



# BARTHOLOMEW COUNTY, INDIANA

## Storm Water Quality Management Plan Program Implementation (Part C) Revisions

Permit Number: INR040097

October 2014

Prepared by:

*Bartholomew County Soil & Water Conservation District  
Bartholomew County MS4*



Bartholomew County  
NPDES Storm Water Quality Management Plan  
Part C – Program Implementation

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## **Introduction**

These revisions of Bartholomew County's (County) Storm Water Quality Management Plan (SWQMP), Part C have been completed to satisfy IDEM's requirements for Phase II of the NPDES program as in section **327 IAC 15-13-14**

The original report was prepared to fulfill the Part C – Program Implementation requirements of Bartholomew County's (County) Storm Water Quality Management Plan (SWQMP) within their existing storm water discharge permit. The Indiana Department of Environmental Management (IDEM) issued the County's storm water permit, Permit Number INR040097, based upon the Notice of Intent (NOI) and Part A – Initial Application submitted on November 5, 2003. Part B – Baseline Characterization and Report was subsequently submitted on April 30, 2004, within 180 days of submitting the NOI.

### **Section 1 – Initial Evaluation of Storm Water Program**

Bartholomew County, serves approximately 71,435 people countywide based upon the 2000 Census. Of the 71,435, approximately 47,918 are contained within cities and towns (i.e. Clifford, Columbus, Edinburgh, Elizabethtown, Hartsville, Hope, Jonesville, and Taylorsville) leaving approximately 23,517 in the County's jurisdiction. The County's urbanized area includes a fraction of the County and predominately includes residential, agricultural, and commercial uses surrounding Columbus, Taylorsville, and Edinburgh. Overall, the land use information indicates the residential community is clustered outside of the populated areas of Edinburgh, Taylorsville, and Columbus; commercial uses are adjacent to transportation corridors such as US 31 and Interstate 65; and the agricultural uses are scattered throughout, predominately further away from the populated areas.

The receiving waters identified in the County are Nineveh Creek, Driftwood River, Muddy Branch, Lick Creek, Big Slough, Flatrock River, Haw Creek, Clifty Creek, a lake feeding a tributary to Clifty Creek, Sloan Branch, East Fork White River, Opossum Creek, Denios Creek, and the groundwater layer via infiltration by drywells. The development of the SWQMP will implement practices to protect these waters and the County's conveyances with additional emphasis placed on the protection of sensitive areas.

The sensitive areas identified for the County include endangered, threatened, and rare species along Flatrock River, Driftwood River, and a tributary to Wolf Creek and full body contact recreational areas at Heflen Park, Blue's Canoe Livery, Driftwood State Fishing Area, and Atterbury State Fish and Wildlife Area.

The County already has existing efforts in place for storm water management. Examples of non-structural practices implemented in Bartholomew County include:

- Filter strips along waterways.
- Inspection and maintenance of the MS4 (i.e. brush and tree control in channels and swales; general trash and debris clean-up; etc.).
- The preliminary development of a drainage ordinance to address flooding and drainage control.
- A household hazardous waste program through the Bartholomew County Solid Waste Management District.

Examples of structural practices implemented in the County include drywells and detention storage areas and basins. The drywells are located predominately in residential communities to reduce the runoff from impervious surfaces. The drywells provide limited storm water treatment with respect to reducing particulate pollutants and erosion in downstream environments. Detention storage structures, such as those along Hackberry Drive in Autumnwood subdivision, detain water in a well before discharging to the MS4 through a 12 inch outlet pipe. The detention storage structures provide limited water quality benefit. Likewise, the detention basins in the County are not owned or maintained by the County; however, basins are located in residential areas as a drainage and flood control structure.

## **Section 2 – Detailed Program Description**

The purpose of the MS4 program is to establish requirements for storm water discharges from MS4 conveyances to protect public health and water quality. To do this, the Part C is developed based on our county's needs. The Part C consists of 6 MCMs (minimum control measures). We have to develop BMPs (best management practices) to satisfy these MCMs. **This program is required by the state.**

The program description for the 6 MCMs is described here:

### **2.1 MCM #1 – Public Education and Outreach**

The proposed public education and outreach program distributes educational materials to the community and conducts outreach activities that discuss the impacts of storm water discharges on waterbodies and the role citizens can take to reduce storm water pollution.

The overall objectives of the Public Education and Outreach section of the SWQMP are as follows:

1. Increase the public's appreciation of its water resources.
2. Increase the public's general level of awareness of storm water runoff quality issues and the public's impact on water quality.
3. Increase the public's general level of awareness of the County's storm water management program and how citizens and organizations can improve storm water quality.

*The County entered into a Memorandum of Understanding for this MCM with the following parties: City of Columbus, Bartholomew County SWCD, Flatrock-Haw Creek Watershed Project, Bartholomew County Purdue Extension, & the Bartholomew County SWMD.*

## **2.2 MCM #2 – Public Participation and Involvement**

The public can provide valuable input and assistance to the development and implementation of the County storm water program. The advantages of active public involvement include reduced pollutant loads, increased program support, and vigilant protection of waterbodies. The County plans to focus the activities proposed for inclusion in this MCM on making the public aware of opportunities for involvement.

The overall objectives of the Public Participation and Involvement section of the SWQMP are:

1. Increase the public's level of involvement in the storm water program.
2. Support volunteer efforts for projects that are not sponsored by the County.
3. Continue to follow all state and local requirements regarding public notice for meetings where storm water program regulations are being revised or altered so as to maximize the opportunity for public participation in the development and implementation of the storm water management program.

*The County entered into a Memorandum of Understanding for this MCM with the following parties: City of Columbus, Bartholomew County SWCD, Flatrock-Haw Creek Watershed Project, Bartholomew County Purdue Extension, & the Bartholomew County SWMD.*

## **2.3 MCM #3 – Illicit Discharge Detection and Elimination**

Illicit discharges enter the storm water system through either direct or indirect connections to the system. The illicit discharges can introduce higher pollutant levels in the receiving waters, degrading water quality and threatening aquatic life, wildlife, and human health. The County plans to establish an Illicit Discharge Detection and Elimination program to address this concern.

The overall objectives of the Illicit Discharge Detection and Elimination section of the SWQMP are:

1. Decrease the incidence of illicit discharges and illegal dumping.
2. Remove illicit discharges and illegal dump sites when they are identified.
3. Provide the public with a method for reporting problems.
4. Provide improved MS4 system mapping.

## **2.4 MCM #4 – Construction Site Runoff Control**

Polluted storm water runoff from construction sites (and post-construction sites) ultimately discharge into local rivers and streams. The final rule requires the development, implementation, and enforcement of a program to reduce pollutants in construction runoff for sites greater than or equal to one acre, or disturbances of less than one acre of land that are part of a larger common plan of development or sale if the larger common plan will ultimately disturb one or more acres of land.

The overall objectives of the Construction Site Runoff Control section of the SWQMP are as follows:

1. Maintain sediment from construction activities on the site to the maximum extent practicable.
2. Decrease the number of violations of the Erosion and Sedimentation Control Plan requirements.
3. Provide education opportunities for developers and inspectors through training.

## **2.5 MCM #5 – Post-Construction Runoff Control**

When compared to storm water runoff from pre-development conditions, higher concentrations and some contaminants that are not naturally present in surface runoff from undeveloped local lands are found. Once developed, constituent loads increase because surface runoff volumes increase and the sources of many of these pollutants also increase. BMPs, both structural and non-structural, can reduce the amount of pollutants in storm water. The design, maintenance, application, and construction of water quality BMPs are important components to post-construction runoff control.

The overall objectives of the Post-Construction Site Runoff Control section of the SWQMP are as follows:

1. Decrease total suspended solids in post-construction runoff from sites of new development and significant redevelopment.
2. Provide training to staff and developers on the water quality policies and design standards.
3. Provide training to staff and inspectors on the importance of BMP maintenance and how to properly inspect the BMPs.
4. Address water quality issues in flood control projects.

## **2.6 MCM #6 – Pollution Prevention and Good Housekeeping**

The pollution prevention/good housekeeping section requires the County to examine and subsequently alter their own actions in a way to minimize contamination of storm water discharges. The program will address pollution that collects on streets, parking lots, open spaces, and storage and vehicle maintenance areas as well as pollution that results from actions taken by the County such as storm sewer system maintenance, flood management practices, or land development.

The overall objectives of the Pollution Prevention and Good Housekeeping section of the SWQMP are as follows:

1. Decrease pollutant discharges to receiving streams from County owned property.
2. Decrease pollutant discharges to receiving streams from County activities.
3. Improve the recordkeeping and reporting processes for County operations to facilitate better tracking of the effectiveness of these operations.

The following BMPs are going to be implemented by Bartholomew County to meet the previously stated MCM requirements for MCM #1-#6.

## **2.7 List of all BMPs**

See Appendix A  
Pages A-1 through A-27



## 2.8 Summary of MCMs

The BMPs developed for each of the six minimum control measures at times overlap in terms of applicability to the objectives of the MCMs. The table below indicates the duplicity in the BMPs by identifying which MCMs the BMP relates to.

### Summary of the BMPs

BMP No. and Title	Relates to Minimum Measures					
	I	II	III	IV	V	VI
1. Annual Training	X	X	X	X	X	X
2. Stormwater Education and Outreach Article	X	X	X			X
3. Rain Barrel Initiative	X	X	X			
4. Maintain Stormwater Social Media Pages	X	X	X			
5. Stormwater Web Page	X	X	X			
6. Pet Waste Education	X		X			X
7. Community Projects	X	X	X			X
8. Distribution of a Stormwater Awareness Brochure	X		X			
9. Restaurant Education	X		X			X
10. Public Input on Stormwater Issues	X	X				
11. Promote Volunteer Opportunities	X	X	X			X
12. Update Storm Sewer System Map			X			X
13. Review Illicit Discharge Ordinance	X		X			X
14. Develop Illicit Discharge Detection & Elimination Policies, Procedures, and Documentation Tools			X			X
15. Utilize Complaint Tracking Mechanism	X	X	X	X	X	X
16. Host and Promote Recycling and Collection of Hazardous Waste Events	X		X	X		X
17. Perform Dry Weather Screening			X			X
18. Review and Enforce the County's Erosion Control Ordinance that Meet the Rule 5 Requirements				X		
19. Review Construction Plans				X		
20. Inspection and Enforcement of Construction Projects	X			X		
21. Continue to Implement Post-Construction Ordinance					X	
22. Inspect/Clean Ditches, Culverts, & Pipes						X
23. Litter Pickup	X					X
24. Road Deicing Materials Application and Storage						X
25. Vehicle Washing						X
26. Documentation of Maintenance Activities						X
27. Proper Disposal of Waste Removed from MS4 Conveyances and Operational Areas						X

### Section 3 – Schedule

The timetable for implementation of each MCM is referenced in each BMP. An additional tabular representation follows. A report will be submitted to IDEM every two years with the effectiveness of each BMP.

#### MCM Implementation Schedule

ELEMENTS AND COMPONENTS	Minimum Occurrences				
	Monthly	Bi-Annually	Annually	Once Per Permit Term	Ongoing
1. Annual Training					
2. Stormwater Education and Outreach Article					
3. Rain Barrel Initiative					
4. Maintain Stormwater Social Media Pages					
5. Stormwater Web Page					
6. Pet Waste Education					
7. Community Projects					
8. Distribution of a Stormwater Awareness Brochure					
9. Restaurant Education					
10. Public Input on Stormwater Issues					
11. Promote Volunteer Opportunities					
12. Update Storm Sewer System Map					
13. Review Illicit Discharge Ordinance					
14. Develop Illicit Discharge Detection & Elimination Policies, Procedures, and Documentation Tools					
15. Utilize Complaint Tracking Mechanism					
16. Host and Promote Recycling and Collection of Hazardous Waste Events					
17. Perform Dry Weather Screening					
18. Review and Enforce the County's Erosion Control Ordinance that Meet the Rule 5 Requirements					
19. Review Construction Plans					
20. Inspection and Enforcement of Construction Projects					
21. Continue to Implement Post-Construction Ordinance					
22. Inspect/Clean Ditches, Culverts, & Pipes					
23. Litter Pickup					
24. Road Deicing Materials Application and Storage					
25. Vehicle Washing					
26. Documentation of Maintenance Activities					
27. Proper Disposal of Waste Removed from MS4 Conveyances and Operational Areas					

## **Section 4 – MS4 Area Boundaries**

### **MCM #1, #2, #4, #5, #6**

**Countywide outside of others jurisdiction (i.e. Columbus, Edinburgh, Taylorsville, Clifford, Jonesville, Elizabethtown, Hope, Hartsville, Camp Atterbury)**

Efforts for the most part will however be centralized in areas with the greatest populations (and the sensitive areas for #6)

For MCM#6, the county facilities are generally in the Columbus city area so a combination of County and City housekeeping will help with this implementation.

### **MCM #3 (Illicit Discharge)**

Only to the section limits of the UA as listed below:

S4, T10N, R5E (excluding the incorporated municipal areas)  
S15, S22, S23, S26 (excluding jurisdictions in these sections)  
S9, S10, S16, S21, S27, S34, S35 (entire boundaries of these sections)

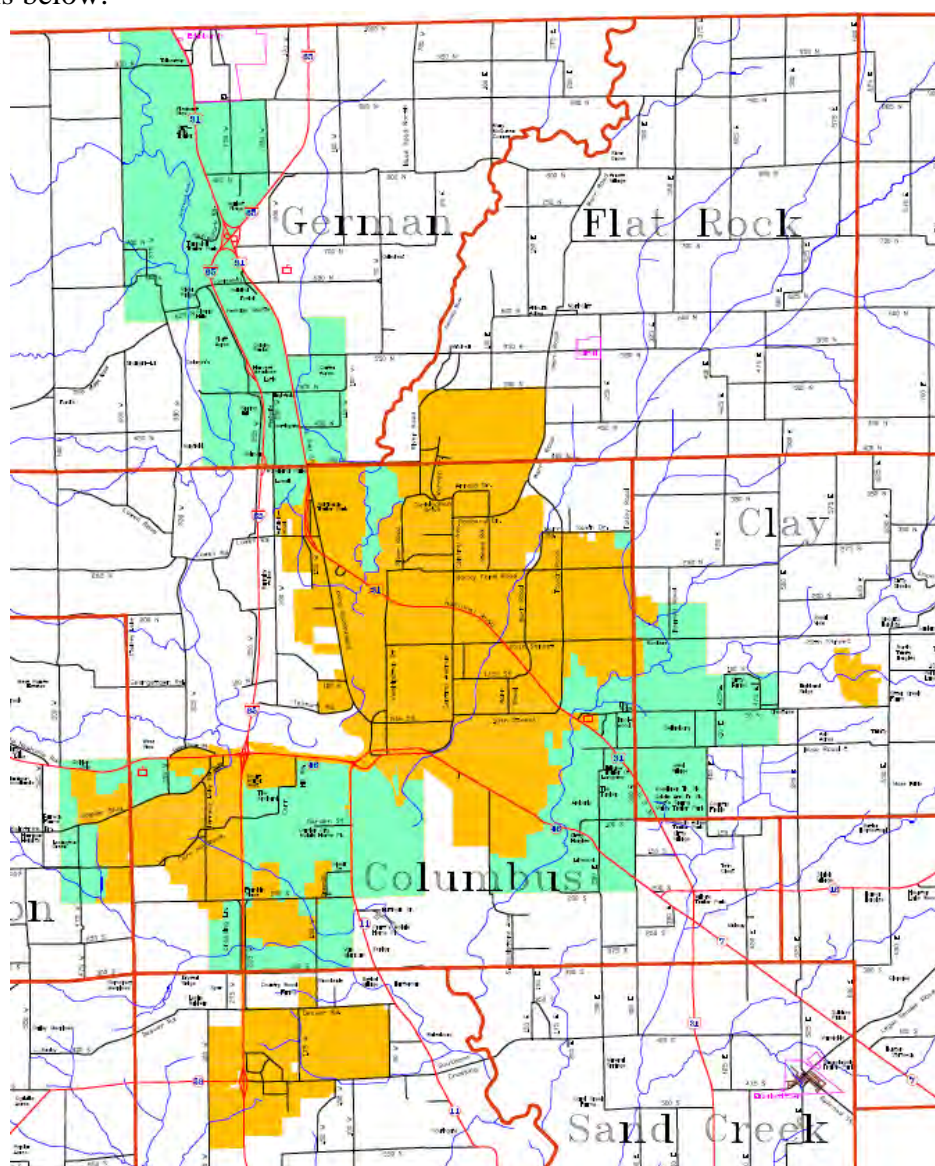
S1, T9N, R5E excluding the incorporated municipal areas  
S2, S12, S25, S26, S27, S28, S29, S32, S34, S35 (excluding the incorporated areas)  
S36 (entire section)

S9, T9N, R6E excluding the incorporated municipal areas  
S15, S16, S21, S28, S29, S32 (excluding jurisdiction)  
S22, S23, S27, S33 (entire boundaries of these sections)

S2, T8N, R5E (entire section)  
S3 (excluding jurisdiction)

\*Note that the maps in the Part B report did not include S23, T10N, R5E. It needs to be included.

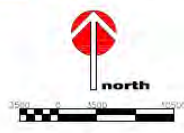
2014 Map is below:



Map of  
Bartholomew County

Legend

- Bartholomew County MS4 Area
- City of Columbus MS4 Area



## Section 5 – Linear Feet of MS4 Estimate

Open ditch (2' or greater bottom width):

Unnamed tributary to Driftwood (S4, T10N, R5E) = 1,320 feet  
 Unnamed tributary to Driftwood (S4 & S9, T10N, R5E) = 5,280 feet  
 Unnamed tributary to Big Slough (S23, T10N, R5E) = 3,960 feet  
 Unnamed tributary to Flatrock River (S1, T9N, R5E) = 2,640 feet  
 Unnamed tributary to Clifty Creek (from lake in S22, T9N, R6E) = 3,960 feet  
 Unnamed tributary to Sloan Branch (S15, T9N, R6E) = 2,640 feet  
 Unnamed tributary to Wolf Creek (S28, T9N, R5E) = 660 feet  
 Unnamed tributary to Denios Creek (S32, T9N, R5E) = 2,640 feet  
 Unnamed tributary to Denios Creek (S29, T9N, R5E) = 1,320 feet  
 Unnamed tributary to Denios Creek (S29, T9N, R5E) = 528 feet  
 Unnamed tributary to Denios Creek (S32, T9N, R5E) = 528 feet  
**TOTAL = 25,476 feet**

Pipe (12" diameter or greater): 1,000 feet

## Section 6 – Allowable Structural BMP Types

Based upon the soil types in Bartholomew County and local conditions, BMPs that will be most appropriate for the County include wet detention ponds, bioretention areas, water quality swales, biofilters (riparian buffer and filter strips), wetlands, and potentially proprietary systems or manufactured BMPs. The County is in the process of compiling a post-construction BMP manual.

## Section 7 – Projected Storm Water Budget

### Proposed Annual Budget

Activity	Year 1 (2014)	Year 2 (2015)	Year 3 (2016)	Year 4 (2017)	Year 5 (2018)
MCM #1	15,000	15,000	15,000	15,000	15,000
MCM #2	5,000	5,000	5,000	5,000	5,000
MCM #3	2,000	2,000	2,000	2,000	2,000
MCM #4	Self-Funded	Self-Funded	Self-Funded	Self-Funded	Self-Funded
MCM #5	10,000	10,000	10,000	10,000	10,000
MCM #6	75,000	75,000	75,000	75,000	75,000
<b>TOTAL</b>	<b>\$117,000</b>	<b>\$117,000</b>	<b>\$117,000</b>	<b>\$117,000</b>	<b>\$117,000</b>

The County has structured the annual allotments to account for fluctuations from year to year based upon the anticipated timetable for implementation of the BMPs. It should be noted that the proposed budgets are estimated and that actual costs may vary.

The County currently has dedicated stormwater Phase II funds that will be partially distributed to the SWCD account to run the MS4 program. The remaining funds will be left in the Rule 13 Stormwater Fund in the county to allow for any permitting fees or unexpected costs. Salaried employees will be utilized in the implementation of the Phase II measures.

Probable resources during the implementation of the SWQMP are as follows:

- |  |  |
|--|--|
| 1. Highway Department                        | 9. Bartholomew County Purdue             |
| 2. Surveyor's Office                         | Extension                                |
| 3. Planning Department                       | 10. City of Columbus                     |
| 4. Consultants                               | 11. Bartholomew County IT Department     |
| 5. Soil & Water Conservation District (SWCD) | 12. County Parks Department              |
| 6. Solid Waste Management District (SWMD)    | 13. Bartholomew County Commissioners     |
| 7. Watershed Projects                        | 14. Bartholomew County Health Department |
| 8. Code Enforcement                          |  |

Funding will also originate from erosion control plan review and inspection fees per the Erosion Control and Sedimentation Control Ordinance. Fines and enforcement fees would be applied to the County's storm water program to result in additional funding for the program.

