partnership for Water Quality (TCPWQ)** – TCPWQ produced a series of videos for training MS4 employees.

1. Good Housekeeping and Pollution Prevention: Module 1 – [Why Do We Have To Do What We're Doing?](#) Duration: 12:42.
2. Good Housekeeping and Pollution Prevention: Module 2 – [How to Identify the Problem?](#) Duration: 10:33.
3. Good Housekeeping and Pollution Prevention: Module 3 – [Which Products Cause Us Concern?](#) Duration: 11:43.
4. Good Housekeeping and Pollution Prevention: Module 4 – [How to Control the Problem?](#) Duration: 17:43.
5. Good Housekeeping and Pollution Prevention: Module 5 – [Cleanup – What Do I Do With This Stuff?](#) Duration: 9:50.
6. Spill Prevention, Control, and Countermeasures – [Spill Prevention Training Module](#). Duration: 22:09.

**Toledo Metropolitan Area Council of Governments (TMACOG)** - TMACOG produced series of videos and posters to help workers meet regulations and protect stormwater during shop and maintenance operations.

1. [Training Playlist](#) on YouTube.
2. [TMACOG Good Housekeeping & Pollution Prevention for Municipal Crews | Introduction to Series - YouTube](#). Date: 9/18/20. Duration: 4:42
3. [TMACOG Good Housekeeping & Pollution Prevention for Municipal Crews | Spill Response - YouTube](#). Date: 9/18/2020. Duration: 2:09.
4. [TMACOG Good Housekeeping & Pollution Prevention | Materials Storage, Handling, and Clean up - YouTube](#). Date 9/18/2020. Duration: 4:30.
5. [TMACOG Good Housekeeping & Pollution Prevention for Municipal Crews | Streets Maintenance - YouTube](#). Date: 9/18/20. Duration: 4:20
6. [TMACOG Good Housekeeping & Pollution Prevention for Municipal Crews | Parks and Grounds Management - YouTube](#). Date: 9/18/2020. Duration: 4:42

**San Diego County, CA Department of Public Works (website)** – multiple videos discussing erosion and sediment controls to municipal operations.

1. [Stormwater Strategies: Housekeeping - YouTube](#). Video reviews municipal operations BMPs and housekeeping. Date: 8/16/2011. Duration: 14:03.
2. [Stormwater Strategies: Erosion & Sediment Control - YouTube](#). Review of erosion and sediment control using BMPs. Date: 7/5/11. Duration: 9:12.

**Stormwater Partners of SW Washington (website)** - Independent coalition of jurisdictions, agencies and non-profit organizations working together to protect water quality and watersheds in SW Washington.

1. [Training Playlist](#) on YouTube.
2. [Stormwater Facilities](#). Extensive information on stormwater facilities (ponds, catch basins, drywells, swales, etc.) including maintenance manuals and trouble-shooting problems.
3. [Stormwater runoff - YouTube](#). Video What is stormwater runoff and its effect on our environment. Also, how stormwater facilities work and who is responsible for their upkeep. Date: 4/20/2011. Duration: 5:15.
4. [Preventing Pollution – Businesses](#). Information for businesses on wastes and spills.
5. [Stormwater management: the basics - YouTube](#). An introduction to stormwater and how we can protect the health of waterways and reduce the risk of flooding. Date: 2/21/2011. Duration: 7:17.



