



Rule 13 - MS4 ANNUAL REPORT

State Form 51278 (R6 / 7-12)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

For questions regarding this form, contact:

IDEM Office of Water Quality , Storm Water Program
MS4 Coordinator
100 North Senate Avenue, Room 1255
MC 65-42
Indianapolis, IN 46204-2251
Telephone: (317) 234-1601 or
(800) 451-6027, ext. 41601 (within Indiana)
Web Access: <http://www.IN.gov/idem/4900>

- NOTE:**
- Annual reports must be submitted to the Indiana Department of Environmental Management. **Failure to submit the annual report is considered noncompliance with your permit.**
 - For the **first five** (5)-year permit term, this completed form must be submitted by 1 year from the SWQMP – Part C submittal date and, thereafter, 1 year from the previous report (i.e., in years two (2) through five (5) of permit coverage).
 - In the **second and subsequent** five (5)-year permit terms, this completed form must be submitted in years two (2) and four (4) of permit coverage.
 - Please type or print in ink.**
 - Please answer all questions thoroughly and return the form by the due date.
 - Return this form and any required attachments to the IDEM Storm Water Program, MS4 Coordinator at the address listed in the box on the upper-right.

Five Year Permit Term	Reporting Year
<input type="checkbox"/> 1st Permit Term	Permit Year <u>2017</u>
<input checked="" type="checkbox"/> Second and subsequent five (5) Year Permit Terms	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 MS4s in their first permit term must submit reports annually. MS4s that are in subsequent permit terms must submit in years 2 and 4 of the permit term.

PART A: GENERAL INFORMATION – MS4 OPERATOR

1. Permit Number:	INR 0 4 0 092	Type of MS4:	
2. MS4 Entity:	Terre Haute Co-Permit <i>(Name of permit holder)</i>	<input checked="" type="checkbox"/> City	<input checked="" type="checkbox"/> Town
		<input checked="" type="checkbox"/> County	<input type="checkbox"/> Non-traditional
3. MS4 Operator:	Debra Padgett		
4. Mailing Address:	Terre Haute Wastewater Utility 3200 South State Road 63 Terre Haute, IN ZIP: 47802 County: Vigo		
5. Email Address:	debbie.padgett@terrehaute.in.gov		

PART B: GENERAL INFORMATION – MS4 COORDINATOR

6. MS4 Coordinator (please print):	Alicia Barnard		
7. Person's Title:	MS4 Coordinator		
8. Mailing Address:	Terre Haute Wastewater Utility 3200 South State Road 63 Terre Haute, IN ZIP: 47802		
9. Telephone Number:	812-244-5500		
10. E-mail Address:	alicia.barnard@terrehaute.in.gov		

PART C: GENERAL INFORMATION – REPORT PREPARER

11. Name: Prepared by MS4 Coordinator, Alicia Barnard <i>(Provide this information if someone other than MS4 Operator or Coordinator completed this report.)</i>			
12. Affiliation with the MS4:			
13. Mailing Address:			
	, IN	ZIP:	
14. Telephone Number:	Extension:		
15. E-mail Address:			

16. Provide a summary of the following program management activities performed during the reporting period:

- a) If this is a co-permit, list all permittees and operators responsible for permit implementation for each entity.
 - i. Terre Haute - Debra Padgett, MS4 Operator/Wastewater Utility Director, 812-244-5500
 - > Alicia Barnard, MS4 Group Coordinator, 812-244-5500
 - > Marcus Maurer, Construction Plan Review & Inspection, 812-244-4903
 - ii. Vigo County - Neil Costillo, Vigo County Engineer, 812-462-3419
 - > Jan Came, Construction Plan Review & Inspection, 812-232-0193
 - iii. West Terre Haute - Jim Crowley, Street & Utility Superintendent, 812-533-1053
 - iv. Seelyville - Brent Spier, Town Manger, 812-877-2665
 - v. Indiana State University - Bryan Duncan, Dir Capital Planning & Improvements, 812-237-8100
 - vi. Rose-Hulman Institute of Technology - Jacob Campbell, Sr Mgr EHS, 812-877-8124
 - vii. IvyTech Community College of Terre Haute - Sam Johnson, Dir Facilities & Mtncce, 812-298-2266

- b) Identify changes to the MS4 area boundaries, including areas added to or lost from the MS4 area via annexation or other similar means. Provide a current map (8.5" X 11" or 8.5" X 14")
 - i. The MS4 area boundaries increased due to the results of the 2010 census and population growth in the urbanized areas. No additional changes have been made to the MS4 boundary areas since that time.
 - > [Attachment 1 - Current Map of MS4 Boundary Areas](#)

- c) Identify follow-up or additional water quality characterizations completed during the reporting period, if applicable.
 - i. IDEM conducted a comprehensive survey of the Otter Creek watershed in 2009. This watershed drains approximately 124 square miles, and covers parts of Clay, Vigo, and Parke counties. A kickoff TMDL meeting was held in 2011 and a TMDL draft meeting was held in 2013. TMDL reports identify and evaluate water quality problems in impaired water bodies and propose solutions to bring those waters into attainment with water quality standards. TMDLs for the Otter Creek watershed are for Escherichia coli bacteria (E. coli) and will address 23 impairments. Some of the recommended solutions to address the impairments include storm water controls, point source controls, manure management, and habitat improvements. Beginning in January 2018, the Terre Haute Wastewater Utility will assist the Otter Creek Watershed Group by providing E. coli analysis at no cost to the watershed group.
 - > [Attachment 2 - Otter Creek Watershed Map](#)
 - ii. The Terre Haute Wastewater Utility must periodically re-evaluate the local limits set forth in the industrial pretreatment and sewage usage ordinance of the City of Terre Haute. Three dry-weather sampling events were conducted mid-stream of the Wabash River from the Ohio Street bridge in June of 2016 to determine pollutant loadings for the following parameters: Arsenic, Cadmium, Chromium, Copper, Cyanide, Iron, Lead, Mercury, Nickel, Selenium, and Zinc.
 - > [Attachment 3 - Wabash River Local Limits Analysis Results](#)

- d) Provide updated receiving water information completed during the reporting period, if applicable.
 - i. No updates to report

- e) Identify funding sources (utility fees, grants, enforcement fines, etc.) utilized for MS4 program implementation during this reporting period.