## Section 8 – Programmatic Indicators

- (1) *Number or percentage of citizens, segregated by type of constituent that have an awareness of storm water quality issues.*

The County has not previously tracked this indicator. This will be tracked based upon a survey conducted in 2015 and again at the end of the permit term.

- (2) *Number and description of meetings, training sessions, and events conducted to involve citizen constituents in the storm water program.*

County will track the number of events to involve citizens throughout the permit.

- (3) *Number or percentage of citizen constituents that participate in storm water quality improvement programs.*

This will be tracked throughout the permit. It is anticipated that this will be based upon participation in community programs, clean-up events, and stream monitoring.

- (4) *Number and location of storm drains marked or cast, specifying marking method.*

A storm drain marking endeavor was held on July 23, 2004 in the City of Columbus through the efforts of the Bartholomew County SWCD's Clifty Creek Watershed Project. The Clifty Creek Watershed Project organized 15 kids to mark approximately 45 storm drains along Washington and Fifth Streets. The SWCD intends to expand its storm drain marking endeavors into the County by 2015. As storm drains are marked in the County, this will be tracked as applicable.



- (5) *Estimated or actual linear feet or percentage of the MS4 mapped and indicated on the MS4 area map.*

Completed

- (6) *Number and location of MS4 area outfalls mapped.*

Completed

- (7) *Number and location of MS4 area outfalls screened for illicit discharges.*

This will be completed annually

- (8) *Number and location of illicit discharges detected.*

This will be tracked through the county highway's tracking system.

- (9) *Number and location of illicit discharges eliminated.*

This will be tracked through the county highway's tracking system.

- (10) *Number of, and estimated or actual amount of material, specified by type, collected from, Hazardous Household Waste (HHW) collections in the MS4 area.*

The County will continue to track the Bartholomew County Solid Waste District's efforts on an annual basis.

- (11) *Number and location of drop-off centers for automotive fluid recycling.*

The Household Hazardous Waste Program accepts car batteries, used motor oil and filters, gasoline/diesel and antifreeze. The Bartholomew County Landfill at 811 East 450 South also accepts used motor oil and filters. Four commercial vendors in Columbus also accept used motor oil and car batteries as follows:

- Advanced Auto Parts– 2460 25<sup>th</sup> Street
- AutoZone – 2575 Central Avenue
- Carquest – 1546 State Street
- NAPA Auto Parts – 3103 National Road

- (12) *Number or percentage of constituents that participate in the HHW collections.*

Approximately 600 people participate on an annual basis. The County will continue to track this on an annual basis.

- (13) *Number of construction sites obtaining an MS4 entity-issued storm water run-off permit in the MS4 area.*

This is tracked now by the County since they have adopted an ordinance that includes the new Rule 5 erosion and sediment control requirements.

- (14) *Number of construction sites inspected.*

The County will track the number of construction sites inspected for compliance with the new stormwater construction site runoff control program.

*(15) Number and type of enforcement actions taken against construction site operators.*

The County will track the number and type of enforcement actions requiring compliance with the new stormwater construction site runoff control program.

*(16) Number of, and associated construction site name and location for, public informational requests received.*

The County will track informational requests for construction activities as they pertain to the stormwater construction site runoff control program.

*(17) Number, type, and location of structural BMPs installed.*

The County's BMP manual that is to be completed by the end of 2018 will include guidance on appropriate structural BMPs. Once the BMP manual is finalized, the County will track all new structural BMP installations.

*(18) Number, type, and location of structural BMPs inspected.*

The County's BMP manual that is to be completed by the end of 2018 will include guidance on BMP inspections. Once the BMP manual is finalized and new BMPs are constructed to comply with the new standards, the County will track BMP inspections.

*(19) Number, type, and location of structural BMPs maintained or improved to function properly.*

The County maintains BMPs and removes trash from the outlet structures as needed. The County will track maintenance items throughout the remainder of the permit.

*(20) Type and location of nonstructural BMPs utilized.*

- Filter strips along waterways.
- Inspection and maintenance of the MS4 (i.e. brush and tree control in channels and swales; general trash and debris clean-up; etc.).
- The preliminary development of a drainage ordinance to address flooding and drainage control. OR
- An article on stormwater in the County Code that currently details erosion control and illicit discharge policies.
- A household hazardous waste program through the Bartholomew County Solid Waste Management District.

*(21) Estimated or actual acreage or square footage of open space preserved and mapped in the MS4 area, if applicable.*

The County preserves parks as open spaces but no County Parks fall within the regulated area. As development occurs, the District will be conscious of site development procedures with regard to open space; however, tracking and mapping the preservation of open space is not feasible. The County as a whole is not an urbanized area. Open space preservation will not be a key management practice, which nullifies the need to track this as an indicator of program compliance. **Accordingly, this programmatic indicator will be removed from the County's programmatic indicator list.**



- (22) *Estimated or actual acreage or square footage of pervious and impervious surfaces mapped in the MS4 area, if applicable.*

Since the county will not institute a stormwater utility fee, this will not be needed.

**Accordingly, this programmatic indicator will be removed from the County's programmatic indicator list.**

- (23) *Number and location of new retail gasoline outlets or municipal, state, federal, or institutional refueling areas, or outlets or refueling areas that replaced existing tank systems that have installed storm water BMPs.*

The County plans to implement this regulation under MCM #5, Post Construction Runoff Control by the end of 2016. The County will track as applicable.

- (24) *Number and location of MS4 entity facilities that have containment for accidental releases of stored polluting materials.*

County Garage: 2452 State Street

SWMD/Recycling Center: 720 S Mapleton St

County Parks Building: SR11 & Spear Street

- (25) *Estimated or actual acreage or square footage, amount, and location where pesticides and fertilizers are applied by a regulated MS4 entity to places where storm water can be exposed within the MS4 area.*

The County hires out all herbicide/pesticide application.

- (26) *Estimated or actual linear feet or percentage and location of unvegetated swales and ditches that have an appropriately sized vegetated filter strip.*

It is currently unknown how many linear feet of unvegetated swales and ditches have an appropriately sized vegetated filter strip. The County will track as applicable.

- (27) *Estimated or actual linear feet or percentage and location of MS4 conveyances cleaned or repaired.*

The County keeps track of linear feet of ditches that are cleaned.

- (28) *Estimated or actual linear feet or percentage and location of roadside shoulders and ditches stabilized, if applicable.*

The County adds gravel to roadside shoulders, cleans ditches, and places riprap along ditches if they are encroaching on roadways.

- (29) *Number and location of storm water outfall areas remediated from scouring conditions, if applicable.*

N/A

- (30) *Number and location of deicing salt and sand storage areas covered or otherwise improved to minimize storm water exposure.*

The County has one salt pile that is covered and one sand storage pile at the County Garage. The County is currently investigating facilities to store their sand in. During the winter months, sand is also stored at the following three facilities:

Growers Farm Service –On 800 South  
Silgas- 550 North  
Sims Sawmill- 12030 S 350 W

- (31) *Estimated or actual amount, in tons, of salt and sand used for snow and ice control.*

The County uses a 3:1 Sand to Salt mixture for snow and ice control. Approximately 700 miles are covered. This will continue to be tracked throughout the permit.

- (32) *Estimated or actual amount of material by weight collected from catch basin, trash rack, or other structural BMP cleaning.*

The County has not previously tracked this indicator. This will be tracked throughout the permit.

- (33) *Estimated or actual amount of material by weight collected from street sweeping, if utilized.*

The County does not own a street sweeper and currently does not sweep streets nor do they have any current plans to begin. **Accordingly, this programmatic indicator will be removed from the County's programmatic indicator list.**

- (34) *If applicable, number or percentage and location of canine parks sited at least one hundred fifty (150) feet away from a surface waterbody."*

The County does not currently have any designated canine parks nor do they have any current plans to establish canine parks. **Accordingly, this programmatic indicator will be removed from the County's programmatic indicator list.**

APPENDIX A:

Best Management Practices  
For The  
Bartholomew County, Indiana  
MS4 Program

Annual Training		
<b>BMP Description</b> Annual Training will be completed for all Bartholomew County employees to educate them on stormwater pollution prevention.		
<b>Measurable Goals</b> There will be one training per year.  The training topics will include, but are not limited to: Illicit Discharge Detection and Elimination, proper tree planting, invasive species, meth lab awareness, erosion and sediment control, good housekeeping measures, proper pesticide/herbicide application, etc.		
<b>Responsible Entity</b> Bartholomew County MS4 Coordinator Each individual department		
<b>Schedule</b> Minimum of once annually		
<b>Reporting and Recordkeeping</b> Sign-in sheets will be kept on file		
<b>Minimum Control Measures:</b> <input checked="" type="checkbox"/> Public Education <input checked="" type="checkbox"/> Public Involvement <input checked="" type="checkbox"/> Illicit Discharge <input checked="" type="checkbox"/> Construction Site Control <input checked="" type="checkbox"/> Post Construction Control <input checked="" type="checkbox"/> Municipal Operations	<b>Target Constituents:</b> <input checked="" type="checkbox"/> Residents <input checked="" type="checkbox"/> Public Service Employees <input type="checkbox"/> Commercial Facilities <input type="checkbox"/> Industrial Facilities <input checked="" type="checkbox"/> Construction Site Personnel <input type="checkbox"/> Visitors <input type="checkbox"/> Ag Producers	<input checked="" type="checkbox"/> <i>New Program</i> <input type="checkbox"/> <i>Current Program</i>

Stormwater Education and Outreach Articles		
<b>BMP Description</b> The purpose of the education and outreach articles is to reach all residents in Bartholomew County concerning stormwater issues and other awareness events. For example, they will educate the public on where stormwater comes from , what it is, where it goes, and ways to help. There will also be articles on the Solid Waste Management District's tox-a-way days, the Soil and Water Conservation District's Arbor Day tree give away, Purdue's pesticide sweeps, etc.		
<b>Measurable Goals</b> Articles will be submitted to The Republic and Hope Star Journal at least two times per year.  An article will be included in a local newsletter at least once per year.  When available, a link to the article will be provided on Bartholomew County social media sites.		
<b>Responsible Entity</b> Bartholomew County		
<b>Schedule</b> Two times per year		
<b>Reporting and Recordkeeping</b> Keep copies of the articles that were submitted		
<b>Minimum Control Measures:</b> <input checked="" type="checkbox"/> Public Education <input checked="" type="checkbox"/> Public Involvement <input checked="" type="checkbox"/> Illicit Discharge <input type="checkbox"/> Construction Site Control <input type="checkbox"/> Post Construction Control <input checked="" type="checkbox"/> Municipal Operations	<b>Target Constituents:</b> <input checked="" type="checkbox"/> Residents <input checked="" type="checkbox"/> Public Service Employees <input checked="" type="checkbox"/> Commercial Facilities <input checked="" type="checkbox"/> Industrial Facilities <input checked="" type="checkbox"/> Construction Site Personnel <input type="checkbox"/> Visitors <input type="checkbox"/> Ag Producers	<input type="checkbox"/> New Program  <input checked="" type="checkbox"/> Current Program

Rain Barrel Initiative		
<b>BMP Description</b>  Bartholomew County will implement a Rain Barrel Initiative. This project will educate and inform residents about the importance of conserving rain water and diverting it away from storm drains. The initiative will allow residents to purchase rain barrels and receive technical assistance if needed. Prices and information about rain barrels will be on the stormwater and Soil and Water Conservation District webpage and social media sites.		
<b>Measurable Goals</b>  Rain barrels will be showcased and promoted through educational events, fairs, and brochures.		
<b>Responsible Entity</b>  MS4, SWCD, SWMD		
<b>Schedule</b>  Rain Barrels will be available for purchase throughout the permit term.		
<b>Reporting and Recordkeeping</b>  Copies of brochures will be kept.  The number of rain barrels sold will be reported		
<b>Minimum Control Measures:</b> <input checked="" type="checkbox"/> Public Education <input checked="" type="checkbox"/> Public Involvement <input checked="" type="checkbox"/> Illicit Discharge <input type="checkbox"/> Construction Site Control <input type="checkbox"/> Post Construction Control <input type="checkbox"/> Municipal Operations	<b>Target Constituents:</b> <input checked="" type="checkbox"/> Residents <input checked="" type="checkbox"/> Public Service Employees <input checked="" type="checkbox"/> Commercial Facilities <input checked="" type="checkbox"/> Industrial Facilities <input type="checkbox"/> Construction Site Personnel <input type="checkbox"/> Visitors	<input checked="" type="checkbox"/> <i>New Program</i>  <input type="checkbox"/> <i>Current Program</i>

<div>Maintain Stormwater Social Media Pages</div>		
<div><div>BMP Description</div><div>Bartholomew County will keep social media sites updated with current information. Social media sites will be kept up to date with the most recent educational programs and community projects taking place in Bartholomew County.</div></div>		
<div><div>Measurable Goals</div><div>Local events will be posted on the MS4, SWMD, SWCD, and Watershed Project's social media sites to inform the public about important dates such as the Solid Waste Management District's (SWMD) tox-a-way day, Soil &amp; Water Conservation District's (SWCD) tree giveaway, etc.</div></div>		
<div><div>Responsible Entity</div><div>Bartholomew County MS4, SWCD, SWMD, Watershed Project, Purdue Extension</div></div>		
<div><div>Schedule</div><div>MS4 Facebook page was created in 2014</div><div>Social media sites will be kept up to date as events occur</div></div>		
<div><div>Reporting and Recordkeeping</div><div>The number of views and shares will be reported</div></div>		
<div><div>Minimum Control Measures:</div><div><div><input checked="" type="checkbox"/> Public Education</div><div><input checked="" type="checkbox"/> Public Involvement</div><div><input checked="" type="checkbox"/> Illicit Discharge</div><div><input type="checkbox"/> Construction Site Control</div><div><input type="checkbox"/> Post Construction Control</div><div><input type="checkbox"/> Municipal Operations</div></div></div>	<div><div>Target Constituents:</div><div><div><input checked="" type="checkbox"/> Residents</div><div><input type="checkbox"/> Public Service Employees</div><div><input type="checkbox"/> Commercial Facilities</div><div><input type="checkbox"/> Industrial Facilities</div><div><input type="checkbox"/> Construction Site Personnel</div><div><input checked="" type="checkbox"/> Visitors</div></div></div>	<div><div><input checked="" type="checkbox"/> New Program</div><div><input type="checkbox"/> Current Program</div></div>



Stormwater Web Page		
<b>BMP Description</b>  The Bartholomew County Website will have information about stormwater and illicit discharge. The web page will include copies of the county SWQMP, educational information, and where to report illicit discharge.		
<b>Measurable Goals</b>  The Bartholomew County MS4 web page will include stormwater information throughout the permit term and will have current information available for download.		
<b>Responsible Entity</b> MS4, SWCD, IT		
<b>Schedule</b>  The stormwater web page will be updated as needed to include new information and educational info throughout the term.		
<b>Reporting and Recordkeeping</b> Track web hits and downloads of maps and other informations.		
<b>Minimum Control Measures:</b> <input checked="" type="checkbox"/> Public Education <input checked="" type="checkbox"/> Public Involvement <input checked="" type="checkbox"/> Illicit Discharge <input type="checkbox"/> Construction Site Control <input type="checkbox"/> Post Construction Control <input type="checkbox"/> Municipal Operations	<b>Target Constituents:</b> <input checked="" type="checkbox"/> Residents <input checked="" type="checkbox"/> Public Service Employees <input checked="" type="checkbox"/> Commercial Facilities <input checked="" type="checkbox"/> Industrial Facilities <input checked="" type="checkbox"/> Construction Site Personnel <input checked="" type="checkbox"/> Visitors	<input type="checkbox"/> New Program  <input checked="" type="checkbox"/> Current Program



<div>Pet Waste Education</div>		
<div><div><div>BMP Description</div><div>This BMP will target residents of Bartholomew County and educate them about pet waste and its effects on stormwater. This will be accomplished by handing out educational materials at the humane society and animal control offices.</div></div></div>		
<div><div><div>Measurable Goals</div><div>Have educational brochures handed out with each adoption/pick up. Place PDF version of pamphlet on web page and social media sites. Place an article in the local papers.</div></div></div>		
<div><div><div>Responsible Entity</div><div>MS4, SWCD, SWMD</div></div></div>		
<div><div><div>Schedule</div><div>Place pamphlets in organizations starting in 2015.</div></div></div>		
<div><div><div>Reporting and Recordkeeping</div><div>Keep track of the number of brochures printed and keep a copy of brochures and articles.</div></div></div>		
<div><div><div>Minimum Control Measures:</div><div><div><div><input checked="" type="checkbox"/>Public Education</div><div><input type="checkbox"/>Public Involvement</div><div><input checked="" type="checkbox"/>Illicit Discharge</div><div><input type="checkbox"/>Construction Site Control</div><div><input type="checkbox"/>Post Construction Control</div><div><input checked="" type="checkbox"/>Municipal Operations</div></div></div></div></div>	<div><div><div>Target Constituents:</div><div><div><div><input checked="" type="checkbox"/>Residents</div><div><input type="checkbox"/>Public Service Employees</div><div><input type="checkbox"/>Commercial Facilities</div><div><input type="checkbox"/>Industrial Facilities</div><div><input type="checkbox"/>Construction Site Personnel</div><div><input checked="" type="checkbox"/>Visitors</div></div></div></div></div>	<div><div><div><input checked="" type="checkbox"/>New Program</div><div><input type="checkbox"/>Current Program</div></div></div>

Community Projects		
<b>BMP Description</b> Community projects will be organized by the county to involve and educate the public on stormwater issues. The purpose of community projects is to provide and opportunity for public involvement while promoting public awareness of stormwater pollution. These projects may include storm drain marking, river cleanups, etc.		
<b>Measurable Goals</b> Utilize local volunteer groups The county will host at least one project a year during the permit term. The public will be involved in the marking of storm drains		
<b>Responsible Entity</b> MS4, Watershed Project, SWMD, SWCD		
<b>Schedule</b> Minimum one project per year		
<b>Reporting and Recordkeeping</b> Pictures and sign in sheets will be kept. Pounds of trash will be recorded for cleanups Any newspaper articles will be kept		
<b>Minimum Control Measures:</b> <input checked="" type="checkbox"/> Public Education <input checked="" type="checkbox"/> Public Involvement <input checked="" type="checkbox"/> Illicit Discharge <input type="checkbox"/> Construction Site Control <input type="checkbox"/> Post Construction Control <input checked="" type="checkbox"/> Municipal Operations	<b>Target Constituents:</b> <input checked="" type="checkbox"/> Residents <input checked="" type="checkbox"/> Public Service Employees <input checked="" type="checkbox"/> Commercial Facilities <input checked="" type="checkbox"/> Industrial Facilities <input type="checkbox"/> Construction Site Personnel <input type="checkbox"/> Visitors	<input checked="" type="checkbox"/> <i>New Program</i> <input type="checkbox"/> <i>Current Program</i>

Distribution of a Stormwater Awareness Brochure		
<b>BMP Description</b> A stormwater awareness brochure will aim to educate the citizens of Bartholomew County about what they can do to protect the environment from stormwater runoff.		
<b>Measurable Goals</b> Develop brochures to insert into the water and electric utility bills Distribute at county events, such as the fair, Earth Day event at SWMD, Tree Giveaway event at SWCD, etc.		
<b>Responsible Entity</b> SWCD, SWMD		
<b>Schedule</b> Annually		
<b>Reporting and Recordkeeping</b> Keep a copy of the brochure, the date it was sent, and which utilities it went out with (when applicable).		
<b>Minimum Control Measures:</b> <input checked="" type="checkbox"/> Public Education <input type="checkbox"/> Public Involvement <input checked="" type="checkbox"/> Illicit Discharge <input type="checkbox"/> Construction Site Control <input type="checkbox"/> Post Construction Control <input type="checkbox"/> Municipal Operations	<b>Target Constituents:</b> <input checked="" type="checkbox"/> Residents <input type="checkbox"/> Public Service Employees <input checked="" type="checkbox"/> Commercial Facilities <input checked="" type="checkbox"/> Industrial Facilities <input type="checkbox"/> Construction Site Personnel <input type="checkbox"/> Visitors	<input checked="" type="checkbox"/> <i>New Program</i> <input type="checkbox"/> <i>Current Program</i>