Prepared by the INAFSM Stormwater Committee

## EDUCATIONAL RESOURCES FOR MS4s

### U.S. Environmental Protection Agency – [NPDES Stormwater Webcasts](#)

1. [EPA: The Scoop on Stormwater - YouTube](#). Review of water pollution in urban areas. Date: 07/18/2017. Duration 1:43.
2. [Construction SWPPPs from A to Z: Everything You Ever Wanted to Know and More - YouTube](#). Duration: 2:06:05. Date 12/16/2015.
3. [Developing Your IDDE Program \(IDDE 101\) - YouTube](#). Provides a basic overview of how municipal stormwater permittees can develop an illicit discharge detection and elimination program. Date: 12/16/2015. Duration: 2:09:04.
4. [Conducting Illicit Discharge Detection and Elimination Investigations \(IDDE 201\) - YouTube](#). Discusses the field and lab methods necessary to conduct IDDE investigations. Date: 12/16/2015. Duration: 1:58:15.
5. [Illicit Discharge Detection and Elimination IDDE 301 - YouTube](#). Focuses on finding and eliminating illicit discharges. Topics include methods for tracing illicit discharges to their sources via various methods and eliminating illicit discharges. Date: 12/16/2015. Duration: 2:00:39.
6. [EPA's Stormwater Pollution Prevention Webinar Series - YouTube](#). Discusses stormwater, coal-tar sealcoats, and polycyclic aromatic hydrocarbons. Date: 12/16/2015. Duration: 2:45:28.
7. [EPA's Stormwater Pollution Prevention Webinar Series: Road Salt Pollution Prevention Strategies - YouTube](#). Provides information on the impacts of road salt on the environment, implementation of TMLDs involving road salt, successful reduction strategies used by states, and possible groundwater impacts. Date: 12/16/2015. Duration: 2:11:03.

### City of Columbia, Missouri – Michael J. Heimos. Series of short videos on municipal operations.

1. [Training Playlist](#) on YouTube.
2. [Waste Management - YouTube](#). Date: 11/24/2020. Duration: 2:45.
3. [Municipal Facility Management - YouTube](#). Date: 11/24/2020. Duration: 2:01.
4. [Landscaping & Ground Maintenance - YouTube](#). Date: 11/24/2020. Duration: 4:05.
5. [Spill Control - YouTube](#). Date: 11/24/2020. Duration: 2:19.
6. [Good House Keeping - YouTube](#). Date: 11/24/2020. Duration: 2:48.
7. [Material Management - YouTube](#). Date: 11/24/2020. Duration: 2:49.
8. [Vehicle Fuel - YouTube](#). Date: 11/24/2020. Duration: 2:12.
9. [Parking Lots & Streets - YouTube](#). Date: 11/24/2020. Duration: 2:07.
10. [Vehicle Wash - YouTube](#). Date: 11/24/2020. Duration: 2:16.
11. [Storm Drains - YouTube](#). Date: 11/24/2020. Duration: 1:22.
12. [Vehicle Maintenance - YouTube](#). Date: 11/24/2020. Duration: 1:15.
13. [Working Over Or Near Water Surfaces - YouTube](#). Date: 11/24/2020. Duration: 2:01.
14. [Good House Keeping - YouTube](#). Date: 11/24/2020. Duration: 2:48.



Prepared by the INAFSM Stormwater Committee

## EDUCATIONAL RESOURCES FOR MS4s

**University of British Columbia, Land and Food Systems** ([mlws.landfood.ubc.ca](http://mlws.landfood.ubc.ca)) – video series on Urban Stormwater Management.

1. [Training Playlist](#) on YouTube.
2. [Introduction to Innovative Stormwater Management - YouTube](#). Date: 2/19/2014. Duration: 4:49.
3. [Innovative Stormwater Management at the Property Scale - YouTube](#). Date: 2/19/2014. Duration: 15:34.
4. [Innovative Stormwater Management at the Neighbourhood Scale - YouTube](#). Date: 2/24/2014. Duration: 14:18.
5. [Innovative Stormwater Management at the Watershed Scale - YouTube](#). Date: 3/5/2014. Duration: 10:11.

**Center for Watershed Protection** (<https://www.cwp.org/>) – several videos on construction BMPs and LID. Created by Chesapeake Stormwater Network.

1. [Weekly webcasts](#). Subjects vary.
2. [Training Playlist](#) on YouTube.
3. [Stormwater BMP & LID Maintenance - YouTube](#). Date: 12/17/2012. Duration: 14:59.
4. [LID Stormwater Construction Practices - YouTube](#). Date: 11/7/2012. Duration: 14:58.
5. [Inspecting LID Stormwater Practices - YouTube](#). Date: 11/30/2012. Duration: 11:29.
6. [BMP Construction \(Spanish\) - YouTube](#). Date: 4/19/2010. Duration: 18:12.
7. [BMP Maintenance \(Spanish\) - YouTube](#). Date: 4/19/2013. Duration: 16:51.
8. [Stormwater Retrofitting - YouTube](#). Date: 8/11/2011. Duration: 5:01.

**Virginia Department of Transportation (VDOT)** – Videos provide training for contractors and Street Department personnel.