- i. The primary funding sources for Terre Haute, Vigo County, Seelyville, and West Terre Haute are general taxpayer funds. Funds for the IvyTech, Rose-Hulman and ISU come from their general facility operating budgets.
- f) Provide a list of new active industrial sites identified during this reporting period.
- i. Plycem USA, LLC located at 1001 West Industrial Drive in Terre Haute, is a manufacturer of fiber cement siding and boards. Cellulose fibers are re-pulped in warm water at an alkaline pH, refined, and then mixed with cement, silica sand, and other additives to form a slurry. The fiber cement mixture is deposited on a felt band substrate, vacuum de-watered, and cured to form a fiber reinforced cement matrix in sheet form. The manufacturing facility includes bulk storage for raw materials, a batch plant for cellulose refining, batch mixing and polymer/anti-foaming agents, sheet production lines, autoclaves, priming and painting lines, washing, finished goods storage and a shipping department. The facility's 5-year Industrial Wastewater Discharge Permit with the City of Terre Haute became valid on September 1, 2017.
 - ii. Other currently active manufacturing/industrial facilities include the following:
 - > ADVICS, 10550 James Adams St, Automobile Brake Components (Rule 6 facility & Terre Haute Wastewater Treatment Utility discharge permit)
 - > Ampacet, 3801 N Fruitridge Ave, Plastic Compounding (Rule 6 facility & Terre Haute Wastewater Treatment Utility discharge permit)
 - > Aramark, 3752 N Fruitridge Ave, Commercial Laundry (Terre Haute Wastewater Treatment Utility discharge permit)
 - > Bemis, 1350 N Fruitridge Ave, Polyethylene Bags/Flexible Packaging (Rule 6 facility)
 - > Boral Bricks, 5601 E 126th Dr (Rule 6 facility)
 - > Brenntag, 1400 Lockport, Wholesale chemicals and allied products
 - > Clabber Girl Corporation, 900 Wabash Ave, Baking Powder
 - > Columbian Home Products, 1600 Beech St, Brand Cookware (Terre Haute Wastewater Treatment Utility discharge permit)
 - > Con-Way Freight XTH, 3651 N Fruitridge Ave (Rule 6 facility)
 - > CSN, LLC, 455 Industrial Dr, Cold-Roll Steel Finishing (Rule 6 facility & Terre Haute Wastewater Treatment Utility discharge permit)
 - > DuPont (Danisco), 11 Litesse Dr, Sweeteners (Terre Haute Wastewater Treatment Utility discharge permit)
 - > Elanco (ChemGen), 1445 S 1st St, Animal Feed Enzymes (Rule 6 facility & Terre Haute Wastewater Treatment Utility discharge permit)
 - > FedEx Freight Inc, 5050 E Margaret Dr, (Rule 6 facility)
 - > Futurex Industries, 10000 S Carlisle Dr, Sheet Extrusion
 - > Gartland Foundry, 330 Grant St, Gray & Ductile Iron
 - > Gatx Financial Corporation Rail Division, 4400 Maple Ave (Rule 6 facility)
 - > GE Aviation, 333 S 3rd St, Turbine Engine Components (Terre Haute Wastewater Treatment Utility discharge permit)
 - > Goodman & Wolfe Incorporated, 1350 College Ave, scrap metal recycling (Rule 6 facility)
 - > Great Dane Trailers, 4955 N 13th St, Semi Trailers (Rule 6 facility)
 - > Green Leaf, 9490 N Baldwin St, Injection Molded Products
 - > Hydrite, 1400 S Erie Canal Rd, Liquid sulfites and bisulfites (Terre Haute Wastewater Treatment Utility discharge permit)
 - > Indiana Railroad Company Van Yard, 1353 N Fruitridge Ave (Rule 6 facility)
 - > Jadcore, 300 N Fruitridge Ave, Polyethylene Liners/Industrial Plastics Recycler
 - > Jones & Sons Inc, 3527 Canal Rd (Rule 6 facility)
 - > Lenex Steel, 2325 S 6th St, Steel Fabrication
 - > MI Express Printing, 100 Hulman St, Printing Company (Rule 6 facility)
 - > Modern Aluminum Castings, 1400 N 14th St, Aluminum

- › Moore Langen Printing, 200 Hulman St, Printing Company (Rule 6 facility)
 - › Novelis, 5901 N 13th St, Aluminum Foil (Terre Haute Wastewater Treatment Utility discharge permit)
 - › PolyOne, 3100 N 35th St, Polymers & Colorants
 - › Reynolds & Company, 1916 S 25th St, Machine & Parts
 - › Sony DADC, 1800 N Fruitridge, CD & DVD Production (Rule 6 facility & Terre Haute Wastewater Treatment Utility discharge permits)
 - › Taghleef, 1171 Crawford St, Oriented Polypropylene Film
 - › Terre Haute Bin (Frito Lay), 6541 Indiana 42 (Rule 6 facility)
 - › ThyssenKrupp Presta, 1597 E Industrial Dr, Automobile Steering Components
 - › TNT Leasing/Trucks Inc, 2611 N 25th St (Rule 6 facility)
 - › Tredegar, 3400 Ft Harrison Rd, Polyethylene Film (Rule 6 facility)
 - › United Parcel Service, 5596 E Margaret Dr (Rule 6 facility)
 - › VNCA Prairie Yard 1075, 3905 N 25th St (Rule 6 facility)
 - › Wabash Valley Asphalt, 400 N 10th St (Rule 6 facility)
 - › Wabash Valley Packaging Corp, 1303 E Industrial Dr (Rule 6 facility)
- iii. All facilities with Terre Haute Wastewater Utility discharge permits receive inspection by the City of Terre Haute’s Industrial Pretreatment Coordinator or by the MS4 Coordinator at least one time each year to determine compliance with wastewater and stormwater discharge regulations.
- g) Provide a list of facilities owned and operated by the MS4 that require Rule 6 (industrial storm water) permits.
- i. IDEM has not required any facility owned and operated by the co-permit group to obtain Rule 6 permit coverage.
- h) Provide a summary of complaints received and follow-up investigation results related to storm water quality issues during this reporting period.
- i. Summary of Stormwater Complaints & Actions during the Reporting Period of 12/01/15 to 11/30/17:
 - › 12/03/15, Ruby Tuesday, Terre Haute. Illegal Disposal of Grease Trap Waste. Civil penalty of \$18,660 to the Environmental Management Special Fund.
 - › 01/06/16, Wastewater Utility Main Lift Station, Terre Haute. Contractor’s diesel tank overturned in floodwaters, IDEM Spill Response notified, cleanup conducted at the contractor’s expense.
 - › 01/07/16, Thompson Thrift, Terre Haute. Public Records request seeking “Copies of all complaints, responses to complaints, charging instruments, administrative findings and orders, witness and other statements, investigative reports, notices, settlement agreements, consent agreements, sanctions, and all other electronic and print records in specific connection with any complaint against, or investigation of Thompson Thrift Construction, Inc., and/or of any owners, officers, or principals thereof” going back to January of 2011.
 - › 04/13/16, Ritter’s Frozen Yogurt, Lafayette Ave, Terre Haute. Road salt storage pile runoff, property owner notified, storage pile removed.
 - › 04/26/16, Weston to Heintz St, Terre Haute. Motor oil found in the combined sewer line, 14 residential door hangers issued to inform the neighborhood of proper disposal requirements.
 - › 04/26/16, Springhill & Prairieton, Terre Haute. Inspected Joink drilling sites for proper bentonite disposal procedures during directional drilling procedures.

- › 07/06/16, College Ave @ Thompson Ditch, Terre Haute. Homeowner complaint of Thompson Ditch bank slipping on her property and railroad ties obstructing flow in stream. No significant movement of the bank was discovered and the railroad company was notified of the rail ties in the stream.
- › 08/09/16, College Ave @ Thompson Ditch, Terre Haute. Homeowner complaint of tall grass in the stormwater conveyance, inspection conducted and mowing crew were contacted.
- › 12/12/16, 10299 South Juaneeta Street (Paint Mill Lake), Terre Haute. Received complaint notice from attorney for a property owner. Complaint was regarding the neighbor's house discharging septic tank waste to the lake. Contacted the Vigo County Health Department for inspection records. 2004 and 2015 inspections said "no visible observation of sewage". Most recent odor complaint was fall 2016. Warranty deed recorded with County shows change of ownership in October 2016. Renovations currently taking place at the location. Vigo County Health Dept says new owners have contacted a soil scientist to conduct soil borings and are in the process of hiring a contractor to install a new septic system. Attorney was provided with update and status report.
- › 01/09/17, 2100 State Road 46, Terre Haute. Phase I Environmental Site Assessment request for information regarding the presence of any landfill areas or unauthorized dumping.
- › 05/18/17, 962 Leslie, West Terre Haute. Homeowner pumped raw sewage from the sewage grinder pump at his home onto the ground. Citation with a fine of \$330 plus \$133 court costs.
- › 06/15/17, 950 Thorpe, West Terre Haute. Baby wipes flushed down the toilet lead to multiple overflows of the sewage grinder pump servicing the property. Property owner issued a notice of violation and compliance order requiring cleaning and inspection of the sewer lines servicing the residence. Any further obstruction to the flow or sanitary sewer overflow events would lead to a citation with fines and charges totaling \$2,105. No further overflows occurred after the notification and cleaning of the lines.
- › 06/12/17, 2^{7th} & Delaware, Terre Haute. Residents of the neighborhood were continually blowing their grass clippings into the street. 100 Yard Waste Pollution notifications were hung on the doors of the homes in the neighborhood along with a brochure explaining why the grass clipping are a stormwater pollutant.
- › 07/21/17, 2220 Wabash Avenue, Terre Haute. Ed's Auto Detailing discharging car wash water into the alley. Site visit confirmed the illegal discharge. Business owner was instructed to direct all wash water to the sanitary sewer connection inside the building. Received a second call a week later from neighbor stating the facility was washing outside again. Inspector visited the site again. Facility personnel were found washing vehicles outside on rubber mats; a failed attempt to direct the water inside to the drain. The owner called all employees together and gave them stern instructions to only wash inside the building. No further complaints were received.
- › 08/02/17, 3209 North 22nd, Terre Haute. Property dispute between neighbors. One owner stated that the other is running his garden hose across the property line trying to damage his foundation and flood his crawlspace. Potable water is not an illicit discharge, told owner to contact a lawyer for legal advice.
- › 08/15/17, 2nd & Oak Street, Terre Haute. Concrete washout containment failure. Subcontractor working at industrial facility used an inflatable child-sized pool as a containment structure for concrete washout. Material placed inside the pool caused one side to sag, releasing the wastewater onto the street and into a curb inlet. Notice of Violation letters were issued to the industry, the contractor and the subcontractor. Cleanup was conducted and all three entities responded to the Notice of Violation appropriately.