Restaurant Education		
<b>BMP Description</b> The Bartholomew County Health Department issues annual retail food establishment licenses in accordance with Bartholomew county Code Chapter 3, Article 2, Section 3-35. Providing stormwater educational information at the time of license issuance would be an effective method to educate restaurant owners on the impacts of improper grease, oil, and trash disposal methods.		
<b>Measurable Goals</b> Insert information for restaurant owners with the retail food establishment licenses about the impacts on stormwater of improper disposal of grease and oil, trash disposal, etc.		
<b>Responsible Entity</b> Bartholomew County MS4, SWCD		
<b>Schedule</b> Annually		
<b>Reporting and Recordkeeping</b> Track the number of restaurant permits with the storm water impact information and keep copies of the educational brochures		
<b>Minimum Control Measures:</b> <input checked="" type="checkbox"/> Public Education <input type="checkbox"/> Public Involvement <input checked="" type="checkbox"/> Illicit Discharge <input type="checkbox"/> Construction Site Control <input type="checkbox"/> Post Construction Control <input checked="" type="checkbox"/> Municipal Operations	<b>Target Constituents:</b> <input type="checkbox"/> Residents <input type="checkbox"/> Public Service Employees <input type="checkbox"/> Commercial Facilities <input checked="" type="checkbox"/> Industrial Facilities <input type="checkbox"/> Construction Site Personnel <input type="checkbox"/> Visitors	<input checked="" type="checkbox"/> <i>New Program</i> <input type="checkbox"/> <i>Current Program</i>

Public Input on Stormwater Issues		
<b>BMP Description</b> All communities are required to comply with local and state public meeting notices regardless of the subject matter. As storm water issues are presented to the Commissioners via a monthly report, notice will be provided. Bartholomew County will seek public input on stormwater program issues as appropriate by participating in the Commissioners' public meetings.		
<b>Measurable Goals</b> Publicize dates and times for all Commissioner meetings where stormwater related ordinances or management objectives are discussed.		
<b>Responsible Entity</b> Bartholomew County Commissioners, MS4		
<b>Schedule</b> Monthly		
<b>Reporting and Recordkeeping</b> Copies of the agendas and monthly reports given will be kept		
<b>Minimum Control Measures:</b> <input checked="" type="checkbox"/> Public Education <input checked="" type="checkbox"/> Public Involvement <input type="checkbox"/> Illicit Discharge <input type="checkbox"/> Construction Site Control <input type="checkbox"/> Post Construction Control <input type="checkbox"/> Municipal Operations	<b>Target Constituents:</b> <input checked="" type="checkbox"/> Residents <input checked="" type="checkbox"/> Public Service Employees <input checked="" type="checkbox"/> Commercial Facilities <input checked="" type="checkbox"/> Industrial Facilities <input checked="" type="checkbox"/> Construction Site Personnel <input type="checkbox"/> Visitors	<input type="checkbox"/> New Program <input checked="" type="checkbox"/> Current Program

<div>Promote Volunteer Opportunities</div>		
<div><div><div>BMP Description</div><div>Community groups, boy/girl scout troops, church groups, business groups, school environmental clubs, conservation clubs, and local businesses are all examples of resources that may be able to assist with the stormwater program. To readily apply these resources, the County will work to promote volunteer participation.</div></div></div>		
<div><div><div>Measurable Goals</div><div>Promote volunteer needs in local newspapers Highlight volunteer opportunities on the stormwater and partnership websites</div></div></div>		
<div><div><div>Responsible Entity</div><div>MS4, Watershed Project, SWCD, SWMD, Purdue Extension</div></div></div>		
<div><div><div>Schedule</div><div>Annually as volunteer opportunities become available</div></div></div>		
<div><div><div>Reporting and Recordkeeping</div><div>Retain copies of newspaper articles Track the number of volunteers participating in the stormwater program</div></div></div>		
<div><div><div>Minimum Control Measures:</div><div><div><div><input checked="" type="checkbox"/> Public Education</div><div><input checked="" type="checkbox"/> Public Involvement</div><div><input checked="" type="checkbox"/> Illicit Discharge</div><div><input type="checkbox"/> Construction Site Control</div><div><input type="checkbox"/> Post Construction Control</div><div><input checked="" type="checkbox"/> Municipal Operations</div></div></div></div></div>	<div><div><div>Target Constituents:</div><div><div><div><input checked="" type="checkbox"/> Residents</div><div><input checked="" type="checkbox"/> Public Service Employees</div><div><input checked="" type="checkbox"/> Commercial Facilities</div><div><input checked="" type="checkbox"/> Industrial Facilities</div><div><input type="checkbox"/> Construction Site Personnel</div><div><input type="checkbox"/> Visitors</div></div></div></div></div>	<div><div><div><input type="checkbox"/> New Program</div><div><input checked="" type="checkbox"/> Current Program</div></div></div>



Update Storm Sewer System Map		
<b>BMP Description</b> A storm sewer map depicting conveyances and outfall locations will be kept up to date. Pipes with diameters of 12 inches or greater and ditches with a bottom width greater than 2 feet will be located by latitude and longitude in decimal degrees.		
<b>Measurable Goals</b>  Update storm sewer system map with streets, MS4 area boundaries, and outfall locations  Post on MS4 website as a downloadable map		
<b>Responsible Entity</b> County Surveyor, County Highway		
<b>Schedule</b> Update Annually		
<b>Reporting and Recordkeeping</b> Retain a copy of the storm sewer system map		
<b>Minimum Control Measures:</b> <input type="checkbox"/> Public Education <input type="checkbox"/> Public Involvement <input checked="" type="checkbox"/> Illicit Discharge <input type="checkbox"/> Construction Site Control <input type="checkbox"/> Post Construction Control <input checked="" type="checkbox"/> Municipal Operations	<b>Target Constituents:</b> <input checked="" type="checkbox"/> Residents <input checked="" type="checkbox"/> Public Service Employees <input checked="" type="checkbox"/> Commercial Facilities <input checked="" type="checkbox"/> Industrial Facilities <input checked="" type="checkbox"/> Construction Site Personnel <input type="checkbox"/> Visitors	<input type="checkbox"/> New Program <input checked="" type="checkbox"/> Current Program

<div>Review Illicit Discharge Ordinance</div>		
<div><div><div>BMP Description</div><div>The Illicit Discharge Ordinance (Chapter 53 of the Bartholomew County Ordinances) will be reviewed by the Bartholomew County Commissioners to make sure it is still meeting the compliance standards for IDEM's MS4 program.</div></div></div>		
<div><div><div>Measurable Goals</div><div>The ordinance will be available online at the Bartholomew County MS4 website for public awareness.</div></div></div>		
<div><div><div>Responsible Entity</div><div>Bartholomew County Commissioners, IT</div></div></div>		
<div><div><div>Schedule</div><div>Reviewed at the beginning of the permit term</div></div></div>		
<div><div><div>Reporting and Recordkeeping</div><div>Retain a copy of the ordinance Track downloads on MS4 website</div></div></div>		
<div><div><div>Minimum Control Measures:</div><div><div><div><input checked="" type="checkbox"/>Public Education</div><div><input type="checkbox"/>Public Involvement</div><div><input checked="" type="checkbox"/>Illicit Discharge</div><div><input type="checkbox"/>Construction Site Control</div><div><input type="checkbox"/>Post Construction Control</div><div><input checked="" type="checkbox"/>Municipal Operations</div></div></div></div></div>	<div><div><div>Target Constituents:</div><div><div><div><input checked="" type="checkbox"/>Residents</div><div><input checked="" type="checkbox"/>Public Service Employees</div><div><input checked="" type="checkbox"/>Commercial Facilities</div><div><input checked="" type="checkbox"/>Industrial Facilities</div><div><input checked="" type="checkbox"/>Construction Site Personnel</div><div><input type="checkbox"/>Visitors</div></div></div></div></div>	<div><div><div><input type="checkbox"/>New Program</div><div><input checked="" type="checkbox"/>Current Program</div></div></div>



Develop Illicit Discharge Detection and Elimination Policies, Procedures, and Documentation Tools		
<b>BMP Description</b> A strategy will be developed that includes detection procedures, illicit discharger notification procedures, enforcement procedures, and equipment resources that will be used in the illicit discharge control measure program		
<b>Measurable Goals</b> Develop policies, procedures, and documentation tools for illicit discharge inspections and enforcement.		
<b>Responsible Entity</b> County Highway, MS4		
<b>Schedule</b> Develop the policies, procedures, and tools in 2014 and keep updated throughout the term.		
<b>Reporting and Recordkeeping</b> Maintain copies of the policies and procedures for illicit discharge detection and elimination, along with any reporting forms		
<b>Minimum Control Measures:</b> <input type="checkbox"/> Public Education <input type="checkbox"/> Public Involvement <input checked="" type="checkbox"/> Illicit Discharge <input type="checkbox"/> Construction Site Control <input type="checkbox"/> Post Construction Control <input checked="" type="checkbox"/> Municipal Operations	<b>Target Constituents:</b> <input checked="" type="checkbox"/> Residents <input checked="" type="checkbox"/> Public Service Employees <input checked="" type="checkbox"/> Commercial Facilities <input checked="" type="checkbox"/> Industrial Facilities <input checked="" type="checkbox"/> Construction Site Personnel <input type="checkbox"/> Visitors	<input checked="" type="checkbox"/> <i>New Program</i> <input type="checkbox"/> <i>Current Program</i>

<div>Utilize Complaint Tracking Mechanism</div>		
<div><div>BMP Description</div><div>According to the rule language, a public reporting mechanism must be established to allow the public to report illicit discharges and spills. Depending on the type of reporting issue, the follow-up to this complaint reporting should be to investigate, and where necessary, eliminate or penalize the verified pollutant source. A hotline for citizens to report illegal dumping is available and supplements Bartholomew County's efforts to target outfalls for inspection and will facilitate the cleanup and remediation of dumping sites. Advertising the hotline will improve public involvement and will serve as an educational tool to inform the public about the hazards of illicit discharges and illegal dumping.</div></div>		
<div><div>Measurable Goals</div><div>The hotline will be advertised online and in stormwater educational brochures</div><div>All complaints of illegal discharges and dumping to storm drains and local streams will be investigated and actions taken will be documented</div><div>Utilize forms developed in 2014 by the MS4 to report complaints and track any investigation that was done</div></div>		
<div><div>Responsible Entity</div><div>County Highway, Surveyor</div></div>		
<div><div>Schedule</div><div>Advertise the hotline online</div><div>Advertise how to report illicit discharges and sedimentation and erosion problems in brochures, social media pages, and in other informational outreach programs at least bi-annually.</div></div>		
<div><div>Reporting and Recordkeeping</div><div>Retain copies of complaint forms</div><div>Retain copies of filled out complaint &amp; inspection forms</div><div>Track the number and type of outreach efforts to promote the reporting system; Keep copies of information</div></div>		
<div><div>Minimum Control Measures:</div><div><div><input checked="" type="checkbox"/> Public Education</div><div><input checked="" type="checkbox"/> Public Involvement</div><div><input checked="" type="checkbox"/> Illicit Discharge</div><div><input checked="" type="checkbox"/> Construction Site Control</div><div><input checked="" type="checkbox"/> Post Construction Control</div><div><input checked="" type="checkbox"/> Municipal Operations</div></div></div>	<div><div>Target Constituents:</div><div><div><input checked="" type="checkbox"/> Residents</div><div><input checked="" type="checkbox"/> Public Service Employees</div><div><input checked="" type="checkbox"/> Commercial Facilities</div><div><input checked="" type="checkbox"/> Industrial Facilities</div><div><input checked="" type="checkbox"/> Construction Site Personnel</div><div><input checked="" type="checkbox"/> Visitors</div></div></div>	<div><div><input type="checkbox"/> New Program</div><div><input checked="" type="checkbox"/> Current Program</div></div>

<div>Host and Promote Recycling &amp; Collection of Hazardous Waste Events</div>		
<div><div><div>BMP Description</div><div>The Solid Waste Management District (SWMD) is in charge of the day-to-day operations of all solid waste programs including Household Hazardous Waste. Bartholomew County and Columbus residents can bring their Household Hazardous Wastes to the Columbus/Bartholomew Recycling Center every Wednesday. The SWMD also hosts a Tox-A-Way Day where residents can recycle hazardous wastes for no fee or a limited fee. The SWMD also hosts events for the proper disposal of over the counter and prescription medications. Purdue Extension also hosts pesticide sweeps where residents and farmers can properly dispose of lawn and garden/agricultural chemicals.</div><div>The MS4 will work with the above agencies to promote these events to reduce the items being released into the environment.</div></div></div>		
<div><div><div>Measurable Goals</div><div>Host hazardous materials Wednesdays and Tox-A-Way Days at the SWMD</div><div>Host pesticide sweeps via Purdue Extension</div><div>Promote the tox-a-way days and other events through advertising in newspapers radio, and social media.</div><div>Increase awareness of the importance of proper disposal of hazardous items, materials, liquids, and medicine.</div></div></div>		
<div><div><div>Responsible Entity</div><div>Bartholomew County Purdue Extension</div><div>Bartholomew County SWMD</div></div></div>		
<div><div><div>Schedule</div><div>Host tox-a-way days a minimum of three times per year</div><div>Tox-a-way Wednesdays are hosted once per week.</div><div>Advertise and promote events a minimum of one week in advance of the event.</div></div></div>		
<div><div><div>Reporting and Recordkeeping</div><div>Keep track of how many items are recycled and collected during the events</div><div>Keep track of how much is recycled yearly through the SWMD</div><div>Keep copies of promotional articles, fliers, and news releases</div></div></div>		
<div><div><div>Minimum Control Measures:</div><div><div><div><input checked="" type="checkbox"/>Public Education</div><div><input type="checkbox"/>Public Involvement</div><div><input checked="" type="checkbox"/>Illicit Discharge</div><div><input checked="" type="checkbox"/>Construction Site Control</div><div><input type="checkbox"/>Post Construction Control</div><div><input checked="" type="checkbox"/>Municipal Operations</div></div></div></div></div>	<div><div><div>Target Constituents:</div><div><div><div><input checked="" type="checkbox"/>Residents</div><div><input checked="" type="checkbox"/>Public Service Employees</div><div><input checked="" type="checkbox"/>Commercial Facilities</div><div><input checked="" type="checkbox"/>Industrial Facilities</div><div><input checked="" type="checkbox"/>Construction Site Personnel</div><div><input type="checkbox"/>Visitors</div></div></div></div></div>	<div><div><div><input type="checkbox"/>New Program</div><div><input checked="" type="checkbox"/>Current Program</div></div></div>

<div>Perform Dry Weather Screening</div>		
<div><div><b>BMP Description</b></div><div>The County will perform screenings throughout the five year permit. All stormwater outfalls with a pipe diameter of 12 inches or larger wand open ditches with a 2 foot or larger bottom width will be screened annually.</div></div>		
<div><div><b>Measurable Goals</b></div><div>Perform visual inspections of all outfalls and screen for illegal dumping 2-3 days after a rainfall.</div></div>		
<div><div><b>Responsible Entity</b></div><div>County Health Department &amp; Surveyor</div></div>		
<div><div><b>Schedule</b></div><div>Annually</div></div>		
<div><div><b>Reporting and Recordkeeping</b></div><div>Retain copies of inspection data for reporting Track the number of illicit connections found and repaired/removed</div></div>		
<div><div><b>Minimum Control Measures:</b></div><div><div><input type="checkbox"/> Public Education</div><div><input type="checkbox"/> Public Involvement</div><div><input checked="" type="checkbox"/> Illicit Discharge</div><div><input type="checkbox"/> Construction Site Control</div><div><input type="checkbox"/> Post Construction Control</div><div><input checked="" type="checkbox"/> Municipal Operations</div></div></div>	<div><div><b>Target Constituents:</b></div><div><div><input checked="" type="checkbox"/> Residents</div><div><input type="checkbox"/> Public Service Employees</div><div><input checked="" type="checkbox"/> Commercial Facilities</div><div><input checked="" type="checkbox"/> Industrial Facilities</div><div><input checked="" type="checkbox"/> Construction Site Personnel</div><div><input type="checkbox"/> Visitors</div></div></div>	<div><div><input type="checkbox"/> New Program</div><div><input checked="" type="checkbox"/> Current Program</div></div>

<div>Review and Enforce the County's Erosion Control Ordinance that meet the Rule 5 Requirements</div>		
<div><div><div>BMP Description</div><div>The County has existing erosion control requirements in the Subdivision Control Ordinance. The County will review and update the ordinance to reflect NPDES goals. The ordinance gives the County the authority to require erosion and sediment control plans for new developments, to inspect new development sites, and to require compliance with the local ordinance and 327 IAC 15-5. The ordinance will include the following elements:<ul style="list-style-type: none"><li>• Requirement to install Erosion and Sediment Control Best Management Practices;</li><li>• Requirement to manage other construction site wastes;</li><li>• Technical standards reference (e.g., Indiana Stormwater Quality Manual);</li><li>• Clear definition of who must submit Erosion and Sediment Control information or plans;</li><li>• Requirement to obtain plan approval prior to initiation of land disturbance activities;</li><li>• Provisions for submittal of revised Erosion and Sediment Control plans or information if site plan or conditions change during construction;</li><li>• Allow right-of-entry for inspection; and</li><li>• Enforcement authority, with provisions for penalties (e.g., monetary fines, stop work orders).</li><li>• Requirements for site inspection, enforcement, and plan review, including the review of plans for projects operated by the MS4 Operator.</li></ul></div></div></div>		
<div><div><div>Measurable Goals</div><div>Review erosion and sediment control legislation to address all of the components noted in 327 IAC 15-5</div><div>Formally establish a policy that establishes penalties associated with violations of the local ordinance, including the use of monetary fines and stop work orders as enforcement tools.</div></div></div>		
<div><div><div>Responsible Entity</div><div>Commissioners' Office, County Highway, Code Enforcement</div></div></div>		
<div><div><div>Schedule</div><div>Adopted in 2008, Reviewed in 2014.</div><div>Will be reviewed with every new permit term</div></div></div>		
<div><div><div>Reporting and Recordkeeping</div><div>Provide a copy of the ordinance and date adopted</div><div>Record all enforcement actions on a per site basis, including the type of action taken</div></div></div>		
<div><div><div>Minimum Control Measures:</div><div><div><input type="checkbox"/> Public Education</div><div><input type="checkbox"/> Public Involvement</div><div><input type="checkbox"/> Illicit Discharge</div><div><input checked="" type="checkbox"/> Construction Site Control</div><div><input type="checkbox"/> Post Construction Control</div><div><input type="checkbox"/> Municipal Operations</div></div></div></div>	<div><div><div>Target Constituents:</div><div><div><input type="checkbox"/> Residents</div><div><input type="checkbox"/> Public Service Employees</div><div><input type="checkbox"/> Commercial Facilities</div><div><input type="checkbox"/> Industrial Facilities</div><div><input checked="" type="checkbox"/> Construction Site Personnel</div><div><input type="checkbox"/> Visitors</div></div></div></div>	<div><div><div><input type="checkbox"/> New Program</div><div><input checked="" type="checkbox"/> Current Program</div></div></div>



Review Construction Plans		
<b>BMP Description</b> The County will review all new development plans for compliance with the local ordinance.		
<b>Measurable Goals</b> Review all soil erosion and sediment control plans.  All Rule 5 reviews will be completed by the County.		
<b>Responsible Entity</b> County Highway		
<b>Schedule</b> Within 28 days of receiving a new development plan		
<b>Reporting and Recordkeeping</b> Keep track of the number of plan reviews		
<b>Minimum Control Measures:</b> <input type="checkbox"/> Public Education <input type="checkbox"/> Public Involvement <input type="checkbox"/> Illicit Discharge <input checked="" type="checkbox"/> Construction Site Control <input type="checkbox"/> Post Construction Control <input type="checkbox"/> Municipal Operations	<b>Target Constituents:</b> <input type="checkbox"/> Residents <input type="checkbox"/> Public Service Employees <input type="checkbox"/> Commercial Facilities <input type="checkbox"/> Industrial Facilities <input checked="" type="checkbox"/> Construction Site Personnel <input type="checkbox"/> Visitors	<input type="checkbox"/> New Program <input checked="" type="checkbox"/> Current Program

<div>Inspection and Enforcement of Construction Projects</div>		
<div><div><div>BMP Description</div><div>Implement an ongoing erosion and sediment control inspection and enforcement program.</div></div></div>		
<div><div><div>Measurable Goals</div><div>Establish inspection and enforcement policies and procedures. Perform inspections per the established policies and procedures.</div></div></div>		
<div><div><div>Responsible Entity</div><div>County Highway, Code Enforcement</div></div></div>		
<div><div><div>Schedule</div><div>Perform inspections on all applicable construction projects</div></div></div>		
<div><div><div>Reporting and Recordkeeping</div><div>Provide a copy of all policies and procedures, and an inspection checklist Track the number of inspections and applicable enforcement measures</div></div></div>		
<div><div><div>Minimum Control Measures:</div><div><div><div><input checked="" type="checkbox"/>Public Education</div><div><input type="checkbox"/>Public Involvement</div><div><input type="checkbox"/>Illicit Discharge</div><div><input checked="" type="checkbox"/>Construction Site Control</div><div><input type="checkbox"/>Post Construction Control</div><div><input type="checkbox"/>Municipal Operations</div></div></div></div></div>	<div><div><div>Target Constituents:</div><div><div><div><input type="checkbox"/>Residents</div><div><input type="checkbox"/>Public Service Employees</div><div><input type="checkbox"/>Commercial Facilities</div><div><input type="checkbox"/>Industrial Facilities</div><div><input checked="" type="checkbox"/>Construction Site Personnel</div><div><input type="checkbox"/>Visitors</div></div></div></div></div>	<div><div><div><input type="checkbox"/>New Program</div><div><input checked="" type="checkbox"/>Current Program</div></div></div>