1. [Training Playlist](#) on YouTube.
2. [VDOT Good Housekeeping and Pollution Prevention Training - YouTube](#). Date: 5/16/2019. Duration: 7:10.
3. [VDOT Best Practices – Maintenance – Tree trimming and removal of downed trees - YouTube](#). Date: 8/17/2018. Duration: 4:38.
4. [VDOT Best Practices – Maintenance – Skin Patching - YouTube](#). Date: 8/17/2018. Duration: 5:05.
5. [VDOT Best Practices – Maintenance – Pothole Patching - YouTube](#). Date: 8/17/2018. Duration: 5:05.
6. [VDOT Best Practices – Maintenance – Gravel Road Maintenance - YouTube](#). Date: 8/17/2018. Duration: 5:32.
7. [VDOT Best Practices – Maintenance, Snow Removal Equipment Desalting - YouTube](#). Date: 8/17/2018. Duration: 5:06.
8. [VDOT Best Practices – Maintenance, Concrete Bridge Deck Patching - YouTube](#). Date: 8/17/2018. Duration: 3:45.
9. [VDOT: Shoulder maintenance - YouTube](#). Date: 9/5/2018. Duration: 3:31.



Prepared by the INAFSM Stormwater Committee

## EDUCATIONAL RESOURCES FOR MS4s

### Misc. Videos and Training:

1. [Erosion & Sediment Control Inspection Basics - YouTube](#). The inspection basics for construction erosion and sediments. Provided by Ohio EPA. Date: 5/29/2013. Duration: 11:18.
2. [NPDES Refresher Training: Erosion & Sedimentation Control - YouTube](#). This refresher course in Stormwater Pollution Prevention covers erosion and sedimentation control or E&SC, and is intended to be a brief refresher course to help staff and contractors review the E&SC concepts. Provided by Water Atlas and Orange County, FL. Date: 4/30/2018. Duration: 28:15.
3. [Stormwater Pollution & Green Infrastructure Solutions - YouTube](#). An educational film on Stormwater Pollution and Green Infrastructure. Provided by Nassau County Soil and Water Conservation District and the New York State Department of Environmental Conservation ([website](#)). Date: 1/27/2016. Duration: 29:29.
4. [Parks Staff Keep Water Clean](#). A video over landscaping, repairs, and maintenance specific to Parks Departments. Provided by Minnesota State Academy for Parks Maintenance, Preservation and Beautification. Date: 4/23/2018. Duration: 11:43.
5. [How to Spot and Report Stormwater Pollution - YouTube](#). North Central Texas Council of Governments and the Illicit Discharge Detection and Elimination Task Force. This video is a tool to train non-storm water, municipal personnel to be able to recognize and report water pollution while traveling the community to conduct municipal business. Date: 10/1/2013. Duration: 7:06.
6. [Inspecting LID Stormwater Practices - YouTube](#). Review of LID features and functions, inspections, and management. Provided by Center for Watershed. Date: 11/30/2012. Duration: 11:29.
7. [MCM 6 Pollution Prevention/Good Housekeeping - Minnesota Stormwater Manual \(state.mn.us\)](#). The Minnesota Pollution Control Agency provides various resources, fact sheets, and videos on PP & GH.
8. Partners for a Clean Environment (PACE), Colorado – [Municipal Stormwater Operations](#)
9. Local Technical assistance Program (LTAP), Purdue – training events are posted on [website](#).

### Other Training Resources:

1. NPDES Training Institute ([website](#)) – Stormwater training and certification for MS4, Construction, Industrial, and Green Infrastructure Stormwater Inspectors.
2. Stormwater One ([website](#)) – online training and credentials. Some courses are paid, but there are some that are free. [Free Training \(stormwaterone.com\)](#).
3. Excal Visual, Inc. ([website](#)) – online and purchased storm water training.
4. International Erosion Control Associations (IECA) – various live webinars and on-demand courses through their [eHUB](#).
5. NPDES Stormwater Center ([website](#)) – various live webinars and on-demand courses.
6. Continuing Education & Development ([website](#)) – online courses for erosion and sediment control.
7. Hoosier Riverwatch ([website](#)) – hosts various workshops.
8. Indiana Master Naturalist Program ([website](#)) – provides classes on natural resources.