- › 08/31/17, 16th & Washington, Terre Haute. The property owner cleared a fencerow on a relatively steep slope. Precipitation lead to erosion and sedimentation covering the sidewalk. Complaint handled by Terre Haute engineer’s office.
- › 09/01/17, Sugar Creek, West Terre Haute. Kayaker found hoses and a green substance on the stream bank near a bridge crossing Sugar Creek. Stated he saw a truck that said Pro-Turf at the bridge. IDEM was notified for further investigation. It appears that the truck was getting water from the stream for hydro-seeding and lost a small amount of product in the process.
- › 10/23/17, ISU Food Services, Terre Haute. A delivery truck damaged fryer oil bin in the shipping and receiving dock. Facility Director notified and appropriate corrective actions were taken to prevent the discharge of oil.
- › 11/21/17, 301 South 3rd Street, Terre Haute. Gas station had an overturned 55-gallon drum outside the building that was leaking into a drain. The liquid had a petroleum odor. A Notice of Violation was issued and the facility was required to remove all of the unused liquid-filled 55-gallon drums that were stored behind the facility.

i) Other:

- i. The co-permittees have no additional information to report under this Program Management section.

PART E: PUBLIC EDUCATION AND OUTREACH - MINIMUM CONTROL MEASURE

17. Identify the best management practices (BMPs) for public education and outreach included in your Storm Water Quality Management Plan (SWQMP) Part C and then respond to the following:

Public Education and Outreach BMPs

- 3-1 Assessment of Public Awareness
- 3-2 Stormwater Quality Brochures
- 3-3 Storm Drain Stenciling
- 3-4 Classroom Education Workshops
- 3-5 Business & Industry Education Program
- 3-6 Public Service Announcements
- 3-7 Web Sites

- a) Identify progress made towards development and implementation of each BMP for this minimum control measure including timetables and measurable goals during this reporting period.

BMP 3-1 Assessment of Public Awareness	
Implementation Actions	Status
Develop survey up to 20 questions by October 2008	Completed in 2008, refreshed in 2015
Make survey available on City and MS4 website by March 2010 and at various times throughout permit term	Survey was available on the home page of both websites by March 2010 but received less than 20 hits so it was removed in 2013. It is still available on the city website in the wastewater utility section at http://terrehaute.in.gov/departments/wastewater-utility/storm-water-management-program-2010-survey
Review and record results 1 st permit term = annually, 2 nd permit term = years 2 & 5, subsequent permit terms = 5 th year	Refer to Attachment 4 - Public Survey Analysis for a comparison of 2015, 2016 and 2017 survey results obtained at the annual Earth Day Celebration at St. Mary of the Woods College.

Measurable Goals	Status
The number of surveys administered	The MS4 Coordinator administered 132 surveys at St Mary's Earth day festival during this reporting period. The Vigo County SWCD administered 25 surveys over the two-year reporting period at the Vigo County 4-H Fair.
The percentage of citizens surveyed that have an awareness of stormwater quality issues	The results of the most recent survey conducted at St Mary of the Woods Earth Day event indicate that 93% of the people surveyed understand that allowing grass clippings, oil, detergent or other substances to enter the storm sewer system can harm fish and other aquatic life. When asked where stormwater goes after entering the storm drain, 30% of people surveyed believe that storm drainage systems are connected to the wastewater treatment plant while only 23% understand that the system discharges directly to a water body. Additional education initiatives need to be developed to address this concern.
Programmatic Goals	Status
Continually increase the number of surveys administered	During the reporting period, 92 surveys were completed in 2016, and only 40 were completed in 2017 at the St Mary of the Woods Earth Day event. Participation in the educational activities including completion of these surveys has continued to grow annually at St Mary's Earth Day event however; the number of people attending this event varies drastically in inclement weather. For example, the April 22, 2017 event had temperatures in the mid-40's with drizzly rain and high winds leading to lower than normal public participation while the 2015 event was conducted on a warm sunny day with 122 surveys completed.

BMP 3-2 Stormwater Quality Brochures	
Implementation Actions	Status
Develop Brochures by August 2008, annually thereafter	Attachment 5 - Informational Materials - General Public
Print brochures by October 2008, annually thereafter	New brochures are designed or old brochures are revised as educational needs change.
Distribute brochures annually	Brochures, flyers or other promotional items are distributed at a variety of public events, every year. The County Annex, Seelyville and West Terre Haute keep printed material in the customer waiting areas and most customers read displays and brochures while waiting to pay water bills or conduct other business.
Measurable Goals	Status
The number of each brochure distributed	Estimated distribution during this reporting period: 2600 Make your home the solution brochures 114 Pollution Found door hangers 14 Leaking Car flyers 25 Rubber Ducky ads 100 Yard Waste brochures

Programmatic Goals	Status
Distribute 500 brochures per year	The “Make your Home the Solution to Stormwater Pollution” is the group’s most widely distributed brochure with at least 1,200 copies provided at the Vigo County 5 th Grade Conservation Field Days event and another 100 distributed at Earth Day and other smaller events annually.

BMP 3-3 Storm Drain Stenciling

Implementation Actions	Status
Order stencils by January 2009	Terre Haute experimented with spray-on stencils during the previous permit periods but we were not happy with the finished look of the stencil. Terre Haute ordered Almetek aluminum drain markers in March of 2013 and applies them in areas where illicit discharges are probable. Rose-Hulman also has used aluminum markers. IvyTech has painted storm drains.
Organize work dates on various dated in 2009 and annually thereafter	Using employees instead of volunteers because of possible insurance liability
Apply the stencils June thru October 2009 and annually thereafter	Many of the cast iron MS4 drain inlets have the “DUMP NO WASTE” verbiage stamped in during manufacturing. We install additional notification near drains where illicit discharges have been located.

Measurable Goals	Status
The number and location of storm drains marked	Terre Haute installed 35 Almetek markers around 50 Oakland Avenue in Terre Haute on June 9, 2017. The Redevelopment Department installed 83 new cast inlets during their projects. Rose-Hulman has 103 storm drain markers on current drains, all new drains have the drain covers stamped with the appropriate wording and any drain found with missing markers were replaced. IvyTech has not added any new storm drains; all 21 drains receive fresh paint as needed. Seelyville has 2 drains and both are marked.

Programmatic Goals	Status
Mark 200 drains per year	As development and redevelopment continues, the use of precast inlets with the “No Dumping” insignia is required; therefore, nearly all of the MS4 drains have been marked. Stencils or aluminum markers will be installed whenever unmarked drains are discovered or in response to illicit discharges.

BMP 3-4 Classroom Education Workshops

Implementation Actions	Status
Distribute informational brochures by September 2008	The “Make Your Home the Solution to Stormwater Pollution” brochures are included in educational packets for the Vigo County 5 th Grade Conservation Field Days. ISU Recycle Center offers printed materials or other promotional items to school groups touring the facility. Brochures and other printed materials are provided to student groups that tour the Terre Haute Wastewater Utility.