Continue to Implement Post-Construction Ordinance		
<b>BMP Description</b> Continue enforcement of the county's adopted post construction ordinance. Review ordinance language and make the recommended revisions, if necessary, to respective legislative authorities prior to the end of each permit term.		
<b>Measurable Goals</b> Post-construction plans for sites disturbing an acre or more of soil, or part of a larger common plan of development or sale if the larger common plan disturbs an acre or more of soil, will continue to be reviewed by each individual entity. These plans will meet the requirements of 327 IAC 15-5-6.5-(a) (8).  Continue to respond to violations of ordinances through enforcement action when necessary.		
<b>Responsible Entity</b> County Highway-Rule 5 Contracted Reviewer  Code Enforcement		
<b>Schedule</b>  Will be completed with every plan submitted.		
<b>Reporting and Recordkeeping</b> Retain documentation of post-construction plans received and reviewed.  Retain documentation of enforcement actions taken.		
<b>Minimum Control Measures:</b> <input type="checkbox"/> Public Education <input type="checkbox"/> Public Involvement <input type="checkbox"/> Illicit Discharge <input type="checkbox"/> Construction Site Control <input checked="" type="checkbox"/> Post Construction Control <input type="checkbox"/> Municipal Operations	<b>Target Constituents:</b> <input type="checkbox"/> Residents <input type="checkbox"/> Public Service Employees <input type="checkbox"/> Commercial Facilities <input type="checkbox"/> Industrial Facilities <input checked="" type="checkbox"/> Construction Site Personnel <input type="checkbox"/> Visitors	<input type="checkbox"/> New Program <input checked="" type="checkbox"/> Current Program



Inspect/Clean Ditches, Culverts, and Pipes		
<b>BMP Description</b> Routine inspections of ditches, culverts, and pipes are performed. Identified problems will be noted, and sediment and debris will be removed to maintain system capacity and reduce flooding concerns.		
<b>Measurable Goals</b> Inspect ditches, culverts, and pipes on normal County Highway routes. The County Highway will clean the ditches, culverts, and pipes when they are noted to be in need of maintenance.		
<b>Responsible Entity</b> County Highway		
<b>Schedule</b> When debris has settled in any ditch, culvert, or pipe.		
<b>Reporting and Recordkeeping</b> Track the amount of linear feet cleaned per year, how many culverts and pipes are replaced and cleaned.		
<b>Minimum Control Measures:</b> <input type="checkbox"/> Public Education <input type="checkbox"/> Public Involvement <input type="checkbox"/> Illicit Discharge <input type="checkbox"/> Construction Site Control <input type="checkbox"/> Post Construction Control <input checked="" type="checkbox"/> Municipal Operations	<b>Target Constituents:</b> <input checked="" type="checkbox"/> Residents <input type="checkbox"/> Public Service Employees <input type="checkbox"/> Commercial Facilities <input type="checkbox"/> Industrial Facilities <input type="checkbox"/> Construction Site Personnel <input type="checkbox"/> Visitors	<input type="checkbox"/> New Program <input checked="" type="checkbox"/> Current Program

<div>Litter Pickup</div>		
<div><div><div>BMP Description</div><div>The County removes roadside litter throughout the county and will continue to do so.  The Solid Waste Management District receives trash pickup from the county residents at their landfill and recycling center.</div></div></div>		
<div><div><div>Measurable Goals</div><div>The County will perform litter removal when noticed or reported and when they are on their daily routes.  The SWMD will continue to receive all trash collected in Bartholomew County.</div></div></div>		
<div><div><div>Responsible Entity</div><div>County Highway Solid Waste Management District</div></div></div>		
<div><div><div>Schedule</div><div>Daily</div></div></div>		
<div><div><div>Reporting and Recordkeeping</div><div>Monthly and yearly reports will be kept by both responsible entities with the amounts of trash collected/recycled.</div></div></div>		
<div><div><div>Minimum Control Measures:</div><div><div><div><input checked="" type="checkbox"/>Public Education</div><div><input type="checkbox"/>Public Involvement</div><div><input type="checkbox"/>Illicit Discharge</div><div><input type="checkbox"/>Construction Site Control</div><div><input type="checkbox"/>Post Construction Control</div><div><input checked="" type="checkbox"/>Municipal Operations</div></div></div></div></div>	<div><div><div>Target Constituents:</div><div><div><div><input checked="" type="checkbox"/>Residents</div><div><input type="checkbox"/>Public Service Employees</div><div><input type="checkbox"/>Commercial Facilities</div><div><input type="checkbox"/>Industrial Facilities</div><div><input type="checkbox"/>Construction Site Personnel</div><div><input type="checkbox"/>Visitors</div></div></div></div></div>	<div><div><div><input type="checkbox"/>New Program</div><div><input checked="" type="checkbox"/>Current Program</div></div></div>

Road Deicing Material Application and Storage		
<b>BMP Description</b> The County Highway maintains a salt stockpile, sand stockpile, and beet juice tank at the County Garage for roadway snow and ice control. These materials will be stored appropriately to reduce any runoff from storage materials.  The County Highway will apply these materials during hazardous road conditions in a way to ensure runoff is minimized.		
<b>Measurable Goals</b> Evaluate current procedures, structures, and equipment for salt, sand, and beet juice application.  Develop or modify material storage and application policies and practices.		
<b>Responsible Entity</b> County Highway		
<b>Schedule</b> Evaluate at least one time per permit term.		
<b>Reporting and Recordkeeping</b> Retain a copy of the road deicing material storage and application procedures. Track the amount of sand, salt, and beet juice applied to roadways. Track the miles of roadways treated. Keep track of all storage locations during the heavy-use months.		
<b>Minimum Control Measures:</b> <input type="checkbox"/> Public Education <input type="checkbox"/> Public Involvement <input type="checkbox"/> Illicit Discharge <input type="checkbox"/> Construction Site Control <input type="checkbox"/> Post Construction Control <input checked="" type="checkbox"/> Municipal Operations	<b>Target Constituents:</b> <input checked="" type="checkbox"/> Residents <input type="checkbox"/> Public Service Employees <input type="checkbox"/> Commercial Facilities <input type="checkbox"/> Industrial Facilities <input type="checkbox"/> Construction Site Personnel <input type="checkbox"/> Visitors	<input type="checkbox"/> New Program <input checked="" type="checkbox"/> Current Program

Vehicle Washing		
<b>BMP Description</b> The County washes vehicles at the County Garage in a designated wash bay with floor drains that are plumbed to the sanitary sewer.		
<b>Measurable Goals</b> Evaluate current vehicle washing SOP.		
<b>Responsible Entity</b> County Highway		
<b>Schedule</b> The vehicle washing SOP will be evaluated at least once per permit term.		
<b>Reporting and Recordkeeping</b> The vehicle washing SOP will be kept on hand at the County Garage and at the MS4 Coordinator's Office.		
<b>Minimum Control Measures:</b> <input type="checkbox"/> Public Education <input type="checkbox"/> Public Involvement <input type="checkbox"/> Illicit Discharge <input type="checkbox"/> Construction Site Control <input type="checkbox"/> Post Construction Control <input checked="" type="checkbox"/> Municipal Operations	<b>Target Constituents:</b> <input checked="" type="checkbox"/> Residents <input type="checkbox"/> Public Service Employees <input type="checkbox"/> Commercial Facilities <input type="checkbox"/> Industrial Facilities <input type="checkbox"/> Construction Site Personnel <input type="checkbox"/> Visitors	<input type="checkbox"/> <i>New Program</i> <input checked="" type="checkbox"/> <i>Current Program</i>

<div>Documentation of Maintenance Activities</div>		
<div><div><div>BMP Description</div><div>The County Highway will keep documentation of the maintenance activities and maintenance schedules to reduce floatables and other pollutants discharged into the waters of the State. The maintenance activities may include, but are not limited to the following:<div><div>(A) Cleaning of county bridges</div><div>(B) Roadside shoulder stabilization</div><div>(C) Roadside ditch stabilization</div><div>(D) Planning and proper care of roadside vegetation</div></div></div></div></div>		
<div><div><div>Measurable Goals</div><div>The County Highway will provide documentation of the maintenance activities and schedules.</div></div></div>		
<div><div><div>Responsible Entity</div><div>County Highway</div><div>Pesticide/Herbicide application is hired out to licensed entities.</div></div></div>		
<div><div><div>Schedule</div><div><div>(A) Once per year (in the Spring)</div><div>(B) Standard after new pavement (when funding allows)</div><div>(C) Cleaned when blockage reported</div><div>(D) Right of ways are mowed a minimum of once per year (twice per year when funding allows)</div></div></div></div>		
<div><div><div>Reporting and Recordkeeping</div><div>Retain a copy of the maintenance activities and schedules.</div></div></div>		
<div><div>Minimum Control Measures:</div><div><div><div><input type="checkbox"/> Public Education</div><div><input type="checkbox"/> Public Involvement</div><div><input type="checkbox"/> Illicit Discharge</div><div><input type="checkbox"/> Construction Site Control</div><div><input type="checkbox"/> Post Construction Control</div><div><input checked="" type="checkbox"/> Municipal Operations</div></div></div></div>	<div><div>Target Constituents:</div><div><div><div><input checked="" type="checkbox"/> Residents</div><div><input type="checkbox"/> Public Service Employees</div><div><input type="checkbox"/> Commercial Facilities</div><div><input type="checkbox"/> Industrial Facilities</div><div><input type="checkbox"/> Construction Site Personnel</div><div><input type="checkbox"/> Visitors</div></div></div></div>	<div><div><div><input type="checkbox"/> New Program</div><div><input checked="" type="checkbox"/> Current Program</div></div></div>

## Proper Disposal of Waste Removed from MS4 Conveyances and Operational Areas

### BMP Description

The County will properly dispose of waste that is removed from the MS4 conveyances and operational areas according to the County's SOP. All materials, including dredge spoil, accumulated sediments, floatables, and debris, will be removed from the MS4 conveyances and operational areas and will be:

- (A) Reused or Recycled  
(B) Disposed of at the Solid Waste Management District

### Measurable Goals

Evaluate SOPs for accuracy on waste disposal procedures.

## Responsible Entity

County Highway

### Schedule

Minimum of once per permit term

### Reporting and Recordkeeping

Retain a copy of the disposal SOPs at the County Highway and the MS4 coordinator's office.

**Minimum Control Measures:**

- ☐ Public Education  
☐ Public Involvement  
☐ Illicit Discharge  
☐ Construction Site Control  
☐ Post Construction Control  
☒ Municipal Operations

**Target Constituents:**

- ☒ Residents  
☐ Public Service Employees  
☐ Commercial Facilities  
☐ Industrial Facilities  
☐ Construction Site Personnel  
☐ Visitors

- ☐ *New Program*  
☒ *Current Program*

# APPENDIX B:

## Memorandum of Understanding



## MEMORANDUM OF UNDERSTANDING

Regarding the Cooperation and Coordination of Implementing 327 IAC 15-13 (Rule 13) between the following entities:

Bartholomew County, Indiana  
City of Columbus, Indiana  
Bartholomew County Solid Waste Management District  
Bartholomew County Soil and Water Conservation District  
**Purdue University Acting** Flatrock-Haw Creek Watershed Program  
**On Behalf Of** ^ Bartholomew County's Purdue Extension

**Whereas**, the Federal Clean Water Act requires storm water discharges from certain types of urbanized areas to be permitted under the National Pollution Discharge Elimination System (NPDES) program (Phase II); and,

**Whereas**, the Indiana Department of Environmental Management, hereinafter referred to as "IDEM", has designated Bartholomew County and the City of Columbus as MS4 Entities under the provisions of 327 IAC 15-13 (Rule 13); and,

**Whereas**, the Storm Water Phase II Rule 13 extends coverage of the NPDES Storm Water Program to all small MS4s, requiring the implementation of the six (6) element program minimum control measures (MCMs) and the implementation of best management practices (BMPs) to satisfy each of the MCMs;

**Whereas**, Bartholomew County, the City of Columbus, the Bartholomew County Soil and Water Conservation District, the Bartholomew County Solid Waste Management District, Flatrock-Haw Creek Watershed Program, and Bartholomew County's Purdue Extension Office will assist each other in activities to towns, city, and the county with meeting the requirements for MCM 1 Public Education and MCM 2 Public Participation and Involvement.

**Whereas**, Bartholomew County, the City of Columbus, the Bartholomew County Soil and Water Conservation District, the Bartholomew County Solid Waste Management District, Flatrock-Haw Creek Watershed Program, and Bartholomew County's Purdue Extension Office will each be responsible for their own costs of providing services and fulfilling its responsibilities as set forth above.

**Whereas**, the City of Columbus and Bartholomew County will be responsible for satisfying the requirements of their individual storm water permits.

**Whereas**, this Memorandum of Understanding will remain in effect for four years from the signatory date.

**Therefore Be It Resolved** that all parties do hereby agree to work jointly to carry out the requirements to meet the minimum control measures for Public Education and Outreach and Public Participation and Involvement. These activities include but are not limited to the following: website, news articles, press releases, clean up events, 4-H fair booth, school programs, educational brochures, restaurant education, and other educational events.

It is further understood that the cost or level of corresponding employee participation to be attributed to any party involved in meeting the requirements of the above shall be decided on a case by case basis with the involved parties.

It is further understood that this agreement becomes effective when all parties are signatory hereto.

14120955 revised

Any party may withdraw from participation in this Agreement for any reason by giving 30 days advance written notice to the other parties. Should any party withdraw from this Agreement, the Agreement shall continue to exist as if the withdrawing party was not an original party to this Agreement.

This agreement is made and entered into by:

Carl H. Lushcep, Chairman of the Bartholomew County Commissioners  
August 4, 2014, Date

Mike SB, City of Columbus, Indiana's Board of Public Works and Safety  
August 26, 2014, Date

Dennis Bruck, Chairman of the Bartholomew County Soil and Water Conservation District  
Aug. 12, 2014, Date

Jon S. Klein, Chairman of the Bartholomew County Solid Waste Management District  
8/13/14, Date

Kenneth W. Suter, Contract Analyst, Purdue University on Behalf of Bartholomew County  
JUL 22 2014, Date  
**Kenneth W. Suter**  
**Contract Analyst**

Jennifer Whitaker, Chairman of the Flatrock Haw-Creek Watershed Organization  
August 11, 2014, Date

# APPENDIX C:

Chapter 53: Storm Water; Illicit Discharges

Bartholomew County, IN Code of Ordinances

## **CHAPTER 53: STORM WATER; ILLICIT DISCHARGES**

### Section

53.01 Purpose and intent

53.02 Definitions

53.03 Applicability

53.04 Responsibility for administration

53.05 Ultimate responsibility

53.06 Discharge prohibitions; exemptions and requirements

53.07 Elimination of illegal discharges

53.08 Requirement to eliminate or secure approval for illicit connections

53.09 Suspension of MS4 access

53.10 Industrial or construction activity discharges

53.11 Access and inspection of properties and facilities

53.12 Requirement to remediate

53.13 Requirement to monitor and analyze

53.14 Requirement to prevent, control and reduce storm water pollutants by the use of best management practices

53.15 Notification of spills

53.16 Violations and enforcement

53.99 Penalty

### **§ 53.01 PURPOSE AND INTENT.**

(A) The intent of this chapter is to protect and enhance the water quality of our watercourses and water bodies in a manner pursuant to and consistent with the Federal Clean Water Act (33 U.S.C. §§ 1251 et seq.) and to also provide for the health, safety and general welfare of the citizens of the county, through the reduction of pollutants in storm water discharges and the regulation of non-storm water discharges to the storm drainage system to the maximum extent practicable. This chapter establishes methods for controlling the introduction of pollutants into the municipal separate storm sewer system (MS4) in order to comply with requirements of the National Pollutant Discharge Elimination System (NPDES) permit process and specifically meet the requirements of 327 I.A.C. 15-13.

(B) The objectives of this chapter are:

- (1) To regulate pursuant to 327 I.A.C. 15-13 the contribution of pollutants to the municipal separate storm sewer system (MS4) by storm water discharges by any user;
  - (2) To prohibit illicit connections and discharges to the municipal separate storm sewer system;
  - (3) To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this chapter; and
  - (4) To promote public awareness of the hazards involved in the improper discharge of trash, yard waste, lawn chemicals, pet waste, wastewater, grease, oil, petroleum products, cleaning products, paint products, hazardous waste, sediment and other pollutants into the storm drainage system.
- (Ord. 2008-08, passed 5-5-2008)

### **§ 53.02 DEFINITIONS.**

For the purpose of this chapter, the following definitions shall apply unless the context clearly indicates or requires a different meaning.

**BASEMENT.** A building substructure used for any type of storage or finished for use as living or entertainment quarters.

**BEST MANAGEMENT PRACTICES (BMPS).** Schedules of activities, prohibitions of practices, general good housekeeping practices, pollution prevention and educational practices, maintenance procedures and other management practices to prevent or reduce the discharge of pollutants directly or indirectly to storm water, receiving waters or storm water conveyance systems. **BMPS** also include treatment practices, operating procedures and practices to control site runoff, spillage or leaks, sludge or water disposal, or drainage from raw materials storage.

**COUNTY.** The employees or designees of the county designated to enforce this chapter.

**CONCENTRATED FLOW.** Any flow observable in an MS4 conveyance such as a pipe, gutter or swale.

**CONTIGUITY.** An entities proximity to a designated MS4 area in a way that it allows for direct discharges of storm water run-off into the regulated MS4 conveyance.

**CONVEYANCE.** Any structure which transfers storm water between at least two points. The term includes, but is not limited to, piping, ditches, swales, curbs, gutters, catch basins, channels, storm drains and roadways.

**CLEAN WATER ACT.** The Federal Water Pollution Control Act (33 U.S.C. §§ 1251 et seq.), and any subsequent amendments thereto.

**CONSTRUCTION ACTIVITY.** Activities subject to NPDES construction permits. These include construction projects resulting in land disturbances of one acre or more, or from sites smaller than one acre if the construction activity is part of a larger plan of development or sale that disturbs one acre or more. The activities include, but are not limited to, clearing and grubbing, grading, excavating and demolition.

**CRAWL SPACE.** A building substructure not meeting the above definition of a basement.

**DISPOSAL.** The discharge; deposit; injection; spilling; leaking; or placing of any solid waste or hazardous waste into or on any land or water so that the solid or hazardous waste, or any constituent of the waste, may enter the environment, be emitted into the air, or be discharged into any waters, including ground waters.

**GARBAGE.** All animal solid, vegetable solid and semisolid wastes resulting from the processing; handling; preparation; cooking; serving; or consumption of food or food materials.

**FACILITY.** Any building including private homes, structures, installations, processes or activities from which there is or may be a pollutant discharge.

**HAZARDOUS MATERIALS.** Any material, including any substance, waste or combination thereof, which because of its quantity, concentration or physical, chemical or infectious characteristics may cause, or significantly contribute to, a substantial present or potential hazard to human health, safety, property or the environment when improperly treated, stored, transported, disposed of or otherwise managed.

**ILLEGAL DISCHARGE.** Any direct or indirect non-storm water discharge to the storm drain system, except naturally occurring floatables, such as leaves or tree (shrub) limbs or as exempted in § 53.06(B).

**ILLICIT CONNECTIONS.** An illicit connection is defined as either of the following:

(1) Any drain or conveyance, whether on the surface or subsurface, which allows an illegal discharge to enter the storm drain system including, but not limited to, any conveyances which allow any non-storm water or non pure ground water discharge including sewage, process wastewater and wash water to enter the storm drain system and any connections to the storm



drain system from indoor drains, basement sump pumps and sinks, regardless of whether the drain or connection had been previously allowed, permitted or approved by the county; or (2) Any drain or conveyance connected from a commercial or industrial land use to the storm drain system which has not been documented in plans, maps or equivalent records and approved by the county.

**ILLCIT DISCHARGE.** See **ILLEGAL DISCHARGE**.

**INDUSTRIAL ACTIVITY.** Activities subject to NPDES industrial permits as defined in 40 C.F.R. § 122.26 (b)(14) and subject to 327 I.A.C. 15-6.