**Attachment E**  
**SWPPP Review Sheet**



## Plan Review Information

- The technical review and comment is intended to evaluate the completeness of the Construction/Stormwater Pollution Prevention Plan for the project. The Plan submitted was not reviewed for the adequacy of engineering design. All measures included in the plan, as well as those recommended in the comments should be evaluated as to their feasibility by a qualified individual with structural measures designed by a qualified engineer. The Plan has not been reviewed for other local, state, or federal permits that may be required to proceed with this project.
- Additional information, including design calculations may be requested to further evaluate the plan.
- All proposed stormwater pollution prevention measures and those referenced in this review must meet the design criteria and standards set forth in the "Indiana Stormwater Quality Manual" from the Indiana Department of Environmental Management or similar Guidance Documents.
- Construction activities and unforeseen weather conditions may affect the performance of the erosion and sediment control system, individual measures, or the effectiveness of the plan. The plan must be a flexible document, with provisions to modify or substitute measures as necessary to ensure compliance.

## Section A: Construction Plan Elements

Adequate	Deficient	NA	A	
				<i>The construction plan elements include general information associated with the project site that are critical for the evaluation of the stormwater pollution prevention plan component. This information includes, but is not limited to an index, resource information, reference maps, grading information, project layout and design, and drainage plan</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	Index of the location of required plan elements in the construction plan
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	A vicinity map depicting the project site location in relationship to recognizable local landmarks, towns, and major roads
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	Narrative of the nature and purpose of the project
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	Latitude and longitude to the nearest fifteen (15) seconds
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	Legal description of the project site
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6	11 X 17-inch plat showing building lot numbers/boundaries and road layout/names
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7	Boundaries of the one hundred (100) year floodplains, floodway fringes, and floodways
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8	Land use of all adjacent properties
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9	Identification of a U.S. EPA approved or established TMDL
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10	Name(s) of the receiving water(s)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	11	Identification of discharges to a water on the current 303d list of impaired waters and the pollutant(s) for which it is impaired
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	12	Soil map of the predominant soil types
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	13	Identification and location of all known wetlands, lakes and water courses on or adjacent to the project site (construction plan, existing site layout)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	14	Identification of any other state or federal water quality permits or authorizations that are required for construction activities
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15	Identification and delineation of existing cover, including natural buffers
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	16	Existing topography at a contour interval appropriate to indicate drainage patterns
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17	Location(s) of where run-off enters the project site
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	18	Location(s) of where run-off discharges from the project site prior to land disturbance
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	19	Location of all existing structures on the project site
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	20	Existing permanent retention or detention facilities, including manmade wetlands, designed for the purpose of stormwater management
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	21	Locations where stormwater may be directly discharged into ground water, such as abandoned wells, sinkholes, or karst features
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	22	Size of the project area expressed in acres

Adequate	Deficient	NA	A	<i>The construction plan elements include general information associated with the project site that are critical for the evaluation of the stormwater pollution prevention plan component. This information includes, but is not limited to an index, resource information, reference maps, grading information, project layout and design, and drainage plan</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	23	Total expected land disturbance expressed in acres
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	24	Proposed final topography
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	25	Locations and approximate boundaries of all disturbed areas
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	26	Location, size, and dimensions of all stormwater drainage systems, such as culverts, storm sewers, and conveyance channels
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	27	Locations of specific points where stormwater and non-stormwater discharges will leave the project site
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	28	Location of all proposed site improvements, including roads, utilities, lot delineation and identification, proposed structures, and common areas
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	29	Location of all on-site soil stockpiles and borrow areas
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	30	Construction support activities that are expected to be part of the project
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	31	Location of any in-stream activities that are planned for the project including, but not limited to stream crossings and pump arounds
<p><b>Section A – Comments:</b></p> <ul style="list-style-type: none"> <li>Evaluate areas with potential waters of the state and, where required, verify if permits/authorizations are required prior to any impacts to waters of the state. These potential resources include areas with hydric soil, hydrophytic vegetation, pooling water, or evidence of flowing water such as swales, ditches, drains, or natural conveyances. Evaluation of hydric soil, hydrophytic vegetation, or pooling water should conform to the US Army Corps of Engineers Wetlands Delineation Manual," Technical Report Y-87-1, and the applicable regional supplement <a href="https://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/reg_supp/">https://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/reg_supp/</a>. Avoidance and minimization of impacts to waters of the state should be prioritized.</li> <li></li> </ul>				