<p>Coordinate presentations with schools by August 2009 thru March 2010 and annually thereafter</p>	<p>All Vigo County Schools and some home school groups participate in the annual conservation education event at Vigo County Fairgrounds. IvyTech holds an annual Matter and Motion education event on campus. Seelyville offers tours of the water treatment plant for school groups and ISU has student groups visit the recycling facility. Indiana Envirothon is a competitive learning event for high school-aged students that test the students' knowledge of environmental resources including aquatics, soils, forestry, wildlife and current environmental issues. Locally, 81 students participated in the Envirothon challenge in 2016, 50 in 2017 and 55 in 2018 at the Vigo County Fairground.</p>
<p>Measurable Goals</p>	<p>Status</p>
<p>Name of schools receiving instruction</p>	<p>Consolidated Elementary School Davis Park Elementary School Deming Elementary School DeVaney Elementary School Dixie Bee Elementary School Farrington Grove Elementary School Fayette Elementary School Franklin Elementary School Fuqua Elementary School Hoosier Prairie Elementary School Lost Creek Elementary School Meadows Elementary School Ouabache Elementary School Riley Elementary School Rio Grande Elementary School St Patrick School Sugar Grove Elementary School Terre Town Elementary School West Vigo Elementary School Terre Town Boy Scout Troup #124 Local Home School Group "Arrows" Local Envirothon Students FIRST LEGO League "Team Storm"</p>
<p>Number of participants</p>	<p>More than 1,200 students per year</p>
<p>Number of brochures distributed</p>	<p>More than 1,200 brochures per year</p>
<p>Programmatic Goals</p>	<p>Status</p>
<p>Perform six classroom presentations per year and/or take part in annual 5th Grade Conservation Field Days</p>	<p>Completed, a rainfall simulator is used to demonstrate sediment-laden runoff from difference surfaces. Up to 60 presentations per year are conducted at the 5th grade field days. Additional presentations cover recycling, wellhead protection, wetland discussions, area planning, and other agricultural, environmental and conservation topics. The Institute for Community Sustainability conducts several classroom presentations on the ISU campus discussing topics like environmental politics, Certificate in Sustainability Leadership programs, and renewable energy. The ICS also leads student participation events like the Earth Day celebration and the Weigh the Waste event.</p>

BMP 3-5 Business & Industry Education Program	
Implementation Actions	Status
Coordinate with area businesses, associations & industries by the spring of 2009 and annually thereafter	MS4 entities are continually seeking additional educational opportunities.
Begin presentations; provide information or training at various dates during the permit term and annually thereafter	Annual inspections take place at Industrial facilities with regulated discharges to the city's sanitary sewer system. Industrial operators understand that education and training is available from the municipality, if desired. The MS4 Coordinator distributed the "Recognizing & Reporting Illicit Discharges" brochures to several industrial facilities in 2017 in hopes that the facilities would implement this information into their annual employee training programs. Commercial facilities, like auto shops, and restaurants receive targeted information specific to the type of pollutants generated by their activities. The local contractors are invited to the annual erosion and sediment control workshop.
Measurable Goals	Status
Number and type of businesses or industries that attend presentations or receive information	During this reporting period, the following businesses or industries have attended presentations or received educational training or materials: 665 food service grease trap inspections 100 mailers were sent to construction industry employees 25 Industrial facility inspection were conducted Attachment 6 - Informational Materials - Business & Industry
Number and description of meetings, training sessions or other outreach events conducted	The annual training event for the construction industry had 26 registrants with 19 attendees in 2016 and 33 registrants with 21 attendees in 2017. Food service, auto, and industry training events are usually triggered by an inspection and are conducted in response to poor management practices or the potential for the facility to cause an illegal discharge of pollutants. Seelyville's local auto mechanics recycling program promotes reusing used oil as a heating source in their operations.
Programmatic Goals	Status
Hold two presentations per year or provide outreach materials to target groups two times per year	Completed

BMP 3-6 Public Service Announcements	
Implementation Actions	Status
Inform TV stations at least one month prior to an event, annually	Completed by event organizers
Write/publish article to submit to the newspaper by fall 2008 and semi-annually thereafter	ISU Institute for Community Sustainability generated 89 news articles and other media pieces discussing topics like environmental justice, lead pollution, soil contamination, community gardening, and sustainability.
Measurable Goals	Status
The number of announcements made prior to an event	A minimum of 2 announcements are made before a public event

<p>The number of articles published each year</p>	<p>On average, there are 24 messages per year covering topics like sustainability, recycling and community cleanup events. Additionally, Seelyville has had 2-3 articles published in industry-specific periodicals and includes reminders in their water Consumer Confidence Reports about water quality, washing cars, well abandonment, recycling batteries and e-scrap.</p> <p>Attachment 7 - News Articles, Television Reports, and Event Announcements</p>
<p>The number and description of meetings, training sessions and other outreach events conducted to involve citizens</p>	<ol style="list-style-type: none"> 1. Keep Terre Haute Beautiful holds a minimum of two cleanup events per year. Their goal is to educate residents, property owners, businesses, community organizations, churches and schoolchildren on what is necessary to have a clean town. 2. The City of Terre Haute, Vigo County SWCD and ISU Recycling Center all participate in the Earth Day celebration at the St. Mary of the Woods College. This is the main, annual event utilized for conducting public surveys. 3. Operation Wabashiki - St Mary of the Woods students and other volunteers pick up trash annually along US Hwy 40 in West Terre Haute in an effort to preserve the Wabashiki Fish and Wildlife Area. 4. The Vigo County SWCD runs ads on WTHI and in the Tribune Star promoting the sale of their rain barrels and tumbling composters. They also participate in Matter & Motion at IvyTech, the Herb Festival, the Gardener's Gathering and the Vigo County Fair where they distribute promotional brochures and materials for the MS4 program 5. "Managing Terre Haute's Tree Canopy" community workshop February 24, 2016 taught participants about the importance of urban and community forestry and allowed for input on the five-year management plan. 6. Earth Day at ISU is a daylong celebration open to both campus and the community. Earth Day 2016 was the biggest celebration yet, including outdoor games, live entertainment, more than 50 local businesses and organizations offering educational activities about sustainability. ISU was recently named one of the top 11 places in the nation to celebrate Earth Day -- 7. May 11, 2016 the City of Terre Haute hosted a public lunch-and-learn meeting for the <i>Clean Water Clear Choices</i> group at the Terre Haute Wastewater Utility. Other cities hosting this event include Richmond, Wabash, Valpraiso and Jeffersonville. 8. Ouabache Land Conservancy Field Day was held on Saturday, August 6, 2016 at Froehde Woods in North Terre Haute. This meeting was open to the public and covered the history of Ouabache Land Conservancy & the EPA Section 319 Grant, developing a Watershed Management Plan for Otter Creek, water testing &

	<p>demonstration, Healthy Rivers Initiative, fish & wildlife of Otter Creek Watershed, woodland management and a tour of Froehde Woods.</p> <p>9. The City Planner presented “Terre Haute Coke & Carbon Site: Construction & Remediation” at the Hulman Student Union on September 6, 2016.</p> <p>10. “Reduce, Reuse and Recycle: Tradeoffs in Policy and Personal Habits” September 27, 2016 at Hulman Memorial Student Union.</p> <p>11. “The Application of Urban Design Planning for Terre Haute: 1996-2016” October 11, 2016 by the Terre Haute City Planner.</p> <p>12. Campus Sustainability Day, October 25, 2016 at ISU</p> <p>13. Art from Waste event 2017. A kick-off event was held at the Vigo County public library to help students turn some waste materials into art. Entries were put on display on April 23rd and participants were given a “Sustainability Champion” water bottle.</p>
Programmatic Goals	Status
Write and have published two articles per year	Completed

BMP 3-7 Web Sites

Implementation Actions	Status
Create a website by summer 2008	Current websites: http://terrehautecleanwater.com http://vigoms4.wix.com/ms4kids# http://terrehaute.in.gov/departments/wastewater-utility/illegal-dumping.html https://www.indstate.edu/university-engagement/sustainability http://www2.indstate.edu/facilities/recycle/ https://www.rose-hulman.edu/academics/degrees-and-programs/cross-cutting-programs/here/index.html
Have website online by winter 2008	Completed
Update the website as necessary as new information becomes available, annually	Completed, last update 2015
Measurable Goals	Status
The number of hits the website receives annually	The MS4 specific websites do not receive very much traffic; less than 100 hits per year
Programmatic Goals	Status
Update information on the website as new information becomes available	Completed

b) Describe implementation problems encountered and changes made due to ineffectiveness or infeasibility during this reporting period.