**MOBILE CLEANING OPERATIONS** or **MOBILE WASHING.** Power washing, steam cleaning, and any other method of mobile cosmetic cleaning, including, but not limited to, vehicles, fabric, pets and/or exterior surfaces, engaged in for commercial purposes or related to a commercial activity.

**MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4).** Publicly-owned facilities by which storm water is collected and/or conveyed, including but not limited to any roads with drainage systems, municipal streets, gutters, curbs, catch basins, inlets, piped storm drains, culverts, pumping facilities, retention and detention basins, natural and human-made or altered drainage ditches/channels, reservoirs and other drainage structures.

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORM WATER DISCHARGE PERMIT.** A permit issued by EPA (or by the state under authority delegated pursuant to 33 U.S.C. § 1342(b)) that authorizes the discharge of pollutants to the states watercourses, whether the permit is applicable on an individual, group or general area-wide basis.

**NON-STORM WATER DISCHARGE.** Any discharge to the storm drain system that is not composed entirely of storm water.

**PERSON.** Any individual, association, organization, partnership, firm, corporation, limited liability company or other entity recognized by law.

**POLLUTANT.** Anything that causes or contributes to pollution. **POLLUTANTS** may include, but are not limited to, paints, varnishes, solvents; oil and automotive fluids; non-hazardous liquid and solid wastes; yard wastes; refuse, rubbish, garbage, litter, floatables; pesticides; herbicides; and fertilizers; hazardous substances and wastes; sewage, effluent, fecal coliform, E. Coli and pathogens; dissolved and particulate metals; animal wastes; wastes and residues that result from constructing a building or structure and noxious or offensive matter of any kind.

**POLLUTION.** The presence in watercourse of any pollutant listed above or a substance listed with the U.S. EPA.

**PREMISES.** Any building, lot, parcel of land or portion of land whether improved or unimproved, and including adjacent sidewalks and parking strips.

**RECEIVING WATER.** Waters of the state including but not limited to Driftwood River, Flatrock River, Haw Creek, Wolf Creek, Denios Creek, East Fork White River, Clifty Creek and Sloan Branch. The term does not include private drains, retention and detention basins or constructed wetlands used as treatment.

**SPILL.** An unintentional release of solid or liquid material, which may cause pollution of the MS4 or its receiving waters.

**STORM DRAINAGE SYSTEM.** Also defined as **MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4)**.

**STORM WATER.** Any surface flow, runoff and drainage consisting entirely of water from any form of natural precipitation and resulting from the precipitation.

**STORM WATER POLLUTION PREVENTION PLAN (SWP3) or STORM WATER MANAGEMENT PLAN (SWMP).** A document which describes the best management practices and activities to be implemented by a person to identify sources of pollution or contamination at a site and the actions to eliminate or reduce pollutant discharges to storm water, MS4 and/or receiving waters to the maximum extent practicable.

**THREATENED DISCHARGE.** A condition creating a substantial probability of a pollutant entering an MS4 or surface waters which may cause harm when the probability and potential extent of harm make it reasonably necessary to take immediate action to prevent, reduce or mitigate damages to persons, property or natural resources.

**WASTEWATER.** Any water or other liquid, other than uncontaminated storm water, discharged from a facility.

**WATERCOURSE.** A natural or artificial channel through which water can flow.  
(Ord. 2008-08, passed 5-5-2008)

### **§ 53.03 APPLICABILITY.**

This chapter shall apply to all water entering the storm drain system generated on any developed and undeveloped lands lying within the county unless explicitly exempted by § 53.06.  
(Ord. 2008-08, passed 5-5-2008)

### **§ 53.04 RESPONSIBILITY FOR ADMINISTRATION.**

The county shall administer, implement and enforce the provisions of this chapter. Any powers granted or duties imposed upon the county may be delegated in writing by the County Commissioners to persons or entities acting in the beneficial interest of or in the employ of the county.

(Ord. 2008-08, passed 5-5-2008)

### **§ 53.05 ULTIMATE RESPONSIBILITY.**

The standards set forth herein and promulgated pursuant to this chapter are minimum standards; therefore, this chapter does not intend nor imply that compliance by any person will ensure that there will be no contamination, pollution, nor unauthorized discharge of pollutants.  
(Ord. 2008-08, passed 5-5-2008)

### **§ 53.06 DISCHARGE PROHIBITIONS; EXEMPTIONS AND REQUIREMENTS.**

#### **(A) Prohibitions.**

(1) No person shall discharge or cause to be discharged into the municipal separate storm sewer system (MS4) or watercourses any materials, including, but not limited to, pollutants or waters containing any pollutants that cause or contribute to a violation of applicable water quality standards, other than storm water. Common storm water pollutants include, but are not limited to, paints, varnishes and solvents; oil and other automotive fluids; non-hazardous liquid and solid wastes and yard wastes; trash, refuse, rubbish, garbage, food waste, litter or other discarded or abandoned objects, ordinances, and accumulations, so that same may cause or contribute to pollution; floatables; oil and grease; cleaning products; pesticides, herbicides and fertilizers; landscaping materials; hazardous substances and wastes; sewage, fecal coliform and pathogens; dissolved and particulate metals; animal wastes; wastes and residues that result from construction activities including, but not limited to, painting, paving, concrete placement, sawcutting and grading; wastes and residues that result from mobile washing operations; discharges from toilets; sinks; industrial processes; cooling systems; boilers; fabric cleaning; equipment cleaning; commercial vehicle cleaning; substances added to the storm drain to control root growth and noxious or offensive matter of any kind.



(2) It shall be unlawful for any person to intentionally dump liquids or solids that are considered pollutants on the ground where there is potential exposure to rain or storm water and potential for the pollutant to reach the MS4 of the county.

(3) The construction, use, maintenance or continued existence of illicit connections to the MS4 is prohibited. This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.

(4) No person owning or in control of any premises shall connect a line conveying sewage to the MS4 or allow such a connection to continue.

(5) It shall be unlawful to cause materials to be deposited in a manner or location as to constitute a threatened discharge into storm drains, gutters or other watercourses. Materials that are no longer contained in a pipe, tank or other container are considered to be threatened discharges unless they are actively being cleaned up.

(6) No person shall maliciously destroy or interfere with BMPs implemented to protect water quality.

(B) *Exemptions.* The following discharges are exempt from the discharge prohibitions established by this chapter when properly managed:

(1) Water line flushing or other potable water sources, landscape irrigation or lawn watering, irrigation return flows, diverted stream flows, rising ground water, uncontaminated ground water infiltration to storm drains (as defined by 40 C.F.R. § 35.2005(20)), uncontaminated pumped ground water, foundation or footing drains, crawl space pumps, air conditioning condensation, springs, individual residential car washing or car washing of less than two consecutive days in duration for charity or nonprofit fund raising, natural riparian habitat or wet-land flows, firefighting activities and any other water source not containing pollutants;

(2) Discharges approved by the authorized enforcement agency as being necessary to protect public health and safety, such as flows from firefighting;

(3) Dye testing, provided the person undertaking the testing provides verbal notification to the authorized enforcement agency 24 hours prior to the time of the test;

(4) The prohibitions set forth in § 53.06(A) shall not apply to any non-storm water discharge permitted under an NPDES permit, waiver or waste discharge order issued and administered under the authority of the Federal Environmental Protection Agency; provided that, the discharger is in full compliance with all requirements of the permit, waiver or order and other applicable laws and regulations and provided that written approval has been granted by the county for any discharge to the storm drain system; and

(5) The county may exempt in writing other non-storm water discharges which are not a source of pollutants to the MS4 or other watercourses.

(C) *Requirements applicable to potential dischargers.*

(1) *Watercourse protection.* Every person owning property through which a watercourse passes, or the person's lessee, shall keep and maintain that part of the watercourse within the property free of trash, debris, excessive vegetation and other obstacles that would pollute, contaminate or significantly retard the flow of water through the watercourse. In addition, the owner or lessee shall maintain existing privately-owned structures within or adjacent to a watercourse, so that the structures will not become a hazard to the use, function or physical integrity of the watercourse.

(2) *Minimization of landscaping irrigation runoff.* A discharge of landscaping irrigation water that is of sufficient quantity to cause a concentrated flow in the municipal separate storm sewer

system is prohibited. Irrigation systems shall be managed to reduce the discharge of water from a site.

(3) *Cleaning of paved surfaces required.* The owner of any paved parking lot, street or drive shall clean the pavement as necessary to prevent the buildup and discharge of pollutants. The visible buildup on a paved service of mechanical fluid, waste materials, sediment or debris is a violation of this chapter. Paved surfaces shall be cleaned by dry sweeping, wet vacuum sweeping or other methods in compliance with this chapter.

(4) *Mobile cleaning operations.* Mobile cleaning operations shall not discharge to the municipal separate storm sewer system in violation of this chapter.

(5) *Maintenance of equipment.* Any leak or spill related to equipment maintenance in an outdoor, uncovered area shall be contained to prevent the potential release of pollutants.

(6) *Reduction of leaking fluids.* Vehicles, machinery and equipment must be maintained to reduce leaking fluids.

(7) *Materials storage.* In addition to other requirements of this chapter, materials such as, but not limited to, stockpiles used in construction and landscaping activities shall be stored to prevent the potential release of pollutants.

(8) *Pet waste.* Pet waste shall be disposed of as solid waste or sanitary sewage in a timely manner to prevent the discharge to the MS4.

(9) *Pesticides, herbicides and fertilizers.* Pesticides, herbicides and fertilizers shall be applied in accordance with manufacturer recommendations and applicable laws. Excessive application shall be avoided. Pesticides, herbicides and fertilizers shall be stored in a manner to prevent release to the MS4.

(Ord. 2008-08, passed 5-5-2008) Penalty, see § 53.99

#### **§ 53.07 ELIMINATION OF ILLEGAL DISCHARGES.**

The county may require, by written notice, that a person responsible for an illegal discharge immediately, or by a specified date, discontinues the discharge and, if necessary, takes measures to eliminate the source of the discharge to prevent the occurrence of future illegal discharges.

(Ord. 2008-08, passed 5-5-2008) Penalty, see § 53.99

#### **§ 53.08 REQUIREMENT TO ELIMINATE OR SECURE APPROVAL FOR ILLICIT CONNECTIONS.**

(A) The county may require, by written notice, that a person responsible for an illicit connection to the storm drain system comply with the requirements of this chapter to eliminate or secure approval from the County Engineer for the connection by a specified date, regardless of whether or not the connection or discharges to it had been established or approved prior to the effective date of this chapter.

(B) (1) If, subsequent to eliminating a connection found to be in violation of this chapter, the responsible person can demonstrate that an illegal discharge will no longer occur, the person may request county approval to reconnect.

(2) The reconnection or reinstallation of the connection shall be at the responsible person's expense.

(Ord. 2008-08, passed 5-5-2008) Penalty, see § 53.99

#### **§ 53.09 SUSPENSION OF MS4 ACCESS.**

(A) *Suspension due to illicit discharges in emergency situations.* The county may, without prior notice, suspend MS4 discharge access to a person when the suspension is necessary to stop an actual or threatened discharge, which presents or may present imminent and substantial danger to the environment, to the health or welfare of persons or to the MS4 or other watercourses. If the

violator fails to comply with a suspension order issued in an emergency, the authorized enforcement agency may take steps as deemed necessary to prevent or minimize damage to the MS4 or other watercourses or to minimize danger to persons.

(B) *Termination due to the detection of illicit discharge.* Any person discharging to the MS4 in violation of this chapter may have his or her MS4 access terminated if the termination would, in the judgment of the authorized enforcement agency, abate or reduce an illicit discharge. The authorized enforcement agency will notify the violator of the proposed termination of his or her MS4 access. The violator may petition the authorized enforcement agency for a post-termination hearing regarding the termination of access. The hearing shall be conducted in accordance with rules promulgated by the authorized enforcement agency. A person commits a violation of this chapter if the person reinstates MS4 access to premises terminated pursuant to this section, without the prior approval of the authorized enforcement agency.

(Ord. 2008-08, passed 5-5-2008)

#### **§ 53.10 INDUSTRIAL OR CONSTRUCTION ACTIVITY DISCHARGES.**

Any person subject to an industrial or construction activity NPDES storm water discharge permit shall comply with all provisions of the permit. Proof of compliance with the permit may be required in a form acceptable to the county prior to or as a condition of a subdivision, site plan, building permit or development or improvement plan; upon inspection of the facility; during any enforcement proceeding or action; or for any other reasonable cause.

(Ord. 2008-08, passed 5-5-2008) Penalty, see § 53.99

#### **§ 53.11 ACCESS AND INSPECTION OF PROPERTIES AND FACILITIES.**

(A) Whenever the county has cause to believe that there exists, or potentially exists, in or upon any premises any condition which constitutes a violation of this chapter, the county or its agent shall have the right to enter the premises at any reasonable time to determine if the discharger is complying with all requirements of this chapter. The county or its agent shall be permitted to enter and inspect facilities subject to regulation under this chapter as often as may be necessary to determine compliance with this chapter. If the facility has security measures in force that require proper identification and clearance before entry into its premises, the person in control of the premises shall make the necessary arrangements to allow access to representatives of the authorized enforcement agency. In the event that the owner or occupant refuses entry after a request to enter has been made, the county is hereby empowered to seek assistance from a court of competent jurisdiction in obtaining the entry. If a discharge is observed which represents an immediate hazard to public health or safety, or aquatic life, the county, a department of law enforcement, a department of fire and rescue services, and any other agent of the county, may enter any property or structure, except a dwelling, as necessary to prevent or stop the hazard.

(B) The county shall have the right to set up on the property of any discharger to the municipal separate storm sewer system the devices that are necessary to conduct an investigation of the discharges. The investigation may include, but is not limited to, the following: sampling of any discharge and/or process waters, the taking of photographs, interviewing staff on alleged violations and access to any and all facilities or areas within the premises that may have any effect on the discharge.

(Ord. 2008-08, passed 5-5-2008)

#### **§ 53.12 REQUIREMENT TO REMEDIATE.**

Whenever the county finds a discharge of pollutants is taking place or has occurred which will result in or has resulted in pollution of storm water, the storm drain system or other watercourses, the county may require, by written notice to the owner of the property and/or the responsible

person, that the pollution be remediated and the affected property restored within a specified time pursuant to the provisions hereof.

(Ord. 2008-08, passed 5-5-2008)

#### **§ 53.13 REQUIREMENT TO MONITOR AND ANALYZE.**

The county may require, by written notice of requirement, that any person engaged in any activity and/or owning or operating any facility which may cause or contribute to storm water pollution, illegal discharges and/or non-storm water discharges to the storm drain system or other watercourses, to undertake at the person's expense the monitoring and analyses and furnish the reports to the county as deemed necessary to determine compliance with this chapter.

(Ord. 2008-08, passed 5-5-2008)

#### **§ 53.14 REQUIREMENT TO PREVENT, CONTROL AND REDUCE STORM WATER POLLUTANTS BY THE USE OF BEST MANAGEMENT PRACTICES.**

The owner or operator of a commercial or industrial establishment shall provide, at his or her own expense, reasonable protection from accidental discharge of prohibited materials or other wastes into the MS4 or watercourses through the use of structural and non-structural BMPs. Further, any person responsible for premises, which are, or may be, the source of an illicit discharge, may be required to implement, at the person's expense, additional structural and non-structural BMPs to prevent the further discharge of pollutants to the municipal separate storm sewer system. Compliance with all terms and conditions of a valid NPDES permit authorizing the discharge of storm water associated with industrial activity, to the extent practicable, shall be deemed compliant with the provisions of this section. These BMPs shall be part of a storm water pollution prevention plan (SWPP) or storm water management plan (SWMP) as necessary for compliance with requirements of the NPDES permit.

(Ord. 2008-08, passed 5-5-2008) Penalty, see § 53.99

#### **§ 53.15 NOTIFICATION OF SPILLS.**

Notwithstanding other requirements of law, as soon as any person responsible for any premises, facility or operation, or responsible for emergency response for a facility or operation has information of any known or suspected release of materials which are resulting or may result in illegal discharges or pollutants discharging into storm water, the municipal separate storm sewer system or other watercourses, the person shall take all necessary steps to ensure the discovery, containment and cleanup of the release. In the event of a release of hazardous materials, the person shall immediately notify emergency response agencies of the occurrence via emergency dispatch services. In the event of a release of non-hazardous materials, the person shall notify the county or its appointed agent in person or by phone no later than 24 hours. Notifications in person or by phone shall be confirmed by written notice addressed and mailed to the county at: Bartholomew County Engineer, 2452 State Street, Columbus, Indiana 47201, (812) 379-1660, within five calendar days of the phone or in person notice. If the discharge of prohibited materials emanates from a commercial or industrial establishment, the owner or operator of the establishment shall also retain an on-site written record of the discharge and the actions taken to prevent its recurrence. The records shall be retained for at least three years.

(Ord. 2008-08, passed 5-5-2008) Penalty, see § 53.99

#### **§ 53.16 VIOLATIONS AND ENFORCEMENT.**

(A) It shall be unlawful for any person to violate any provision or fail to comply with any of the requirements of this chapter. Any person who violates any of the provisions of this chapter shall be subject to one or more of the enforcement actions outlined in this section. Any violation or

threatened violation may be restrained by injunction or otherwise abated in a manner provided by law.

(B) In the event the violation constitutes an immediate danger to public health or public safety, the county or its appointed agent is authorized to enter upon the subject private property, without giving prior notice, to take any and all measures necessary to abate the violation and/or restore the property. The county or its appointed agent is authorized to seek costs of abatement as outlined in division (B)(5) below.

(1) *Compliance directive.* In addition to any other remedy available to the county, inspectors may issue compliance directives at the time of inspection to require a person to implement actions that will correct any violation of this chapter.

(2) *Notice of violation.*

(a) Whenever the county finds that a person has violated a prohibition or failed to meet a requirement of this chapter, the county may order compliance by written notice of violation to the responsible person. The notice may require without limitation:

1. The performance of monitoring, analyses and reporting;
2. The elimination of illicit connections or discharges;
3. Violating discharges, practices or operations shall cease and desist;
4. The abatement or remediation of storm water pollution or contamination hazards and the restoration of any affected property;
5. Payment of a fine to cover administrative and remediation costs; and
6. The implementation of source control or treatment BMPs.

(b) If abatement of a violation or the restoration of affected property is required, the notice shall set forth a deadline within which the remediation or restoration must be completed. The notice shall further advise that, should the violator fail to complete the remediation or restoration within the established deadline, the work may be done by the county or its designee and the expense thereof shall be charged to the violator.

(3) *Appeal of notice of violation.* Any person receiving a notice of violation may appeal the determination of the county. The notice of appeal must be received within ten days from the date of the notice of violation. Hearing on the appeal before the Board of County Commissioners or its designee shall take place within 15 days from the date of receipt of the notice of appeal. The decision of the Board or its designee shall be final.

(4) *Enforcement measures after appeal.* If the violation has not been corrected pursuant to the requirements set forth in the notice of violation or, in the event of an appeal, within ten days of the decision of the Board, then representatives of the county and its designees are authorized to enter upon the subject property and are authorized to take any and all measures necessary to abate the violation and restore the affected property. It shall be unlawful for any person, owner, agent or person in possession of any premises to refuse to allow the representatives or designees of the county to enter upon the premises for the purposes set forth above.

(5) *Cost of abatement of the violation.* If the county abates a violation, then, within 15 days after abatement of the violation, the owner of the property will be notified of the cost of abatement, including administrative costs. The notice shall be given by personal delivery or by mail to the last known address of the owner as shown in the records of the County Auditor. The notice shall be effective upon the date of mailing or personal delivery. The property owner may file a written protest objecting to the amount of the assessment within ten days of the effective date of the notice. If no protest is filed, then the charges shall become due and payable on the date set forth in the notice, which date shall be after the expiration of the time in which to file an appeal and



the charges shall become a special assessment against the property and shall constitute a lien on the property for the amount of the assessment. In the event a protest is filed, a hearing on the protest shall be held before the Board of County Commissioners or its designee within 15 days from the date of receipt of the written protest. If any charges are upheld upon completion of the hearing, then the charges shall become due and payable ten days after the issuance of the order upon the protest and if not timely paid, the charges shall become a special assessment against the property and shall constitute a lien on the property for the amount of the assessment. The charges may also be recovered in a civil action against the owner or other person in control of the premises for which the charges were incurred and any person violating any of the provisions of this chapter shall be liable to the county for all costs, fees, charges and expenses, including, but not limited to, administrative costs and legal fees and costs, by reason of the violation.