**Section B: Stormwater Pollution Prevention Plan – Erosion and Sediment Control/Project Site Management**

Adequate	Deficient	NA	<b>B</b>	<i>The construction component of the Stormwater Pollution Prevention Plan includes stormwater quality measures to address erosion, sedimentation, and other pollutants associated with land disturbance and construction activities. Proper implementation of the plan, maintenance of measures, and administering a self-monitoring program is required to manage the project site to minimize the discharge of sediment and other pollutants. Construction activities and unforeseen weather conditions may affect the performance of the erosion and sediment control system, individual measures, or the effectiveness of the plan. The plan must be a flexible document, with provisions to modify or substitute measures as necessary to ensure compliance.</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>1</b>	Description of the potential pollutant generating sources and pollutants, including all potential non-stormwater discharges
Where applicable, Items in 2 through 10 below will be evaluated for Location, dimensions, detailed specifications, and construction details				
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>2</b>	Stable construction entrance locations and specifications
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>3</b>	Specifications for temporary and permanent stabilization
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>4</b>	Sediment control measures for concentrated flow areas
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>5</b>	Sediment control measures for sheet flow areas
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>6</b>	Run-off control measures
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>7</b>	Stormwater outlet protection locations and specifications
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>8</b>	Grade stabilization structure locations and specifications
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>9</b>	Dewatering applications and management methods
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>10</b>	Measures utilized for work within waterbodies
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>11</b>	Maintenance guidelines for each proposed temporary stormwater quality measure
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>12</b>	Planned construction sequence describing the relationship between implementation of stormwater quality measures in relation to land disturbance
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>13</b>	Provisions for erosion and sediment control on individual building lots regulated under the proposed project
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>14</b>	Material handling and spill prevention and spill response plan meeting the requirements in 327 IAC 2-6.1
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>15</b>	Material handling and storage procedures associated with construction activity

**Section B – Comments:**

- Stormwater quality measures for the reduction of sediment have not been evaluated for adequacy of design. The proposed measures included in this SWP3 are being accepted based on the design engineer’s submittal.
-

**Section C: Stormwater Pollution Prevention Plan – Post-Construction**

Adequate	Deficient	NA	<b>C</b>	<i>The post-construction component of the Stormwater Pollution Prevention Plan includes the implementation of stormwater quality measures to address pollutants that will be associated with the final project land use. Post-construction stormwater measures should be functional upon completion of the project. Long term functionality of the measures is critical to their performance and should be monitored and maintained.</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>1</b>	Description of pollutants and their sources associated with the proposed land use
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>2</b>	Description of proposed post-construction stormwater measures
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>3</b>	Plan details for each stormwater measure
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>4</b>	Sequence describing stormwater measure implementation
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>5</b>	Maintenance guidelines for proposed post-construction stormwater measures
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>6</b>	Entity that will be responsible for operation and maintenance of the post-construction stormwater measures

**Section C – Comments:**

- Post-construction stormwater quality and quantity measures have not been evaluated for adequacy of design. The proposed measures included in this SWP3 are being accepted based on the design engineer’s submittal.
- The rate of stormwater run-off and/or volume from the project site must meet local requirements to address stormwater quantity as established by ordinance or other regulatory mechanism. When a local requirement does not exist, the post-development run-off discharge from the project site must not exceed the pre-development discharge based on the two-year, ten-year, and one-hundred-year peak storm events.
-



**Attachment F**  
**Construction Site Field Inspection Form**

# CONSTRUCTION SITE OBSERVATION REPORT

(To Be Completed by Property Owner or Agent)

## 1. Compliance Requirements

All stormwater pollution prevention BMPs shall be inspected and maintained as needed to document the performance of their intended function during construction. Monitoring of BMPs shall continue until the entire site has been stabilized and a signed copy of Termination Inspection Checklist has been completed and submitted. An inspection of the project site must be completed by the end of the next business day following each measurable storm event. If there are no measurable storm events within a given week, the site should be monitored at least once in that week. Maintenance and repair shall be conducted in accordance with the approved site plans. This log shall be kept as a permanent record and must be made available to the Town of Pendleton, in an organized fashion, within forty-eight (48) hours of a request. Note: This Construction Site Observation Report incorporates items from the 2018 INDOT Storm Water Management Field Guide.