- › Since it was made available to the public in 2008, the MS4 specific websites have not received very many hits from the public. In the 2012 report, the MS4 discussed the possibility of doing away with the web pages because they were outdated and an ineffective form of public education. The website was streamlined during the 2013-2015 reporting period, deleting the outdated and unnecessary information. The Illegal Dumping webpage was added to the Terre Haute Wastewater Utility site on the city government webpage in the beginning of 2018.

- › BMP 3.3 Storm Drain Stenciling Program was originally listed as part of the public participation program BMPs. Due to insurance liability issues, the MS4 has opted to use employees covered by the municipality's insurance when applying stencils to curbside drain inlets. The Stenciling Program was converted to a public education item and Community Clean-up Events took its place in the public participation section during the 2013-2015 reporting period. No additional changes have taken place since that time.
- c) Describe program BMPs that went beyond those identified in the SWQMP.
- › The MS4 continues to use our "Don't Trash the 'Bash" coloring t-shirts at public events. The front of the shirt shows rainwater picking up pollutants as it flows to the storm drain in the street in front of a residential home. This product continues to be a real crowd-pleaser, drawing many people to our educational booth at public events. The shirts are available in youth and adult sizes. Participants are asked to complete one of our public stormwater surveys in exchange for the free t-shirt. [Attachment 8 - "Don't Trash the 'Bash" Coloring T-Shirts](#)
 - › The City of Terre Haute installed a linear arboretum along a walking trail near a heavily traveled boulevard in the City during the previous permit period. A large, double-sided sign was installed that shows examples of the stormwater pollution prevention benefits that trees provide. It continues to be a great educational tool for students on field trips as well as the everyday people using the trail system and the roadway. [Attachment 9 - Trees and Stormwater Sign](#)
 - › FIRST (For Inspiration and Recognition of Science and Technology) LEGO League was founded in 1989 and based in Manchester, NH. It is a 501(c) (3) not-for-profit public charity designed to inspire young people's interest and participation in science and technology, and to motivate them to pursue education and career opportunities in STEM (Science, Technology, Engineering and Math) fields. They empower kids to reach their full potential by making hands-on STEM programs more widely available to students across the world. The theme of this year's competition was hydrodynamics, and participants were challenged to research and problem-solve issues related to the water cycle. Team Storm, a home school team from Terre Haute, met with several local professionals in the water treatment and wastewater disposal fields, engineers and regulators to research this project. They discovered that public participation is a challenge for every community and the difficulty in notifying the Municipal Separate Storm Sewer System coordinator of drainage concerns was inhibiting public participation and the overall effectiveness of the MS4 program. Team Storm has figured out a way to simplify the notification process by using readily available technology, the QR code. The City of Terre Haute plans to start a pilot program building on Team Storm's concept in hopes of eventually getting this illicit discharge reporting/storm drain-stenciling project implemented statewide. Presentation abstracts have been submitted for the annual IWEA meeting, the annual MS4 meeting and the annual INAFSM meeting for 2018 so we can spread the word about our plans for this facet of the MS4 program. [Attachment 10 - FIRST LEGO League: Team Storm](#)
- d) Identify storm water BMPs installed or initiated for this MCM during this reporting period.
- › No new BMPs were installed or initiated during this reporting period
- e) Describe program implementation partnerships and explain successes and barriers during this reporting period.
- › It is estimated that the Vigo County SWCD provides education and outreach to more than 3,000 people, annually. They organize the annual Vigo County 5th Grade Conservation Field Days at the fairgrounds, provide educational information at the 4-H Fair and participate in other local events like Earth Day celebrations, Creek Stomp, Enviro-thon, Dobbs Park & Nature Center Fishing Rodeo, Master Gardener's meetings, and several rain garden presentations. Additionally, the SWCD collaborates with neighboring Vermillion, Clay and Sullivan counties to conducted education events outside our MS4 area.

- › Seelyville’s annual Consumer Confidence Report required by IDEM for drinking water compliance is sent to all stakeholders in the Town and other utility customers outside town limits. The report provides information on the town drinking water quality as well as education about the MS4 group, well abandonment or other EPA water quality issues. Website information is also shown. Additionally, Seelyville participates in a local fish fry event at the fire station next to the water treatment plant annually where they provide information to the public. The Seelyville water company employees hold education sessions at the Vigo County 5th Grade Field Day event teaching about the water cycle and the impact of land-based activities on drinking water supplies.
- › In addition to their participation in numerous public events, ISU Recycle Center offers tours of the recycling facility free of charge to student groups, businesses, clubs, and the public. [Attachment 11 - ISU Recycle Center Report](#)
- › TREES Inc. is a non-profit environmental volunteer group serving Terre Haute and Vigo County. They are the lead organizer for many public participation events. Several annual events conducted by the group include Arbor Day presentations, involvement with multiple Earth Day events, multiple seedling give-a-way events and planting events, and invasive species eradication events. The group organizes two "Keep Terre Haute Beautiful" litter cleanups each year and a TV recycling event with ISU.
- › Partnerships outside of the co-permit group are vital in achieving the goals of the public education and outreach MCM. The MS4 will continue to seek additional partnerships for environmental public education and work to develop a closer relationship with the current constituent list. Meeting our goals relies on partnerships with, or activities completed by, the following persons or organizations:
 1. Vigo County SWCD
 2. Terre Haute Urban Forester
 3. Terre Haute Department of Redevelopment
 4. ISU Institute for Community Sustainability & ISU Recycle Center
 5. Keep Terre Haute Beautiful
 6. White Violet Center for Eco-Justice
 7. Art Spaces Inc.

f) Other:

- › No other items to discuss for this MCM

PART F: PUBLIC PARTICIPATION AND INVOLVEMENT - MINIMUM CONTROL MEASURE

18. Identify the best management practices for public participation and involvement included in your SWQMP Part C and then respond to the following:

Public Participation and Involvement BMPs

- 4-1 Citizen Advisory Committee
- 4-2 Community Clean-up Events
- 4-3 Storm Water Quality Contacts
- 4-4 Recycling Programs

- a) Identify progress made towards development and implementation of each BMP for this MCM including timetables and measurable goals during this reporting period.

BMP 4-1 Citizen Advisory Committee	
Implementation Actions	Status
Public Meetings with the Citizen Advisory Committee during initial program development	There have been no significant changes to the SWQMP. No additional meetings with the original CAC group conducted since designing, developing, and implementing the SWQMP. ISU's Institute for Community Sustainability formed a network of community partners that they work together with regularly for planning public event and tackling community issues.
Measurable Goals	Status
Time, date and location of public meetings with the Citizen Advisory Committee	No additional meetings with the original CAC group conducted since designing, developing, and implementing the SWQMP.
Number of citizens attending	No CAC meetings conducted.
Number or percentage of citizen constituents that participate in storm water quality improvement programs	The MS4 uses the public survey to gauge the public's participation in available programs. When asked about household hazardous waste disposal and recycling programs, 83% of people surveyed in 2015 utilized community collection events. In 2016, that number dropped to 77%. By 2017, 73% of people stated they participate in these programs indicating a decline in public participation. Another question on the survey asks "If I had more information about pollution prevention and recycling programs I would participate...No More...A Little More...A Lot More". In 2015, 97% of the people surveyed agreed that they would increase their participation if they had more information. The response in 2016 was 92% and the response in 2017 was 93% indicating that the organizers of these collection events need to direct more attention to notifying the public in advance of the event if they want to stop the decline in participation.
Programmatic Goals	Status
Hold two meetings per year during program development	Completed

BMP 4-2 Community Clean-up Events	
Implementation Actions	Status
Conduct Community Clean-up Event twice per year between March and November	There is a spring and fall cleanup event conducted in the City of Terre Haute. ISU has 7 scheduled community trash pickup days each year. Volunteers pick up trash along the Wabashiki Wetlands in West Terre Haute, annually. The town of West Terre Haute promotes responsible disposal of trash and debris by providing a central location for residents to dispose of trash, yard trimmings and other waste, in April every year. They hope that by providing a free disposal option to the residents they can prevent the discarded trash from becoming a problem in the storm drains.
Measurable Goals	Status
Weight or volume of trash picked up	Terre Haute Cleanup event totals: Spring 2016, 33 tons Fall 2016, 28.01 tons Spring 2017, 33.04 tons Fall 2017, 27.55 tons

Number of participants	On average 75 to 100 people have volunteered at the cleanup events conducted during this reporting period. That does not include the people that join in during the event.
Programmatic Goals	Status
Increase the number of volunteers	The fall 2014 Terre Haute cleanup event received the largest number of volunteers so far with 279 registered. We will work to increase advertizing in advance of these events to try to get our volunteer numbers back up where they were.
Increase the area covered during the event	Planners of the fall 2014 Terre Haute cleanup event were able to extend the reach beyond its original goal to clean up 1,000 city blocks. The number of participants has declined since that time. We will work to increase advertizing ahead of the cleanup events and try to get more participation so we can make a bigger impact in our community. Other community cleanup events have not shown any significant changes.