(Ord. 2008-08, passed 5-5-2008) Penalty, see § 53.99

#### **§ 53.99 PENALTY.**

(A) *Civil penalties.* In the event the alleged violator fails to take the remedial measures set forth in the notice of violation or otherwise fails to cure the violations described therein within ten days, or a greater period as the county shall deem appropriate, after the county has taken one or more of the actions described above, the county may impose a penalty not to exceed \$1,000 (depending on the severity of the violation) for each day the violation remains unremedied after the receipt of the notice of violation.

(B) *Criminal penalties; enforcement costs.* Any person who violates any provision of this chapter shall be liable to criminal prosecution to the fullest extent of the law and shall be subject to a criminal penalty of \$500 per violation per day. The county may recover all attorneys' fees, court costs and other expenses associated with enforcement of this chapter, including sampling and monitoring expenses.

(C) *Injunctive relief.* The county may petition for a preliminary or permanent injunction restraining any person from undertaking any activities which would result in a violation or continued violation of this chapter and may seek mandatory injunctive relief compelling the person to perform abatement or remediation of any violation of this chapter.

(D) *Compensatory action.* In lieu of enforcement proceedings, penalties and remedies authorized by this chapter, the county, at its option, may impose upon a violator alternative compensatory action, such as storm drain stenciling, attendance at compliance workshops, creek cleanup and the like.

(E) *Violations deemed a public nuisance.* In addition to the enforcement processes and penalties provided herein, any condition caused or permitted to exist in violation of any of the provisions of this chapter is a threat to public health, safety and welfare, is declared and deemed a nuisance and may be summarily abated or restored at the violator's expense, or may be the subject of a civil action to abate, enjoin or otherwise compel the cessation of the nuisance.

(F) *Remedies not exclusive.* Except as expressly provided above, the remedies in this section are cumulative and the exercise of any one or more remedies shall not prejudice any other remedies that may otherwise be pursued for a violation of this chapter. The remedies listed in this chapter are not exclusive of any other remedies available under any applicable federal, state or local law and it is within the discretion of the county to seek cumulative remedies.

(Ord. 2008-08, passed 5-5-2008)

# APPENDIX D:

## Chapter 155: Soil Erosion and Sedimentation Control

### Bartholomew County, IN Code of Ordinances



## **CHAPTER 155: SOIL EROSION AND SEDIMENTATION CONTROL**

### Section

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- 155.02 Definitions
- 155.03 General principles
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#### *Site Development Approval*

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## **GENERAL PROVISIONS**

### **§ 155.01 FINDINGS AND PURPOSE.**

(A) *Findings.* The Board of Commissioners of the county finds that:

(1) Excessive quantities of soil may erode from areas undergoing development for certain non-agricultural uses including but not limited to the construction of dwelling units, commercial buildings and industrial plants, the building of roads and streets and the creation of recreational facilities;

- (2) Sediment from soil erosion tends to clog sewers and ditches and to pollute and silt rivers, streams, ponds, lakes and reservoirs;
  - (3) Sediment limits the use of water and waterways for most beneficial purposes and has resulted in the deterioration of the water resources of the county;
  - (4) Sediment reduces the channel capacity of waterways, resulting in increased chances of flooding at risk to public health and safety;
  - (5) Adopting the standards, criteria and procedures contained in this chapter and implementing the same will address many of the detrimental effects associated with land development;
  - (6) Adopting these standards is necessary for the preservation of the soils and topography of the county as well as the public health, safety and welfare; and
  - (7) The county has the authority to adopt an erosion and sediment control ordinance pursuant to I.C. 36-1-3 and so that the county may comply with requirements of 327 I.A.C. 15-13.
- (B) *Purpose.* The Board of Commissioners of the county hereby declares that the purpose of this chapter is to establish minimum erosion and sediment control requirements to protect and safeguard the general health, safety and welfare of the public by guiding, regulating and controlling the design, construction, use and maintenance of any development or other land altering activity which disturbs or breaks the topsoil or otherwise results in the movement of earth within the defined boundaries of the county and as specified herein.
- (Ord. 2008-07, passed 5-5-2008)

#### **§ 155.02 DEFINITIONS.**

For the purpose of this chapter, the following definitions shall apply unless the context clearly indicates or requires a different meaning.

**AGRICULTURAL USE.** Land use consistent with raising of livestock, grain and/or vegetables. Excluded from this definition are the storage of grain for more than one concern, the production of agricultural related chemicals or the commercial slaughter and processing of livestock or meat.

**APPLICANT.** Any person who seeks or is granted site development approval which is on behalf of and who is a representative of the owner of the project and/or the project site.

**BUILDING PERMIT.** A permit issued by the County Department of Technical Code Enforcement for the construction, erection or alteration of a structure or building.

**CERTIFY or CERTIFICATION.** Formally attesting that the specific inspections and tests required have been performed by a qualified professional and that the tests comply with the applicable requirements of this chapter.

**CONSTRUCTION ACTIVITY.** Land alteration associated with the construction of infrastructure and structures. This term does not include routine ditch, road maintenance or landscaping projects disturbing less than one acre.

**CONSTRUCTION PLAN.** A representation of a project site and all activities associated with the project. The plan includes the location of the project site, buildings and other infrastructure, grading activities, schedules for implementation and other pertinent information related to the project site. A storm water pollution prevention plan is a part of the **CONSTRUCTION PLAN**.

**COUNTY.** Bartholomew County, Indiana.

**DEVELOPED or DEVELOPMENT.** A land alteration that requires, pursuant to state law or local ordinance, the approval of a site plan, plat, special land use, planned unit development,

rezoning of land, land division approval, private road approval or other approvals required for the construction of land or the erection of buildings or structures; provided, however, that, for purposes of this chapter only, developed or development shall not include the actual construction of, or an addition, extension or modification to, an individual single-family or a two-family detached dwelling.

**DEVELOPER.** Any individual, firm, association syndicate, partnership, corporation, trust or any other legal entity initiating land altering activity for himself or herself or for another.

**DEVELOPMENT SITE.** Any land that is being or has been developed or that a developer proposes for development.

**DRAINAGEWAY.** The area within which surface water or ground water is carried from one part of a lot or property to another part of the lot or property or to adjacent land.

**ENGINEERING DEPARTMENT.** The County Highway Engineer, a staff member of the Engineering Department for the county or a designee of the County Highway Engineer.

**EROSION.** The transport of the land surface by the action of wind, water, gravity or a combination thereof.

**EXCAVATION.** Any act by which organic matter, earth, sand, gravel, rock or any other similar material is cut into, dug, quarried, uncovered, removed, displaced, relocated or bulldozed and shall include the conditions resulting therefrom.

**FILL.** Any act by which earth, sand, gravel, rock or any other material is deposited, placed, replaced, pushed, dumped, pulled, transported or moved by humans to a new location and shall include the conditions resulting therefrom.

**GRADING.** Excavation or fill or any combination thereof and shall include the conditions resulting from any excavation or fill.

**IDEM.** The Indiana Department of Environmental Management.

**INDIANA HANDBOOK FOR EROSION CONTROL** or the **INDIANA STORM WATER**

**QUALITY MANUAL.** The state document used for guidance for means and methods of acceptable erosion and sediment control within the state (whichever of the two is the standard of the state at the time).

**INFRASTRUCTURE.** The roads, bridges, streets, curbs, sidewalks, sanitary and storm sewers, water mains, gas mains, electrical supply lines and communication lines which supply the structures of a development with transportation means and utilities.

**LAND ALTERATION.**

(1) Any action taken relative to land which either:

- (a) Removes the natural ground cover;
- (b) Changes the existing elevation;
- (c) Increases the runoff rate;
- (d) Decreases the rate at which water is absorbed;
- (e) Changes the drainage pattern;
- (f) Creates or changes a drainage facility;
- (g) Involves construction, enlargement or location of any building on a permanent foundation; or
- (h) Creates an impoundment.

(2) **LAND ALTERATION** includes (by way of example and not of limitation) terracing, grading, excavating, constructing earthwork, draining, installing drainage tile, filling and paving.

**MAJOR AMENDMENT.** A change in the project scope that will increase the disturbed area 20% or more or extend the construction limits as described in the original permit.

**MAJOR SUBDIVISION.** Major subdivision, as defined in Chapter 156 of this code.

**MINOR AMENDMENT.** A change in the project scope that will increase the disturbed area less than 20% and will not extend the construction limits as described in the original permit.

**MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4).** The storm water conveyances (swales, creeks, streams, pipes and the like) through the county and is more clearly defined in 327 I.A.C. 15-13.

**NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES).** The law that is a further development of the Clean Water Act (327 I.A.C. 15).

**NOTICE OF INTENT.** A letter that contains the entire applicable storm water pollution prevention plan, which meets the requirements of 327 I.A.C. 15-5-5 for the county and the *Indiana Handbook for Erosion Control* or the *Indiana Storm Water Quality Manual* whichever is the current adopted standard.

**NOTICE OF TERMINATION (NOT) LETTER.** A written notification indicating that facility has met the conditions to terminate its permit coverage under rule (327 I.A.C. 15-5 through 327 I.A.C. 15-13).

**OWNER.** The person(s) listed in the most recent official records of the township or County Assessor or County Auditor.

**PARCEL.** A division of property in a single legal description.

**PERSON.** Any individual, firm or corporation, public or private, the state and its agencies or political subdivisions, and the United States of America, its agencies and instrumentalities, and the agent, servant, officer or employee of any of the foregoing.

**PROPERTY.** All contiguous land in one ownership.

**REMOVAL.** The cutting to the ground, complete extraction or killing by spraying of vegetation or stumps.

**REPRESENTATIVE.** The authorized representative of the County Engineer assigned to make detailed observations of contract performances.

**SEDIMENT.** Material, which settles to the bottom of a stream, lake or along a drainageway.

**SEDIMENTATION.** The deposition or accumulation of sediment.

**SITE.** A property where land-altering activity is proposed or taking place.

**SITE DEVELOPMENT.** Altering terrain and/or vegetation and constructing improvements.

**SITE DEVELOPMENT APPROVAL.** Documented confirmation by the county for the construction or alteration of ground improvements and structures for the control of erosion, runoff and grading.

**SITE PLAN.** An exhibit required to obtain a building permit from the Columbus/Bartholomew County Department of Code Enforcement, also known as a **CONSTRUCTION STAKE OUT DRAWING** or **PROPOSED PLOT PLAN**.

**SITE PLAN REVIEW.** A plan review conducted by the Columbus/Bartholomew Planning Department required to obtain a zoning compliance certificate.

**STORM WATER POLLUTION PREVENTION PLAN (SWP3) or STORM WATER MANAGEMENT PLAN (SWMP).** A document, which describes the best management practices and activities to be implemented by a person to identify sources of pollution or contamination at

a site and the actions to eliminate or reduce pollutant discharges to storm water, MS4 and/or receiving waters to the maximum extent practicable.

**STRIP DEVELOPMENT.** A commercial development in which multiple tenants occupy a single site or multiple sites managed by the same owner as a homogeneous development.

**STRIPPING.** Any activity, which removes the vegetative surface cover including tree removal, clearing and storage or removal of topsoil.

**STRUCTURE.** Any construction that provides protection from weather for the human activities of work, storage, habitation or recreation.

**UNIMPROVED LOT.** A lot that has infrastructure brought close enough to its boundary that could allow structures to be built for human work, storage, habitation or recreation and has not been improved with structures for human work, storage, habitation or recreation.

**WORK DAY.** A calendar day, exclusive of Saturdays, Sundays and county recognized holidays. (Ord. 2008-07, passed 5-5-2008)

### **§ 155.03 GENERAL PRINCIPLES.**

(A) It is the objective of this chapter to control soil erosion and sedimentation caused by development activities within the county. Measures taken to control erosion and sedimentation as adopted by §§ 155.35 through 155.43 should be adequate to assure that sediment is not transported from the site by a storm event. The following principles shall apply to all development activities within the county's jurisdiction and to the preparation of the submissions required under §§ 155.15 through 155.22.

(B) Development should be related to the existing topography and soils of the site so as to create the least potential for erosion. Areas of steep slopes where high cuts and fills may be required should be avoided wherever possible, and natural contours should be followed as closely as possible.

(C) Natural vegetation should be retained and protected wherever possible. Areas immediately adjacent to natural watercourses should be left unaltered wherever possible.

(D) The smallest practical area of land should be exposed for the shortest practical time during development.

(E) Sediment basins, debris basins, desilting basins or silt traps or filters should be installed and maintained to remove sediment from runoff waters from land altering activity or development.

(F) The selection of erosion and sedimentation control measures should be based on assessment of the probable frequency of climatic and other events likely to contribute to erosion, and on evaluation of the risks, costs and benefits involved.

(G) In the design of erosion control facilities and practices, aesthetics and the requirements of continuing maintenance should be considered.

(H) Provisions should be made to accommodate the increased runoff caused by changed soil and surface conditions during and after development. Drainageways should be designed so that their final gradients and the resultant velocities of discharge will not create additional erosion.

(I) Permanent vegetation and structures should be installed as soon as practical during development.

(J) Post construction measures should be considered for their ability to provide long-term reduction in associated pollutant loading of the waterways.

(Ord. 2008-07, passed 5-5-2008)

#### **§ 155.04 ENFORCEMENT.**

(A) *Stop-work order; revocation of site development approval.*

(1) In the event that any person holding site development approval pursuant to this chapter violates the terms of the approval or implements site development in a manner as to materially and adversely affect the health, welfare or safety of persons residing or working in the neighborhood or development site or so as to be materially detrimental to the public welfare or injurious to property or improvements in the neighborhood, the county may suspend or revoke the site development approval by issuing a stop-work order.

(2) The stop-work order shall be served upon any person engaged in the accomplishment of the construction activity. The construction activity so affected shall be stopped forthwith and until a future time as authorization to resume work is granted by the Engineering Department.

(B) *Show cause hearing.* At any time, a show cause hearing may be ordered if this protocol is unclear or inadequate to address specific violations.

(Ord. 2008-07, passed 5-5-2008)

#### **§ 155.05 SITE DEVELOPMENT APPROVAL FEES.**

(A) The fees for the required approval shall be paid pursuant to the schedule set forth in the table below:

<b><i>Erosion and Sediment Control Plan Review and Inspection Fees</i></b>		
Building permit - disturbing more than 1 acre	Single-family residential on single lot	\$300.00
Commercial and industrial site plan review	1 acre to 5 acres	\$500.00
	More than 5 acres to 10 acres	\$1,200.00
	More than 10 acres	\$2,500.00
Major amendments to plans or renewal of coverage	Major amendments to plans	25% of original fee (\$200 min)
	Renewal of coverage	\$100.00
Major subdivision	1 acre to 10 acres	\$500.00
	More than 10 acres to 40 acres	\$1,000.00
	More than 40 acres	\$2,000.00
Utilities	Per linear foot disturbed	\$0.25
	Minimum fee	\$300.00

(B) All applications will be reviewed within 15 work days.

(C) Application and inspection fees shall be deposited in the Soil Erosion and Sedimentation Control Fund.

(Ord. 2008-07, passed 5-5-2008)

### **SITE DEVELOPMENT APPROVAL**

#### **§ 155.15 APPROVAL REQUIRED.**

Site development approval is required from the County Engineer's office for major subdivisions; site plan reviews not part of a major subdivision with current site development approval;



building permits for sites disturbing more than one acre that are not part of a major subdivision or site plan review with current site development approval.

(A) The requirements under this chapter apply to all persons who:

- (1) Do not obtain an individual NPDES permit under 327 I.A.C. 15-2-6;
- (2) Meet the general permit rule applicability requirements under 327 I.A.C. 15-2-3; and
- (3) Are involved in construction activity, except operations that result in the land alteration of less than one acre of total land area as determined under division (E) below and are not part of a larger common plan of development or sale.

(B) For off-site construction activities which are under the direct control of the applicant and provide services (i.e., road extensions, sewer, water and other utilities) to a project site, these off-site activity areas must be considered a part of the project site.

(C) For an individual lot where land alteration is expected to be one acre or more and the lot lies within a project site approved under this chapter, the individual lot owner shall:

- (1) Complete his or her own notice of intent letter (NOI); and
- (2) Ensure that a sufficient construction plan is completed and submitted in accordance with § 155.17.

(D) For an individual lot where the land alteration is less than one acre and the lot lies within a project site approved under this chapter, the individual lot operator shall:

(1) Comply with:

- (a) The provisions and requirements of the storm water pollution prevention plan developed by the project site owner; and
- (b) 327 I.A.C. 15-5-7.5.

(2) Not be required to submit a notice of intent letter and construction plans.

(E) Multi-lot project sites are regulated by this chapter in accordance with the following:

(1) A determination of the area of land alteration shall be calculated by adding the total area of land alteration for improvements such as roads, utilities or common areas, and the expected total alteration on each individual lot, as determined by the following.

(a) For a single-family residential project site where the lots are one-half acre or more, one-half acre of land alteration must be used as the expected lot alteration.

(b) For a single-family residential project site where the lots are less than one-half acre in size, the total lot must be calculated as being altered.

(c) To calculate lot alteration on all other types of project sites, such as industrial and commercial project sites, the following apply.

1. Where lots are one acre or greater in size, a minimum of one acre of land alteration must be calculated as the expected lot alteration.

2. Where the lots are less than one acre in size, the total lot must be calculated as being altered.

(2) For purposes of this chapter, strip developments:

(a) Are considered as one project site; and

(b) Must comply with this chapter; unless the total combined alteration on all individual lots is less than one acre and is not part of a larger common plan of development or sale.

(F) Submittal of a notice of intent and construction plans is not required for construction activities associated with a single-family residential dwelling altering less than one acre when the dwelling is not part of a larger common plan of development or sale.



(Ord. 2008-07, passed 5-5-2008)

#### **§ 155.16 APPLICATION FOR SITE DEVELOPMENT.**

The applicant has the following responsibilities:

- (A) Complete a sufficient notice of intent letter per 327 I.A.C. 15-5-5 and 327 I.A.C. 15-5-6;
- (B) Ensure that a sufficient construction plan is completed and submitted in accordance with 327 I.A.C. 15-5-6 and 327 I.A.C. 15-5-6.5;
- (C) Ensure compliance with this chapter and 327 I.A.C. 15-5 during:
  - (1) The construction activity; and
  - (2) Implementation of the construction plan.
- (D) Ensure that all persons engaging in construction activities on an approved project site comply with the applicable requirements of this chapter and the approved construction plan;
- (E) Notify the Engineering Department with a sufficient notice of termination (NOT) letter; and
- (F) Complete a sufficient site development permit application.

(Ord. 2008-07, passed 5-5-2008)

#### **§ 155.17 SUBMISSIONS.**

The NOI for the county and the Storm Water Pollution Prevention Plan are to be submitted to the county at: Bartholomew County Engineer, 2452 State Street, Columbus, Indiana 47201.

(Ord. 2008-07, passed 5-5-2008)

#### **§ 155.18 REVIEW AND APPROVAL.**

Each application for site development approval shall be reviewed and acted upon according to the following procedures.

(A) Construction plans shall be received by the Engineering Department for review by the Engineer or Engineer's representative, and the review and inspection fees will be remanded to the Storm Sewer Operating Account numbered 101019319. Upon preliminary review, the Engineering Department shall determine:

- (1) The submittal is complete and sufficient pursuant to §§ 155.35 through 155.43 and direct the specific review of the submittal; or
- (2) The submittal is deficient and lacks information pursuant to §§ 155.35 through 155.43 and therefore can not be adequately reviewed; at which time:
  - (a) The developer will receive written notice of those specific deficiencies of the submittal; and/or
  - (b) Be invited to meet with the county or its qualified representative to discuss specific deficiencies of the submittal.

(B) Construction plan review shall be carried out within the number of work days shown in Table 1. If there has been no notification or request for more information within that time, application shall be assumed complete and approved on the following workday.

(C) Upon completion of a review, the applicant shall be notified in writing that the submitted construction plan:

- (1) Fulfills the requirements of this chapter and constitutes site development approval so long as a notice of intent is submitted to the Engineering Department and IDEM at least 48 hours prior to commencement of construction activities; or
- (2) Does not meet the requirements of this chapter and therefore does not warrant the issuance of a site development approval.

(Ord. 2008-07, passed 5-5-2008)

#### **§ 155.19 APPEALS.**

The applicant, or any person or agency which receives notice of the filing of the application, may appeal the decision of the Engineering Department as provided in § 155.18(C) to the Board of County Commissioners. Upon receipt of an appeal, the County Commissioners shall schedule and hold a public hearing, after providing the applicant a minimum 15 days' notice thereof. The County Commissioners shall give the notice of the public hearing, as it deems necessary and appropriate. The County Commissioners shall hear evidence at the hearing and render a decision within 30 days after the hearing. Factors to be considered on review shall include, but need not be limited to, the effects of the proposed development activities on the surface water flow to tributary and downstream lands, any comprehensive watershed management plans, or the use of any retention facilities; possible situation of fill and unsupported cuts by water, both natural and domestic; runoff surface waters that produce erosion and silting of drainageways; nature and type of soil or rock which when disturbed by the proposed development activities may create earth movement and produce slopes that cannot be landscaped.