## 2. Inspection Details

Project Name:	IDEM Permit No. ("INR" followed by 6 digits):
Address/Lot #:	Inspection Performed By:
<b>Type of Inspection</b> (Check all that apply):	
<input type="checkbox"/> Routine Inspection <input type="checkbox"/> Measurable Storm Event Related (Must complete Section 3) <input type="checkbox"/> Final Site inspection	
<b>Stages of Construction</b> (Check all that apply):	
<input type="checkbox"/> Land Development <input type="checkbox"/> Inactive <input type="checkbox"/> Vertical Construction <input type="checkbox"/> Post-Construction	
<b>Weather Conditions</b> (Check all that apply):	
<input type="checkbox"/> Dry <input type="checkbox"/> Wet <input type="checkbox"/> Flooded <input type="checkbox"/> Frozen Ground	
<b>Discharge Description</b> (Check all that apply):	
<input type="checkbox"/> None <input type="checkbox"/> Sheen <input type="checkbox"/> Turbid <input type="checkbox"/> Debris <input type="checkbox"/> Clear <input type="checkbox"/> Color	

**3. For "Measurable Storm Event Related" Inspection Only** A "Measurable Storm Event" is a precipitation event that results in a total measured precipitation accumulation equal to, or greater than, one-half (0.5) inch of rainfall, within a 24-hour period.

Estimated date of most recent Storm-Event that triggered this inspection:		
Rainfall Total:	Estimated Start Time:	Duration of Storm:

## 4. Overall Management of Erosion & Sediment Control

ITEM	YES	NO	<b>If "No," then an Action Item is required.</b> Describe all Action Items in Section 9.
A. Was the SWPPP accessible at the time of the inspection?	<input type="checkbox"/>	<input type="checkbox"/>	
B. Does the SWPPP reflect the current state of the development?	<input type="checkbox"/>	<input type="checkbox"/>	
C. Have all Site Observation Report Action Items from preceding reports been resolved?	<input type="checkbox"/>	<input type="checkbox"/>	
D. Is site information (NOI, etc.) posted and in compliance with permit requirements?	<input type="checkbox"/>	<input type="checkbox"/>	

## 5. Stormwater Management Site BMPs

ITEM	NOT APPLICABLE	ACCEPTABLE	ACTION ITEM	ASSIGNED TO:
A. Diversion Interceptors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
B. Pump Around	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
C. Dewatering	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
D. Rock Chute	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
E. Slope Drain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
F. Cofferdam	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

## 6. Erosion Control Site BMPs

ITEM	NOT APPLICABLE	ACCEPTABLE	ACTION ITEM	ASSIGNED TO:
A. Perimeter Vegetative Buffers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
B. Slope Roughening (Tracks Parallel to Contour)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
C. Temporary Seeding/Mulch	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
D. Stockpile Stabilization/Protection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
E. Rock Check Dam	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

F. Erosion Control Blanket	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
G. Permanent Inlet/Outlet Protection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
H. Riprap Ditch (Slow Velocity/Energy Dissipation)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
I. Permanent Seeding/Sod	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
J. Dust Control	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
K. Street Sweeping	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**7. Sediment Control Site BMPs**

ITEM	NOT APPLICABLE	ACCEPTABLE	ACTION ITEM	ASSIGNED TO:
A. Construction Entrance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
B. Silt Fence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
C. Sediment Trap	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
D. Sediment Basin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
E. Filter Berm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
F. Filter Sock	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
G. Temporary Inlet Protection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
H. Temporary Culvert Inlet Protection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
I. Basin Surface Water Skimmers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
J. Polymer Addition Practices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**8. Other Stormwater Runoff Pollution Prevention Site BMPs**

ITEM	NOT APPLICABLE	ACCEPTABLE	ACTION ITEM	ASSIGNED TO:
A. Material Storage (Fuel, Hazardous Materials)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
B. Concrete & Construction Washout Containment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
C. Good Housekeeping (Waste, Trash, Sanitation)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
D. Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
E. Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
F. Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**9. Action Items from Sections 4 through 8 of this Construction Site Inspection Report**

Identify Inspection Item Reference Number, Location and Action Item(s) to be Taken	Date Noted	Date Completed	Initials
<i>Example: "7.B: 50' west of Construction Entrance, repair torn Silt Fence."</i>			

*Attach additional sheet(s) if needed*

**10. Discussion of Previous Action Items Not Completed and Updated Compliance Plan** Identify any previously noted Action Item(s) that have not been corrected; describe why they have not been completed and note a schedule for completion.