BMP 4-3 Storm Water Quality Contacts

Implementation Actions	Status
Update information on website as changes occur	The website was streamlined in 2015 to remove clutter and refresh the layout. The City of Terre Haute is the lead in the co-permit group and the main contact for the program. Contact information on the webpage has been trimmed down to the MS4 Operator, City Engineer, CSO LTCP Program Manager, and the MS4 Coordinator. All calls or concerns from the public filter thru these four contacts to the right channel. Permit entities maintain a contact list for storm water related issues, construction assistance and engineering & design.
Include contacts on letterhead, business cards, brochures, surveys, presentations. Update as changes occur	The primary printed document that is used for public education is the EPA "Make Your Home the Solution to Stormwater Pollution" brochure. The phone numbers for each entity of the co-permittee group is printed on the back along with the MS4 web address.
Measurable Goals	Status
The number of stormwater related calls received per year	The MS4 Coordinator addressed 20 stormwater related calls or requests for information during this reporting period (<i>refer to 16 h of this report for a summary</i>)
Programmatic Goals	Status
Keep names and numbers up to date	Completed

BMP 4-4 Recycling Programs

Implementation Actions	Status
Advertize prior to a recycling collection day, as necessary	Events are publicized on the local radio and television stations, in the Tribune Star newspaper, on websites and on billboards

Publicize recycling options on website	Completed, recycling information is available on several of the co-permit group’s websites including the following links: http://www.terrehaute.in.gov/sign-up-for-recycling-with-republic-services-inc.html http://www2.indstate.edu/facilities/recycle/ http://wwwcc.IvyTech.edu/going-green/initiatives.html https://www.rose-hulman.edu/academics/degrees-and-programs/cross-cutting-programs/here/index.html
Measurable Goals	Status
The number of days available for public recycling	ISU Recycle Center operates a public drive-thru 6 days a week. The City and County partner together to hold a household hazardous waste and white goods collection event, annually. The City of Terre Haute Police Department have kiosks at several locations around town to collect unwanted medications. Kiosk locations include the Terre Haute Police Department, Honey Creek Mall, Baesler’s grocery store, and Menards. The program is very successful and they have to empty the kiosk at the police department twice each week. The month of April is scheduled for “Tire Amnesty Days” in Vigo County. Residents can drop off up to 10 tires for proper disposal with the Vigo County Health Department. More than 10,000 tires have been collected since 2016.
Number of and estimated or actual amount of material segregated by type, collected from MS4 collection events	Rose-Hulman Recycle Center continues to operate with a 25% diversion rate. Education and outreach occurs with e-scrap events, competitions between residence halls, and general notifications. RHIT collected 2.23 tons of e-scrap, 26.6 tons of scrap metal and 226.85 tons of recyclable materials including aluminum, paper, cardboard and plastics during this reporting period. ISU’s recycle collection increased by 5% from the previous year with 1,973,344 pounds measured through the ISU Recycle, an increase of 100,300 pounds. ISU measured a 43% decrease in e-scrap and increases in cardboard, books, colored/mixed paper, printers mix, glass and plastic. IvyTech puts great efforts forth to get students and staff to assist in their recycling efforts with community awareness events including recycling measures that are easily attainable by all students, faculty and staff on and off campus. Receptacles are available for mixed recycling of papers, plastics, cardboard and metals throughout all of their campus buildings. All cardboard associated with the shipping and receiving of IvyTech is also recycled. Republic Services collects IvyTech recyclables. The Vigo County Solid Waste Management District holds a one-day Household Hazardous Waste and White Goods Collection drive-thru drop-off event annually at the Vigo County Fairgrounds. In the past two years this HHW event has attracted 431 participants and collected 16,060 pounds of white goods, 480 gallons of automotive fluids, 7,780 pounds of paint, pesticides, herbicides, disinfectants,

	cleaning products and other miscellaneous liquids, 10,680 pounds of solidified oil based paint, and <1 pound of mercury. The Vigo County Health Department holds Tire Amnesty Month annually in April. Vigo County residents can properly dispose of up to 10 tires per household. In 2016 the Health Department collected 5,300 tires plus another 4,919 in 2017.
Number and location of constituent drop-off centers for automotive fluid recycling	In addition to local service stations and repair shops that accept waste automotive fluids, these wastes are collected at the annual household hazardous waste collection event at the Vigo County Fairgrounds.

- b) Describe implementation problems encountered and changes made due to ineffectiveness or infeasibility during this reporting period.
- › BMP 4.2 was previously listed as Storm Drain Stenciling Program. Due to insurance liability issues, the MS4 has opted to use employees covered by the municipality’s insurance when applying stencils to curbside drain inlets. The Stenciling Program was moved to Public Education item BMP 3.3 and BMP 4.2 was changed to Community Clean-up Events during the previous reporting period.
- c) Describe program BMPs that went beyond those identified in the SWQMP.
- i. Recycle Mania is a competition and benchmarking tool for college and university recycling programs to promote waste reduction activities to their campus communities. Over a 10-week period, schools report recycling and trash data, which are then ranked according to who collects the largest amount of recyclables per capita, the largest amount of total recyclables, the least amount of trash per capita, or have the highest recycling rate. ISU Recycle Center received that top award from the Indiana Recycling Coalition Conference in June for collecting the most paper, corrugated cardboard, bottles and cans during Recycle Mania in Indiana. They have won an award 6 out of 7 years. Indiana State also holds an internal competition between the residence halls, with the winning hall receiving a prize.
 - ii. Ivy Tech continues to strive to get all students, faculty and staff as well as other Vigo County residents involved in being good stewards of our environment. Matter and Motion helps bring these concerns to the light of several Wabash Valley children and their parents on a yearly basis. Their annual car show helps shed light on the good housekeeping required and maintained by the College.
- d) Identify storm water BMPs installed or initiated for this MCM during this reporting period.
- i. BMP 4.2 Community Clean-up Events is new to the SWQMP but not new to the MS4. Keep Terre Haute Beautiful is a committee of TREES Inc. In addition to TREES Inc. board members, the KTHB committee is made up of community members concerned about the state of litter in our community. They have been working with city government, business leaders, community organizations, churches, residents, property owners and schools to solve the problem of trash on the streets and in the alleys of Terre Haute for several years.
- e) Describe program implementation partnerships and explain successes and barriers during this reporting period.
- i. ISU opened the Institute of Community Sustainability in 2012. Since opening, they have coached more than 3,600 experiential and community engagement student learning experiences, gave 43 sustainability presentations, formed a network of more than 75 community partners, generated more than 630 news articles and other media pieces, contributed in-kind donations to community sustainability efforts and hosted 135 major events open to the public.
<https://www.indstate.edu/university-engagement/sustainability>

- f) Other:
 - i. No additional information to report for this MCM.

PART G: ILLICIT DISCHARGE DETECTION AND ELIMINATION - MINIMUM CONTROL MEASURE

19. Identify the best management practices for illicit discharge detection and elimination (IDDE) included in your SWQMP Part C and then respond to the following:

Illicit Discharge Detection and Elimination Program BMPs

- 5-1 Illicit Discharge Detection and Elimination
- 5-2 Storm Sewer System Map
- 5-3 Recycling Collection Program
- 5-4 Identification of Active Industrial facilities

- a) Identify progress made towards development and implementation of each BMP for this MCM including timetables and measurable goals during this reporting period (mapping, screening, etc.).