(Ord. 2008-07, passed 5-5-2008)

#### **§ 155.20 RETENTION OF PLANS.**

The county shall retain in original form, microfilm or electronic copy plans and reports for all site developments.

(Ord. 2008-07, passed 5-5-2008)

#### **§ 155.21 EXCEPTIONS.**

Site development approval shall not be required for any of the following:

- (A) Development of a site of less than one acre upon which no more than one residential structure is to be built, or no more than one commercial or industrial structure is to be built; provided that, the person responsible for any development shall implement necessary erosion and sedimentation control measures to satisfy the principles set forth in § 155.03, and the county reserves the right to require the site development techniques as will insure satisfactory erosion and sedimentation control at locations as determined by the County Engineer or his or her representative;
- (B) Agricultural use of land, including the implementation of conservation measures included in a farm conservation plan approved by the Soil and Water Conservation District and including the construction of agricultural structures;
- (C) Installation, renovation or replacement of a sewer line, waterline or septic system to serve an existing structure pursuant to the prior approval of the County Health Department; and
- (D) Installation, renovation or replacement of utility lines and appurtenances to serve an existing structure.

(Ord. 2008-07, passed 5-5-2008)

#### **§ 155.22 ADDITIONAL DEVELOPMENT REQUIRED TO COMPLY.**

Even in those instances where site development approval is not required under § 155.15, no person shall commence or perform any grading, stripping, excavating or filling by disturbing one acre or more of land without complying with the applicable standards and requirements for control of soil erosion and sedimentation as contained in §§ 155.35 through 155.43, as well as

implement necessary erosion and sedimentation control measures to satisfy the general principles contained in § 155.03.

(Ord. 2008-07, passed 5-5-2008)

## **OPERATION STANDARDS AND REQUIREMENTS**

### **§ 155.35 APPLICABILITY.**

All grading, stripping, excavating and filling which is subject to the site development approval requirements of this chapter, and any grading, stripping, excavating and filling falling under § 155.22 shall be subject to the applicable standards and requirements set forth in this subchapter.

(Ord. 2008-07, passed 5-5-2008)

### **§ 155.36 RESPONSIBILITY.**

The applicant shall not be relieved of responsibility for damage to persons or property otherwise imposed by law, and the county or the Engineer or Engineer's representative will not be made liable for the damage, by:

- (A) Issuance of a site development approval under this chapter;
- (B) Compliance with the provisions of that site development approval or with conditions attached to it by the county;
- (C) Failure of the county officials to observe or recognize hazardous or unsightly conditions;
- (D) Failure of county officials to recommend denial of or to deny a site development approval; or
- (E) Exemptions from the site development approval requirements of this chapter.

(Ord. 2008-07, passed 5-5-2008)

### **§ 155.37 PROCEDURES AND STANDARDS ADOPTED BY REFERENCE.**

- (A) 327 I.A.C. 15-5-7 for general requirements on storm water quality control;
- (B) 327 I.A.C. 15-5-7.5 for general requirements of individual building lots within an approved project; and
- (C) The *Indiana Handbook for Erosion Control* until the *Indiana Storm Water Quality Manual* is approved by the state. After being issued, the *Indiana Storm Water Quality Manual*, the county will discontinue the use of the *Indiana Handbook for Erosion Control* as a standard.

(Ord. 2008-07, passed 5-5-2008)

### **§ 155.38 INSPECTION.**

- (A) The Engineer or Engineer's representative may inspect any project site involved in construction activities regulated by this chapter at any time. The county or its designated representatives may make recommendations to the project site owner or his, her or their representative to install appropriate measures beyond those specified in the storm water pollution prevention plan and schedule to achieve compliance.
- (B) All persons engaging in construction activities on a project site shall be responsible for complying with the storm water pollution prevention plan and the provisions of this chapter.
- (C) The county shall investigate potential violations of this chapter to determine which person may be responsible for the violation. The county shall, if appropriate, consider public records of ownership, building permits and other relevant information, which may include site inspections, storm water pollution prevention plans, notices of intent and other information related to the specific facts and circumstances of the potential violation.

(D) If the person occupying or owning the property does not properly maintain remaining storm water quality measures, the county may pursue enforcement against that person for correction of deficiencies.

(E) Construction plans and supporting documentation associated with the storm water pollution prevention plan must be made available to the county or its designated representative within 48 hours of the request.

(F) Appeals to violations shall be as described in § 155.19.

(Ord. 2008-07, passed 5-5-2008)

#### **§ 155.39 SPECIAL PRECAUTIONS.**

(A) If at any stage of the grading of any development site the county determines by inspection that the nature of the site is such that further work authorized by an existing site development approval is likely to imperil any property, public way, watercourse or drainage structure, the county may require, as a condition of allowing the work to be done, that the reasonable special precautions to be taken as is considered advisable to avoid the likelihood of the peril. "Special precautions" may include, but shall not be limited to, a more level exposed slope, construction of additional drainage facilities, berms, terracing, compaction or cribbing, installation of plant materials for erosion control, and recommendations of a registered soils engineer and/or engineering geologist which may be made requirements for further work.

(B) Where it appears that storm damage may result because the grading on any development site is not complete, work may be stopped as described in § 155.15 and the applicant required to install temporary structures or take other measures as may be required to protect adjoining property or, the public safety. On large developments or where unusual site conditions prevail, the county may specify the time of starting grading and time of completion or may require that the operations be conducted in specific stages so as to insure completion of protective measures or devices prior to the advent of seasonal rains.

(Ord. 2008-07, passed 5-5-2008)

#### **§ 155.40 AMENDMENT OF PLANS.**

(A) Amendments to the storm water pollution prevention plan are required when:

(1) The disturbed area increases;

(2) The construction limits change to include areas outside of the original construction limits; and

(3) The applicant wishes to modify the storm water pollution prevention plan.

(B) Major amendments shall be processed and approved or disapproved in the same manner as the original plans.

(C) Minor amendments may be approved by written authorization to the applicant.

(Ord. 2008-07, passed 5-5-2008)

#### **§ 155.41 PROJECT TERMINATION.**

(A) The project site applicant shall plan an orderly and timely termination of the construction activities, including the implementation of storm water quality measures that are to remain on the project site.

(B) The project site applicant shall submit a notice of termination (NOT) letter to the Engineering Department in accordance with the following:

(1) Except as provided in division (B)(2) below, the project site owner shall submit an NOT letter when the following conditions have been met:

(a) All land altering activities, including construction on all building lots, has been completed and the entire site has been stabilized; and

(b) All temporary erosion and sediment control measures have been removed.

(2) The project site applicant may submit an NOT letter to obtain early release from compliance with this chapter if the following conditions are met:

(a) The remaining, unimproved acreage does not exceed five acres, with contiguous areas not to exceed one acre;

(b) A map of the project site, clearly identifying all remaining unimproved lots, is attached to the NOT letter. The map must be accompanied by a list of names and addresses of individual lot owners or individual lot operators of all unimproved lots;

(c) All public and common improvements, including infrastructure, have been completed and permanently stabilized and all public improvements have been transferred to the county;

(d) The remaining acreage does not pose a significant threat to the integrity of the infrastructure, adjacent properties or water quality; and

(e) All permanent storm water quality measures have been implemented and are operational.

(C) The NOT letter must contain a verified statement that each of the conditions in division (B) above have been met.

(D) Following acceptance of the NOT letter and written approval from the county for early release under division (B) above, the project site owner shall notify all current individual lot owners and all subsequent individual lot owners of the requirements to:

(1) Install and maintain appropriate measures to prevent sediment from leaving the individual building lot; and

(2) Maintain all erosion and sediment control measures that are to remain on-site as part of the construction plan.

(E) The Engineer or Engineer's representative may inspect the project site to evaluate the adequacy of the remaining storm water quality measures and compliance with the NOT letter requirements. If the inspecting entity finds that the applicant has sufficiently filed a NOT letter, the inspecting entity shall forward notification to IDEM, and the applicant shall no longer be responsible for compliance with this chapter.

(F) After a verified NOT letter has been submitted for a project site, maintenance of the remaining storm water quality measures shall be the responsibility of the individual lot owner or occupier of the property.

(Ord. 2008-07, passed 5-5-2008)

#### **§ 155.42 EXPIRATION OF SITE DEVELOPMENT APPROVAL.**

The expiration of a site development approval shall be consistent with and engender the spirit of I.C. 36-7-4-1109. This may be overridden by the County Engineer or Planning Director if there is a declared emergency by either responsible party or an approved county official.

Source is I.C. 36-7-4-1109(2).

(Ord. 2008-07, passed 5-5-2008)

#### **§ 155.43 REVIEW OF INDIVIDUAL LOTS WITHIN A PERMITTED PROJECT.**

(A) For individual lots disturbing or impacting less than five acres, developed within a larger permitted project, a formal review and issuance of an individual site plan will be required before a building permit can be issued. All storm water management measures necessary to comply with this chapter must be implemented in accordance with the approved storm water management plan.

(B) In addition to other requirements of the Columbus/Bartholomew County Department of Technical Code Enforcement, the following information must be submitted to this Department, for review and acceptance, by the individual lot operator, whether owning the property or acting as the agent of the property owner, as part of a request for review and issuance of an individual site plan that must be obtained prior to the issuance of a building permit.

(C) Erosion and sediment control plan that, at a minimum, includes the following measures:

- (1) Installation and maintenance of a stable construction site access;
- (2) Installation and maintenance of appropriate perimeter erosion and sediment control measures prior to land disturbance;
- (3) Minimization of sediment discharge and tracking from the lot;
- (4) Clean up of sediment that is either tracked or washed onto roads. Bulk clearing of sediment shall not include flushing the area with water. Cleared sediment must be redistributed or disposed of in a manner that is in compliance with all applicable statutes and rules;
- (5) Adjacent lots disturbed by an individual lot operator must be repaired and stabilized with temporary or permanent surface stabilization;
- (6) Certification of compliance stating that the individual lot plan is consistent with the storm water management permit, as approved by the County Engineer for the larger project; and
- (7) Name, address and telephone number, of the individual in charge of the storm water management measures for the project site.

(D) The individual lot operator is responsible for installation and maintenance of all erosion and sediment control measures until the site is stabilized.

(Ord. 2008-07, passed 5-5-2008)

#### **§ 155.99 PENALTY.**

No person shall construct, enlarge, alter, repair or maintain any grading, excavation or fill, or cause the same to be done, contrary to or in violation of any terms of this chapter. Occupancy certificates and building permits shall not be issued in a development in which the holder of the site development approval is found to be in violation of this chapter. Any person, partnership or corporation found to be in violation of this chapter may be fined \$50 per day per offence. All fines collected will be remanded to the Soil Erosion and Sedimentation Control Fund. In addition to any other penalty authorized by this section, if the Board of Public Works and Safety or the Engineering Department identifies violations of this chapter, the board or department shall give a five-day written notice to the applicant to bring the site into compliance. The notice shall be served by registered mail addressed to the applicant. If the applicant shall fail to bring the site into compliance within the time prescribed, after receiving the notice, then the Board of County Commissioners shall proceed to bring the site into compliance. The County Auditor shall make a certified statement of the actual cost incurred by the county to bring the site into compliance. The statement shall be delivered to the applicant by registered mail and the applicant shall pay the amount due to the Clerk-Treasurer. If the applicant fails to pay the amount within ten days after



receiving the statement, a certified copy of the statement of costs shall be filed in the office of the Auditor of the county. The Auditor of the county shall place the amount claimed on the tax duplicate against the property affected by the work and the amount shall be collected as taxes are collected and shall be disbursed to the Clerk-Treasurer who shall deposit the funds in the account from which the funds were expended.  
(Ord. 2008-07, passed 5-5-2008)

# APPENDIX E:

## Policies and Procedures for NPDES Stormwater Regulations for Construction Activities

### Bartholomew County, Indiana MS4 Program

(Work In Progress)

APPENDIX F:

Construction Public Inquiries Policy

Bartholomew County, Indiana

MS4 Program

(Work In Progress)

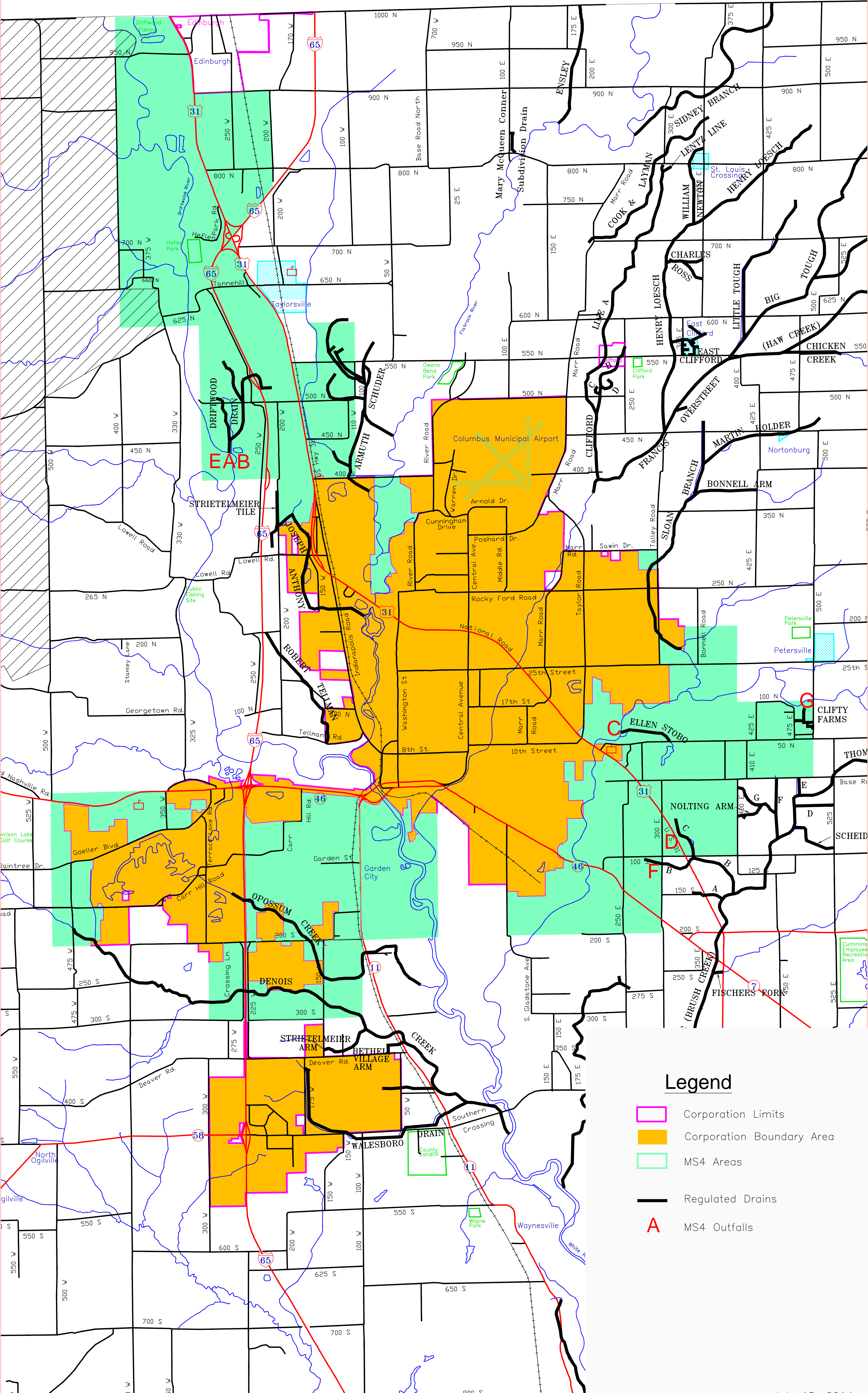
# APPENDIX G:

Illicit Discharge Detection and Elimination Plan

Dry Weather Monitoring Policies and Procedures

Bartholomew County, Indiana  
MS4 Program







# BARTHOLOMEW COUNTY SURVEYOR'S OFFICE



E. R. GRAY III, *County Surveyor*

**Governmental Office Building**

440 Third Street, Room 400

Columbus, Indiana 47201

ph: 812.379.1525 - fax: 812.379.1526


email: [surveyor@bartholomew.in.gov](mailto:surveyor@bartholomew.in.gov)

website: [www.bartholomew.in.gov](http://www.bartholomew.in.gov)

## COUNTY REGULATED DRAINS CONSIDERED MS4 OUTFALLS July 11, 2014

A. Driftwood Drain open ditch outlet into Driftwood River	Lat 39.263969 Long -85.962196
B. Driftwood Drain 12" tile outlet into Driftwood River	Lat 39.263920 Long -85.962102
C. Ellen Stobo open ditch outlet into Clifty Creek	Lat 39.210051 Long -85.866740
D. Brush Creek Arm "C" 15" tile outlet into Arm "C" open ditch	Lat 39.191046 Long -85.852086
E. Driftwood Drain 8" tile into Driftwood River	Lat 39.263978 Long -85.962369
F. Brush Creek Arm "B" 8" tile outlet into Arm "B" open ditch	Lat 39.186316 Long -85.858700
G. Clifty Farms 10" tile into Clifty Creek	Lat 39.215567 Long -85.821847



<b>Bartholomew County</b> <b>MS4</b> <b>Standard Operating Procedure</b>	<b>Subject:</b> <b>Dry Weather Screening Procedures &amp; Field Sheet</b>	<b>SOP Number:</b> <b>IDDE-1</b>
 Approved By: _____ MS4 Coordinator _____ Date		<b>Issue Date:</b> 5/19/2015

**Purpose**

Know your County weather conditions by conducting screening during dry weather periods

**Standard Operating Procedures**

- A. Storm Water Coordinator generates work order form to conduct dry weather screening
- B. Determine the preferred weather condition and time of year to perform dry weather screening.
  1. Low ground water (exiting ground with a very low flowing outfalls)
    - a) Conduct dry weather screening during early winter month, (November, December, etc.)
  2. No runoff producing rainfall within 48 hours.
    - a) Reduce the confounding influence of storm water
    - b) Time frame may become longer if needed
  3. Dry season
    - a) Allow for more day of field work
    - b) Apply during the early winter months so irrigation water doesn't affect conditions.
- C. Obtain mapping and identify the outfalls that are designated for dry weather screening.
- D. If dry weather flow is present at the outfall, then document and evaluate the discharge by completing the following steps:
  1. Collect field samples for visual observation in a clean, clear one-liter sample bottles and in a manner that avoids distorting the sediment so that it might be observed.
  2. Observe and record the basic physical indicators (e.g. odor, color, turbidity, oil sheen) on the Dry Weather Field Sheet.
  3. Compare to previous Dry Weather screenings.
  4. If flow does not appear to be an obvious illicit discharge trace the source of the flow to its source (groundwater, intermittent stream, etc.)
- E. If illicit discharge is detected or suspected follow the SOP IDDE- 3 Illicit Discharge Tracking Investigation Procedures to identify contaminating source location.



## DRY WEATHER SCREENING 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): <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <input type="checkbox"/> Industrial  <input type="checkbox"/> Ultra -Urban Residential  <input type="checkbox"/> Suburban Residential  <input type="checkbox"/> Commercial         </div> <div style="width: 45%;"> <input type="checkbox"/> Open Space  <input type="checkbox"/> Institutional            Other: _____            Known Industries: _____         </div> </div>			
Notes (e.g., origin of outfall, if known):			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN)	SUBMERGED
<input type="checkbox"/> <b>Closed Pipe</b>	<input type="checkbox"/> RCP <input type="checkbox"/> PVC <input type="checkbox"/> Steel <input type="checkbox"/> CMP <input type="checkbox"/> HDPE <input type="checkbox"/> Other: _____	<input type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter: _____  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"/> <b>Open drainage</b>	<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 Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____	
<input type="checkbox"/> <b>In-Stream</b>	(applicable when collecting samples)			
<b>Flow Present?</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No <i>If No, Skip to Section 5</i>			
<b>Flow Description (If present)</b>	<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

**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 M(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"/> Grey <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, Ect.) <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/origine clear (e.g. obvious oil sheen, suds, or floating sanitary materials)

**Section 5: Physical Indicators for 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
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Comments:

**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 and Photo of Outfall (e.g., trash or needed infrastructure repairs)?**

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**Section 9: Generate Work Order**


1. Generate Work Order for outfall maintenance	<input type="checkbox"/> Yes <input type="checkbox"/> No	Signature:	Date:
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**Section 10: Completed Work Order**

1. Completed Work Order for outfall maintenance	<input type="checkbox"/> Yes <input type="checkbox"/> No	Signature:	Date:
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**Section 11: Follow Up Corrective Action**

1. Determine if the contamination source still present?	<input type="checkbox"/> Yes <input type="checkbox"/> No	(if Yes repeat Section 3 through 10)
2. Completed Corrective Action.	Signature:	Date:

<b>Bartholomew County</b> <b>MS4</b> <b>Standard Operating Procedure</b>	<b>Subject:</b> <b>Illicit Discharge Enforcement Procedures</b>	<b>SOP Number:</b> <b>IDDE-2</b>
	Approved By:  _____ MS4 Coordinator _____ Date	Issue Date: 5/19/2015

**Purpose**

To establish enforcement procedures for illicit discharges to the storm drain system.