---

---

---

---

---

---

---

---

*Attach additional sheet(s) if needed*

**11. Certification and Signature**

*“I certify under penalty of law that this document was completed to the best of my knowledge and belief on the date listed below per my signature. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”*

Inspector Name and Title:	
Inspector Signature:	Date:



**Attachment G**

**Construction and Post-Construction Permit Inventory and Tracking Sheet**





**Attachment H**  
**Post-Construction Field Inspection Form**

**Detention/Retention Pond Inspection & Inventory**

Pond ID: \_\_\_\_\_

Location: \_\_\_\_\_ Nearest Cross Street: \_\_\_\_\_

Size: \_\_\_\_\_ acres Volume: \_\_\_\_\_

Receiving Stream: \_\_\_\_\_

Outlet Type: rcp    pvc    cmp    ear    grass    rip-rap    Other \_\_\_\_\_

Outlet Size: 10    12    15    18    24    36    48    54    Other \_\_\_\_\_

Outlet Cond: good    fair    bad    Comments \_\_\_\_\_

Screen on Outlet:    Y    N

Land Cover: vegetation    grass    rip-rap    Other \_\_\_\_\_

Upstream: ditch    street/inlet    yard/inlet    Other \_\_\_\_\_

Up Land Use:    res    comm    indust    Specify \_\_\_\_\_

Note other conditions at detention pond or outlet

Drawing or Comments

\_\_\_\_\_ erosion

\_\_\_\_\_ silting

\_\_\_\_\_ Debris

\_\_\_\_\_ sediment Det Pnd \_\_ Outlet \_\_

\_\_\_\_\_ Oil or scum on surface

\_\_\_\_\_ suspicious discharge

\_\_\_\_\_ odor

\_\_\_\_\_ visible pollution

\_\_\_\_\_ flow obstruction

\_\_\_\_\_ overgrowth around pond

\_\_\_\_\_ Other Maintenance Issues: Specify \_\_\_\_\_

\_\_\_\_\_ potential pollutant Specify \_\_\_\_\_

\_\_\_\_\_ sensitive area Specify \_\_\_\_\_

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Storm Water Outfall Investigation**

**Outfall No:** \_\_\_\_\_ **Location:** \_\_\_\_\_

**Rec Stream:** \_\_\_\_\_

**Indy:** ear pipe size \_\_\_\_\_ mat \_\_\_\_\_

**Out Type:** rcp pvc cmp ear grass rip-rap Other \_\_\_\_\_

**Out Size:** 10 12 15 18 24 36 48 54 Other \_\_\_\_\_

**Out Cond:** good fair bad Comments \_\_\_\_\_

**Out Struct:** headwall endpipe **Cond:** good fair bad Comment \_\_\_\_\_

**Stream:** clear mud silt Pollution Source: \_\_\_\_\_

**Land Cover:** veg woods wetland pavement grass rip-rap

**Upstream:** ditch street/inlet yard/inlet detpond Other \_\_\_\_\_

**Cond:** good fair bad comment

**Up Land Use:** res comm indust Specify \_\_\_\_\_

**Distance from source to outfall:** \_\_\_\_\_ **Comments:** \_\_\_\_\_

**Note other conditions at outfall**

**Drawing or Comments**

\_\_\_\_\_ erosion

\_\_\_\_\_ silting

\_\_\_\_\_ sediment

\_\_\_\_\_ ponding

\_\_\_\_\_ suspicious discharge

\_\_\_\_\_ odor

\_\_\_\_\_ visible pollution

\_\_\_\_\_ flow obstruction

\_\_\_\_\_ overgrowth in flowline

\_\_\_\_\_ potential pollutant Specify \_\_\_\_\_

\_\_\_\_\_ sensitive area Specify \_\_\_\_\_

**Comments:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_