BMP 5-1 Illicit Discharge Detection and Elimination	
Implementation Actions	Status
Meet with MS4 Operator and Permit entity Storm water Operators by October 2008	Completed in previous permit term
Implement dry weather screening using physical indicators as part of outfall mapping program by November 2008	Completed in previous permit term
Draft Illicit Discharge Detection and Elimination Program Operational & Maintenance Plan by May 2009	Completed in previous permit term
Meet with Citizens advisory Committee by June 2009	Completed in previous permit term
Implement Operation and Maintenance Plan by July 2009 and update as necessary, annually	Completed in previous permit term
Complete initial dry weather screening using physical indicators, source identification, and correction of illicit discharges on 25% of MS4 outfalls 12" in diameter or greater and 2 foot or large bottom width by August 2009	Completed in previous permit term
Complete initial dry weather screening using physical indicators, source identification, and correction of illicit discharges on 50% of MS4 outfalls 12" in diameter or greater and 2 foot or large bottom width by August 2010	Completed in previous permit term
Complete initial dry weather screening using physical indicators, source identification, and correction of illicit discharges on 75% of MS4 outfalls 12" in diameter or greater and 2 foot or large bottom width by August 2011	Completed in previous permit term
Complete initial dry weather screening using physical indicators, source identification, and correction of illicit discharges on 100% of MS4 outfalls 12" in diameter or greater and 2 foot or large bottom width by August 2012	Completed in previous permit term
Chemical analysis follow-up to suspected illicit discharges as necessary throughout term of permit	Completed when chemical analysis is required to identify source or type of discharge

Measurable Goals	Status
<p>The number and location of MS4 area outfalls screened for illicit discharges and the number and location of MS4 area illicit discharges detected</p>	<p>100% of all known MS4 owned and operated outfalls were mapped by December 2010 (180 City, 4 West Terre Haute, 1 Seelyville, 58 RHIT, 1 IVTC, 0 County, and 0 ISU). Initial illicit discharge inspections were conducted during the initial mapping process and completed in 2010. The second dry weather screening sweep was completed by June 2013 during the second permit term. No illegal discharges were detected during these screening phases. Rose-Hulman’s campus inlets and 58 outfalls are screened for illicit discharge or erosion issues monthly and updates are completed as needed. RHIT is currently updating their campus conveyance system and outfall mapping to include current construction activities at their Union building. IvyTech cleans and inspects storm drains monthly including the drainage pipes that outfall to their retention pond. West Terre Haute inspects stormwater flap gates in the levee before each rain event. The most urbanized drainage channel in the MS4 area is Thompson Ditch. All City of Terre Haute employees received a mass email containing the “Recognizing & Reporting Illicit Discharges and Illegal Connections” brochure as part of the 2017 municipal training event. They are trained to recognize and report any signs of illicit discharge they may encounter while working in and around the City. The County Surveyor’s office conducts Annual Ditch Inspections and prepares written reports with images, notes and comments for all of the regulated drains. The county highway department employees receive annual training and regularly report any issues to their supervisor upon discovery.</p>
Programmatic Goals	Status
<p>Complete dry weather screening, source identification and illicit discharge correction on 100% of known outfalls 12 inches in diameter and larger and two foot or larger bottom width by December 2012</p>	<p>Completed in previous permit term by August 2012. Additional dry weather screening will be conducted at least once during the current 5 year permit term, as required by 327 IAC 15-13-14(e) and information will be updated in subsequent biennial reports.</p>

BMP 5-2 Storm Sewer System Map

Implementation Actions	Status
<p>Update GIS as necessary when new information becomes available</p>	<p>Completed in previous permit term</p>
<p>Map 25% of the outfalls, MS4 conveyance system, initial illicit discharge data and scour inspection data by January 2009</p>	<p>Completed in previous permit term</p>
<p>Map 50% of the outfalls, MS4 conveyance system, initial illicit discharge data and scour inspection data by August 2010</p>	<p>Completed in previous permit term</p>
<p>Map 75% of the outfalls, MS4 conveyance system, initial illicit discharge data and scour inspection data by October 2010</p>	<p>Completed in previous permit term</p>

Map 100% of the outfalls, MS4 conveyance system, initial illicit discharge data and scour inspection data by December 2010	Completed in previous permit term
Measurable Goals	Status
Estimated or actual linear feet or percentage of MS4 mapped and indicated on a MS4 area map	Conveyance and outfall mapping was complete in December 2010. Nearly 14,000,000 linear feet of MS4 conveyances were mapped countywide. This includes the river and all of the lakes and streams, but not roadside ditches, curbs or gutters.
Number and location of MS4 area outfalls mapped	In the most densely urbanized areas along Thompson Ditch and Lost Creek, the City of Terre Haute mapped 180 outfalls. Mapping of Rose-Hulman campus conveyance and 58 outfalls was completed. IvyTech maintains mapping of all storm sewer locations and discharge points. West Terre Haute has 4 flap gates that open to the wetland side of the levee. The County does not own and operate any qualifying systems that fall within the requirements. The majority of their system is made up of small ditching networks. Culvert pipes passing under county roads are mapped.
Programmatic Goals	Status
Complete mapping of locations, illicit discharge data for 100% of outfalls based on length of receiving waters and 100% of MS4 conveyance system by December 31, 2010	Completed

BMP 5-3 Recycling Collection Program	
Implementation Actions	Status
Distribute promotional brochure/mailers to homeowners include information on website by December 2008 and annually thereafter	Completed by recycling centers
Update recycling center and waste center information annually	Completed as information changes
Revise promotional information as necessary, annually	Completed as information changes
Collect data from recycling centers on types and amounts of materials collected for biennial report April 2010, April 2012, annually	<i>(refer to BMP 4.4)</i>
Measurable Goals	Status
Number of and estimated or actual amount of material collected in the MS4 area	<i>(refer to BMP 4.4)</i>
Number and location of constituent drop-off centers for automotive fluid recycling	<i>(refer to BMP 4.4)</i>
Programmatic Goals	Status
Continually increase the participation and amount of materials recycled	Ongoing activities, public promotion and community events are designed to increase participation in this MCM. IvyTech has community awareness events that include recycling measures that are easily attainable by all staff, students and faculty both on and off campus.

BMP 5-4 Identification of Active Industrial facilities	
Implementation Actions	Status
Query database for active industrial facilities in the MS4 area by November 2008	MS4 Coordinator updates list with the Wastewater Utility Industrial Pretreatment Coordinator and IDEM's Rule 6 Permits Coordinator prior to each biennial report
Develop local active industrial facilities database	City Engineer's office can add or remove industrial facilities to ArcGIS layers upon request.
Update database and GIS System by February 2009	Completed and updated conditions change.
Provide updated data in each biennial report to IDEM	<i>(refer to item 16 f of this report for facility list)</i>
Measurable Goals	Status
Number and location of active industrial facilities identified and mapped	<i>(see item 16 f of this report)</i>
Programmatic Goals	Status
Development of database	Completed, information available in Arc GIS.
Annual updates to database	Completed as conditions change.

- b) Describe implementation problems encountered, particularly as it relates to mapping and screening of outfalls during this reporting period.
 - i. There have been no implementation problems. The initial mapping and screening of outfalls was completed during prior permit periods. Mapping updates occur as development and redevelopment projects are completed and screening is conducted as required by the Rule language.
- c) Identify changes made to the IDDE Plan during this reporting period, if applicable.
 - i. No changes to the IDDE Plan
- d) Identify updates or revisions to IDDE ordinance or other regulatory mechanism made during this reporting period.
 - i. No updates or revisions to report
- e) Describe level of mapping and screening completed to date. If there are unmapped or unscreened outfalls, provide a plan and a timetable for completion.
 - i. Mapping of all entity stormwater conveyance and outfalls was completed by December 2010. The MS4 uses a GIS based map with regional map overlays. Mapping does not include private or mutual drains, yard swales that are not maintained by the MS4, or curbs and gutters. All known outfall conveyances with a pipe diameter of 12" or larger and open ditches with a 24" or larger bottom width were mapped with GPS collection methods at or better than plus or minus 5 meters of accuracy. There are no updates or revisions to report.
- f) Other:
 - i. No additional information available for this MCM

PART H: CONSTRUCTION SITE STORM WATER RUN-OFF CONTROL - MINIMUM CONTROL MEASURE

20. List the best management practices for the construction site storm water run-off program identified in your SWQMP Part C and then respond to the following:

Construction Site Storm Water Run-Off Control Program BMPs

- 6-1 Construction Site Runoff Control
- 6-2 Construction EPSC Training
- 6-3 Plan Review

- 6-4 Inspection
- 6-5 Enforcement

a) Identify progress made towards development and implementation of each BMP for this MCM including timetables and measurable goals during this reporting period.