**Standard Operating Procedures****MS4 Coordinator/ Inspector Investigation**

1. Contaminating source and responsible party are identified through the City IDDE reporting process and/or citizen hotline.
2. "Work Order" is received.
3. Inspector should conduct site investigation and determine if stormwater violations exist.
4. If stormwater violations exist, complete "Site Investigation Response Form". At a minimum, the Inspector should collect the following:
  - a) Ordinances violated
    - Inspector should know and understand City ordinances related to stormwater management and water quality.
  - b) Collect perpetrator contact information (name, address, phone number, etc.)
  - c) Take photographs of the violation and relevant site characteristics.
  - d) Collect Soil and/or water samples
  - e) Collect witness contact information (name, address, phone number, etc.) if applicable
  - f) Collect written statements from citizens or employees (if applicable)
5. Proceed to Enforcement Action #1

**Enforcement Action #1: MS4 Coordinator/Inspector**

1. First Inspection: Inspector will issue first "Stormwater Violation" to the responsible party.
  - a. First stormwater violation includes a Stop Work Order, or Notice of Violation
  - b. Inspector will set forth a "Corrective Action Timetable". Included in the timetable will be the period and completion date for the corrective action(s), as well as the inspection follow up appointment.
  - c. MS4 coordinator has the option to go directly to **Enforcement Action #2** for a criminal investigation if violation is deemed an immediate threat to public health, or the responsible party deliberately discarded hazardous waste into the stormwater infrastructure.
2. Second Inspection: Return to site at scheduled time
  - a. Corrective action(s) have been completed according to stipulated schedule and requirements.
    - Complete "Corrective Action" portion of initial Site Investigation Form
    - Close Investigation

Bartholomew County MS4 Standard Operating Procedure	Subject: Enforcement Procedures	SOP Number: IDDE-2
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- Return "Site Investigation Form" and relevant paperwork to MS4 Coordinator for filing
- b. Contamination source still exist.
  - Issue a second Notice of Violation.
  - Inspector will set forth a "Corrective Action Timetable". Included in the timetable will be the period and completion date for the corrective action(s), as well as the inspection follow up appointment.
- 3. Third Inspection: At time of third visit, contamination source is still present and responsible party hasn't completed the corrective action to eliminate the illicit discharge.
  - a. Inspector notifies stormwater coordinator of investigation and non-compliance of responsible party.
  - b. MS4 coordinator notifies public safety to investigate the situation and proceed with public safety enforcement.
- 4. Proceed with **Enforcement Action #2**

### Enforcement Action #2: Public Safety

#### *MS4 Coordinator Investigation Transfer:*

1. Initiate transfer of investigation to Public Safety by calling the public safety dispatch to place the request for services.
2. The MS4 coordinator shall submit copies of all information gathered to date, including:
  - a) Site Investigation Form
  - b) Photographs taken
  - c) Soil or water samples (with test results)
  - d) Witness information (name, address, phone numbers, etc.) if applicable.
  - e) Letters or written statements from citizens or employees if applicable.
3. MS4 coordinator and representative from Public Safety are to sign investigation transfer paperwork.
4. Once the public safety dispatch has been notified of the request for service. This following will transpire.
  - a) A law incident will be generated.
  - b) The next available officer will be dispatched. (they will be able to determine if additional officers or other resources will need to be deployed)
5. The public safety officer will conduct a full investigation according to the public safety department's policy and procedures.
6. MS4 coordinator may assist the investigating officer with:
  - a) Additional statements
  - b) Technical expertise
  - c) On-site investigations

The MS4 coordinator and/or Inspector will be entered in as a complainant in the public safety report and as such may be required to sign a complaint and/or testify in court.




Bartholomew County MS4 Standard Operating Procedure	Subject: Enforcement Procedures	SOP Number: IDDE-2
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***Public Safety Enforcement Investigation***

1. Public Safety will review MS4 coordinator information and start an investigation.
2. At any time, Public Safety Officer may proceed to criminal investigation and prosecution.
3. Public safety shall issue criminal citation to responsible party. Responsible party will have a court appearance.
4. If illicit discharge is still present after criminal citation, the public safety officer will initiate a criminal investigation.

***Criminal Investigation and Prosecution***

1. Once the public safety officer has conducted a criminal investigation, the County attorney will proceed with prosecution. Responsible party will have a court appearance.

<b>Bartholomew County</b> <b>MS4</b> <b>Standard Operating Procedure</b>	<b>Subject:</b> <b>Storm Drain Network Tracking Illicit Discharge Investigation Procedures, Field Sheet, &amp; Illicit Discharge Detection Report</b>	<b>SOP Number:</b> <b>IDDE-3</b>
 Approved By: _____ MS4 Coordinator _____ Date		<b>Issue Date:</b> 5/19/2015

**Purpose**

To methodically determine the source of illicit discharge by tracking through the storm drain network.

**Standard Operating Procedures****I. Attack Method**

- A) Work progressively up the trunk lines from the outfall and test manholes and inlets along the way.
- B) Split the trunk into equal segments and test manholes at strategic junction in the storm drain system.
- C) Work progressively down from the upper part of the storm drain network toward the problem outfall.

**II. Operation Method**

## A) Moving up the Trunk Line (small drainage networks)

- 1. Start at outfall with illicit discharge indicated.
- 2. Move up outfall to first manhole or inlet and inspect for illicit discharge (If discharge detected progressively move up the network and inspect manholes and inlets until indicators reveal that the discharge is no longer present.
- 3. Identify the specific section of the trunk line that has illicit discharge.
- 4. Select the appropriate on-site investigation method to trace the exact source.

## B) Split the storm drain network (larger diameter outfalls)

- 1. Start by determining the selected strategic manholes or inlets at junction in the storm drain network.
- 2. Review a map of the storm drain network leading to the suspect outfall.
- 3. Identify major contributing branches lines to the trunk line.
  - a) Branches: are network of smaller pipes that contribute to the trunk line.
  - b) Trunk: are the largest diameter pipes in the storm drain network that lead to the outfall.
- 4. Working up the network, investigate manholes and inlets on each contributing branch and trunk, until the source is narrowed to a specific section of the trunk or contributing branch lines.
- 5. Once the discharge is narrowed to a specific section of trunk, select the appropriate on-site investigation method to trace the exact source.

## C) Move down the storm drain network (very large drainage areas)

- 1. Start by inspecting manholes or inlets at or around the "headwaters" of the storm drain networks.
- 2. Move down the pipes, inspect for illicit discharge.

Bartholomew County MS4 Standard Operating Procedure	Subject: Illicit Discharge Tracking Investigation Procedures	SOP Number: IDDE-3
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3. Identify major contributing branches lines to the trunk line.
  - a) Branches: are network of smaller pipes that contribute to the trunk line.
  - b) Trunk: are the largest diameter pipes in the storm drain network that lead to the outfall.
4. Working down the network, investigate manholes and inlets on each contributing branch and trunk, confirming that the discharge is removed before moving farther down the pipe.
5. Refer to process flow chart for Following Discharges down the pipe.

### III. Investigation Methods

#### A) Windshield Survey Investigation (small drainage areas)

1. Identify pollutant material
2. Determine the most probable source of the illicit discharge. (fuel illicit discharge = investigation of fueling stations)
3. Investigation of probable source of illicit discharge
4. Conduct on-site Investigation of probable source
5. Correct illicit discharge

#### B) Detailed Drainage Investigation (large drainage areas)

1. Identify pollutant material.
2. Determine and proceed with a method of Attack (*Moving up the Trunk Line, Split the storm drain network, Move down the storm drain network*).
3. Identify illicit discharge potential hotspots.
4. Conduct on-site Investigation of probable source
5. Correct illicit discharge

### IV. On-site Investigations

#### A) Dye Testing

1. Review storm drain network.
2. Contact property owners prior to obtain accessing the property to perform test.
3. Inform other local agency of the dye test being preformed.
4. Position at least two staff members for dye test (one inserting dye and one looking for dye in the downstream manholes and inlets).
5. Determine the required equipment to perform dye test. (refer Key Field Equipment for Dye Testing).
6. Determine type of dye to use, dye tablets, liquid concentrate, dye strips, powder, dye wax cakes, and dye wax donuts (refer to Dye Test Options).
7. Insert dye material. (refer Tips for Successful Dye Testing).
8. Identify dye downstream to isolate possible illicit discharge.

#### B) Video Testing

1. Review storm drain network.
2. Contact property owners prior to obtain accessing the property to video test.
3. Insert camera into storm drain network
4. Drive upstream or down stream to locate the illicit discharge location.

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### STORM DRAIN NETWORK TRACKING FIELD SHEET

Inspection Date: \_\_\_\_\_ Inspector: \_\_\_\_\_

Street: \_\_\_\_\_ Manhole / Inlet Type: \_\_\_\_\_

Inspection: Not Found \_\_\_\_\_ Surface \_\_\_\_\_ Internal \_\_\_\_\_ Inlet Box \_\_\_\_\_ Manhole \_\_\_\_\_

Follow Up Inspection \_\_\_\_\_ Box/Manhole # \_\_\_\_\_

Time Since Last Rain: <48 hours \_\_\_\_\_ 48-72 hours \_\_\_\_\_ >72 hours \_\_\_\_\_

#### Observations:

Standing Water in Manhole or Inlet: Yes \_\_\_\_\_ No \_\_\_\_\_ Color of Water: Clear \_\_\_\_\_ Cloudy \_\_\_\_\_ Other \_\_\_\_\_  
 Flow in Manhole or Inlet: Yes \_\_\_\_\_ No \_\_\_\_\_ Velocity: Slow \_\_\_\_\_ Medium \_\_\_\_\_ Fast \_\_\_\_\_ Depth of Flow: \_\_\_\_\_ in.  
 Color of Flow: No Flow: \_\_\_\_\_ Clear \_\_\_\_\_ Cloudy \_\_\_\_\_ Suspended Solids \_\_\_\_\_ Other \_\_\_\_\_  
 Blockages: Yes \_\_\_\_\_ No \_\_\_\_\_ Sediment in Manhole or Inlet: Yes \_\_\_\_\_ No \_\_\_\_\_ If Yes: Percent of Pipe Filled: \_\_\_\_\_ %  
 Floatables: None \_\_\_\_\_ Oily Sheen \_\_\_\_\_ Foam \_\_\_\_\_ Other \_\_\_\_\_  
 Odor: None \_\_\_\_\_ Oil \_\_\_\_\_ Soap \_\_\_\_\_ Other \_\_\_\_\_

#### Field Testing:

pH \_\_\_\_\_ Temp \_\_\_\_\_ Spec. Cond. \_\_\_\_\_ Surfactants: Yes \_\_\_\_\_ No \_\_\_\_\_ Ammonia: Yes \_\_\_\_\_ No \_\_\_\_\_

#### Contamination:

Found During Inspection: Yes \_\_\_\_\_ Check one: \_\_\_\_\_ Observation \_\_\_\_\_ Positive Test Kit Result  
 No \_\_\_\_\_ Sandbagged Placed No \_\_\_\_\_ Yes \_\_\_\_\_ Give Date \_\_\_\_\_  
 Sandbag Checked (Date): \_\_\_\_\_ Flow was \_\_\_\_\_ Captured \_\_\_\_\_ Not Captured: \_\_\_\_\_

#### Conditions of Manhole or Inlet:

Grade: At _____ Above _____ Below _____	Good	Fair	Poor	Comments	Construction Material
Pavement	_____	_____	_____	_____	Precast      Other
Cover	_____	_____	_____	_____	
Frame	_____	_____	_____	_____	
Walls	_____	_____	_____	_____	
Floor	_____	_____	_____	_____	_____

Comments: Manhole Correct as Mapped Yes \_\_\_\_\_ No \_\_\_\_\_

Bartholomew County MS4 Standard Operating Procedure	Subject: Illicit Discharge Tracking Investigation Procedures	SOP Number: IDDE-3
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## Bartholomew County

**ILLICIT DISCHARGE DETECTION REPORT**


<b>Date/ Time</b>	<b>Address</b>	<b>Photos: Y/N</b>
<b>Responsible Party</b>		
<b>Name:</b>		
<b>Address:</b>		
<b>Phone:</b>		
<b>Company Name:</b>		<b>Truck # &amp; Trailer #</b>
<b>Property Owner:</b>		<b>License Plate #</b>
<b>Issue:</b>		
<b>Counter Measures:</b>		
		<b>Box Number</b>
<b>Identification of Illicit Discharge Material (Type, Quantity)</b>		
<b>Clean Up:</b>		
<b>Material Used to Contain Illicit Discharge</b>		
<b>Material Used to Absorb The Discharge</b>		

Bartholomew County MS4 Standard Operating Procedure	Subject: Illicit Discharge Tracking Investigation Procedures	SOP Number: IDDE-3
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<b>Method and Location of Disposal Waste Site</b>	
<b>Restoration:</b>	
<b>Restoration Required (If yes Description of Area that Needs Restoration) &amp; Process Used to Restore</b>	
<b>Storm Water Inspector Conclusion</b>	
<b>MS4 Coordinator</b>	<b>Signature &amp; Date:</b>

**\*Filing Instruction:**Send to Bartholomew County MS4 Coordinator, Code  
Enforcement, and Health Department




<b>Bartholomew County</b> <b>MS4</b> <b>Standard Operating Procedure</b>	<b>Subject:</b> <b>Citizen Hotline Procedures for Illicit Discharges or Spills</b>	<b>SOP Number:</b> <b>IDDE-4</b>
 Approved By: _____ MS4 Coordinator _____ Date		Issue Date: 5/19/2015

**Purpose**

To provide standard procedures to identify actions required for calls into the citizen hotline.

**Standard Operating Procedures**

1. Citizen has a concern and calls Soil and Water Conservation office at 812-378-1280 ext.3
2. Hotline receptionist receives call from concerned citizen.
3. Receptionist asks questions to determine if contamination is due to a spill or an illicit discharge. If undeterminable, proceed as if a spill.
  - a) The date County became aware of spill/illicit discharge
  - b) The date the spill/illicit discharge was observed
  - c) Location of spill/illicit discharge
  - d) Description of the spill/illicit discharge
4. Responder will inspect and observe the Spill/Illicit Discharge.
  - a) County spill/illicit discharge responder determines appropriate spill/illicit discharge response procedures.
  - b) Refer to Spill Response Procedures SOP IDDE-6.
  - c) Refer to Illicit Discharge Tracking Investigation Procedures SOP IDDE-3 and Ceasing of Illicit Discharge Procedures SOP IDDE-5.
5. Documentation of process to eliminate the spill/illicit discharge removal.
  - a) The date of removal, repair or enforcement action
  - b) Date and method of removal
  - c) Decision process for determining restoration.
6. County employee will complete spill/illicit discharge response paperwork.
7. The citizen will be contacted for a follow up on the concern.
8. All information will be entered into the electronic filing system.


<b>Bartholomew County</b> <b>MS4</b> <b>Standard Operating Procedure</b>	<b>Subject:</b> <b>Ceasing of Illicit Discharge Procedures</b>	<b>SOP Number:</b> <b>IDDE-5</b>
	Approved By:  _____ MS4 Coordinator _____ Date	Issue Date: 5/19/2015

**Purpose**

To stop illicit discharges as quick as possible.

**Standard Operating Procedures**

- A. Inform the proper authorities
  - 1. Bartholomew County MS4 Coordinator.
  - 2. Call 9-1-1 if material is hazardous.
- B. Determine who is financially responsible; and notify the property owner & responsible party involved in illicit discharge.
- C. Suspend all access to the storm drain infrastructure.
- D. Require property owner and responsible party involved to:
  - 1. Terminate all improper disposal practices.
  - 2. Responsible party to contain and eliminate contamination source
- F. Technically assist property owner and responsible party with removing and eliminating improper disposal practices.
- G. Conduct a follow-up inspection
  - 1. If contamination source eliminated
    - a) Complete Illicit Discharge Detection Report
  - 2. If contamination source still present
    - a) Repeat steps previous, until contamination source eliminated.
- H. Bartholomew County may enforce legal action if discharge is not eliminated.

<b>Bartholomew County</b> <b>MS4</b> <b>Standard Operating Procedure</b>	<b>Subject:</b> <b>Spill Response Procedures</b>	<b>SOP Number:</b> <b>IDDE-6</b>
	<b>Approved By:</b>  _____ MS4 Coordinator _____ Date	<b>Issue Date:</b> 5/19/2015

**Purpose**

To establish the Spill Response Procedures for spills less than 10 gallons and more than 10 gallons.

**Standard Operating Procedures**

Determine if spill is more than 10 gallons. If yes, skip to section on response for less than 10 gallons.

**Less than 10 Gallons**

**Counter Measures:** Less than 10 gallons & substances that can be handled by trained spill response employee: Immediate action taken to eliminate the source or cause of the spill.

- Blocking storm drains, inlet boxes, or pipe inlet to prevent or slow the migration of the spilled materials.
- Assess the spill and determine the procedure needed to take to clean up spills.
- Outsource an adequate organization to clean up spill (if required).

**Clean Up:** Controlled and coordinated actions taken to contain and remove spill materials.

- Contain the spill by placing absorbent socks or berms around the perimeter of the spill.
- Initiate spill cleanup by placing absorbent material such as pads, pillow, OIL DRI (oil absorbent), sand, and any absorbent material to recover the spilled materials.
- Place used absorbent materials in disposable bags or containers and transport to a designated waste areas.

**More than 10 Gallons**

**Investigation:** More than 10 gallons & substances that can't be handled by trained spill response employee: Immediate action taken to eliminate the source or cause of the spill.

- Call 9-1-1 to report spill
- Notify County MS4 coordinator.
- Bartholomew County Code Enforcement will observe the spilled material.

Bartholomew County MS4 Standard Operating Procedure	Subject: Spill Response Procedures	SOP Number: IDDE-6
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- MS4 Coordinator will fill out a Spill Incident Report, making sure to note that the spill was more than 10 gallons and that the Emergency Response Team was called and handling the spill.

Required Information on spill incident report:

- Date, Time Spill
- Spill location
- Take as many photos as needed.
- Responsible party (name, address, phone, property name, ect.)
- The counter measures taken by Emergency Response Team.
- Cleanup actions taken.
- Restoration that was performed by responsible party.

**Spill Restoration Corrective Action:** Follow up with spill location to confirm spill removal.

- Contact responsible party to confirm that the spill was removed & cleaned up.
- If spill has not been cleaned up enforce corrective action on responsible party.

### Reporting Instructions

MS4 coordinator must complete a Spill Incident Report for all spills that occur in Bartholomew County.

The spill location will be flagged in GIS department for future inspection.

Bartholomew County MS4 Standard Operating Procedure	Subject: Spill Response Procedures	SOP Number: IDDE-6
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**Bartholomew County  
SPILL INCIDENT REPORT**

<b>Spill #</b>		
<b>MS4 Coordinator:</b>		
<b>Date/ Time Spill</b>	<b>Spill Address</b>	<b>Photos:</b>
		<b>Yes    No</b>
<b>Responsible Party</b>		
<b>Name:</b>		
<b>Address:</b>		
<b>Phone:</b>		
<b>Company Name:</b>		<b>Truck # &amp; Trailer #</b>
<b>Property Owner:</b>		<b>License Plate #</b>
<b>Counter Measures:</b>		
<b>Did Spill Reach Any Storm Drains, Inlet Boxes, Manholes, or Pipes / Material Used to Block Storm Water Inlets</b>		<b>Box Number</b>
<b>Identification of Spill Material (Type, Quantity)</b>		
<b>Clean Up:</b>		
<b>Material Used to Contain Spill</b>		

Bartholomew County MS4 Standard Operating Procedure	Subject: Spill Response Procedures	SOP Number: IDDE-6
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<b>Material Used to Absorb the Spill</b>	
<b>Method and Location of Disposal Waste Site</b>	
<b>Restoration:</b>	
<b>Restoration Required (If yes Description of Area that Needs Restoration) &amp; Process Used to Restore</b>	
<b>Spill Inspector Conclusion</b>	
<b>MS4 Coordinator</b>	<b>Signature &amp; Date:</b>

**\*Filing Instruction:**Send to Bartholomew County MS4 Coordinator, Code Enforcement,  
and Health Department