BMP 6-1 Construction Site Runoff Control	
Implementation Actions	Status
Obtain technical reference by October 2008	The latest edition (2007) of the Indiana Storm Water Quality Manual is the technical reference used by the MS4.
Training for designers and contractors by March and July 2009	MS4 provides one annual training opportunity per year.
Require BMP compliance with technical reference by July 2009 and throughout term of permit	All contractors are required to comply with the Indiana Storm Water Quality Manual. Expectations are communicated prior to bidding and compliance is met. Rose-Hulman and ISU both have their own inspectors that walk the sites weekly to communicate any shortcomings to the contractor.
Measurable Goals	Status
Type, number and location of structural BMPs installed	This information is maintained by the City and County Engineers office. Temporary and permanent structural BMPs typically installed in this area include construction entrances, stream crossings, diversion structures, inlet protection, slope drains, sediment ponds, rock-lined and grass-lined channels, catch basins and drywells. The Vigo County SWCD recorded the following information for this reporting period: Number of BMPs installed during construction: County 178, City 198, ISU 36, RHIT 28, and West Terre Haute 54. Specific details are available upon request thru the SWCD office.
Type, number and location of structural BMPs maintained or improved to function properly	Ongoing maintenance and improvement is required of all BMPs throughout the construction process to ensure water quality is not compromised.
Programmatic Goals	Status
Reference the Indiana Storm Water Quality Handbook as the Technical Reference guide	Completed

BMP 6-2 Construction EPSC Training	
Implementation Actions	Status
Plan Review, Inspector, Contractor, and Plan Preparer training by October 2008 and annually thereafter	The MS4 provides one erosion control workshop annually. Due to competition for spring workshop attendees from neighboring MS4 communities, the Terre Haute co-permit group opted to move our annual training event to the fall of each year. During this reporting period, we have sponsored erosion and sediment control workshops on 11/18/16 and 11/16/17. We encourage plan reviewers, inspectors, contractors and plan preparers to seek additional training opportunities and certifications such as those offered through EnviroCert,

Measurable Goals	Status
Number of training sessions for plan reviewers, inspectors, contractors, and plan preparers	MS4 provides one annual training opportunity per year that covers a variety of construction and post-construction related topics. Presenters include regulatory agencies, engineers, product specialists, and local government personnel involved in the erosion and sediment control field.
Programmatic Goals	Status
Number of certified plan preparers, plan reviewers, inspectors, and contractors attending training	More than 100 workshop brochures were mailed out annually. The annual training event for the construction industry had 26 registrants with 19 attendees in 2016 and 33 registrants with 21 attendees in 2017.

BMP 6-3 Plan Review	
Implementation Actions	Status
Execute Agreement with Vigo County Soil and Water Conservation District and City Engineer's Office by October 2008, renew as necessary	The MOU with VCSWCD was renewed on Jan. 31, 2014 and the MOU with City Engineer was renewed on May 15, 2013. Both agreements will be renewed during the Permit renewal process in 2018.
Training Plan Reviewers by October 2008 and annually thereafter	Completed, some plan review elements are included in the MS4's annual training. Additional training is achieved thru participation in annual IDEM meetings, Road School, webinars, on-site inspections with State Regulators, and training sessions presented by neighboring MS4 entities.
Measurable Goals	Status
Number of reviews completed	City completed 32 reviews and the County conducted 29 reviews.
Number of plans resubmitted	City, 8 and County, 2
Number of construction sites obtaining a MS4 entity-issued stormwater runoff permit in the MS4 area	The City and County have about 15 sites approved each, annually.
Programmatic Goals	Status
Review of all developed plans	Completed

BMP 6-4 Inspection	
Implementation Actions	Status
Inspection Implementation by November 2008 and throughout the term of the permit	Completed
Measurable Goals	Status
Number of construction sites inspected	The County SWCD completed 80 inspections during this reporting period. The City inspected 3 sites.
Number and type of enforcement actions taken against construction site operators	The County generally issues verbal notification of deficiencies on all site inspections. The City usually only used verbal notifications as well, but did issue one stop work order during this reporting period.
Number of public information requests received regarding construction sites	There have been no information requests from the public at City permitted sites during this period. The County had six requests for information only, no reports of deficiencies, just questions about what was being built.

Programmatic Goals	Status
Inspection procedures	Developed and implemented
Site inspection checklist	Developed and utilized
Number of inspections	City, 3 County, 80

BMP 6-5 Enforcement

Implementation Actions	Status
Develop written enforcement response procedures by November 2008	Escalating enforcement actions based on severity of the infraction and efforts to comply include the following: 1. Verbal warning 2. Written warning 3. Written Notice of Non-Compliance 4. Stop Work Order 5. Revocation of Building Permit Additional enforcement actions may include Injunctive Relief, Compensatory Action, and/or Civil Penalty.
Enforcement training by December 2008 and annually thereafter	The Plan Reviewers are also the Site Inspectors in this MS4 area. Additionally, the MS4 Coordinator is a Code Enforcement Officer with County-wide jurisdiction for the MS4 program. Although there has been no “formal” training for enforcement, all of the necessary staff is well aware of the options available to them when dealing with noncompliance because of their involvement in the Ordinance revision process and their participation in the IDEM Audit.
Enforcement implementation by January 2009	Enforcement procedures are followed

Measurable Goals	Status
Number and type of enforcement actions taken	Most enforcement efforts do not need to continue after verbal notification of deficiencies. Contractors are usually prompt with their corrective actions. There was one site that required escalating enforcement. A stop work order was issued until the necessary corrections could be made to regain compliance.

Programmatic Goals	Status
Training of inspectors	The MS4 Plan Reviewers are also the Site Inspectors in this MS4 area and the MS4 Coordinator is a Code Enforcement Officer. Inspection procedures are covered in the annual training and all three employees were involved in the IDEM program audit and Ordinance revision process. They have knowledge of the proper enforcement procedures. The MS4 will look into adding an “Enforcement” topic to the annual training in the future.
Implementation of enforcement procedures	Enforcement procedures have been in effect since the ordinances were signed in May 2008.

- b) Describe program implementation partnerships and explain successes and barriers during this reporting period.
 - i. The Terre Haute Department of Engineering lost some key personnel and it seems that those positions may not be replaced due to budgetary reductions. With more responsibilities on fewer it is difficult for the remaining employees to make time to conduct inspections. Additionally, the plan review period has been longer than it has been in the past.

- ii. RHIT requires all contractors comply with the Indiana Stormwater Quality Manual regardless of project footprint. Rose-Hulman has a very good relationship and understanding with their contractors. Expectations are communicated prior to bidding and compliance is met. EHS conducts weekly Stormwater inspections during projects and communicates any shortcomings to the contractor. Stormwater quality is included in all large-scale project site-access training. Approximately 70 contractors completed this training for their current Union remodel expansion.
- c) Identify the number of construction sites permitted during this reporting period and identify the number and type of enforcement actions taken against construction site operators during the same period.
 - i. City of Terre Haute had 33 plans submitted during this reporting period with 32 reviewed and approved, and 30 received permits for construction. Only eight plans required resubmission. Three construction sites were inspected. Contractors usually correct deficiencies on inspection reports before any further action is needed. One stop work order was issued.
 - ii. The County had 29 permitted sites during this reporting period. Two of those plans required corrections and resubmissions. The county inspector issues verbal notifications of deficiencies in addition to the information recorded on the inspection report. No additional enforcement actions have been necessary as deficiencies are corrected within the allotted period of time.
 - d) Identify the number and types of training opportunities that were provided to contractors, developers and builders during this reporting period.
 - i. The MS4 offers one local training event annually and encourages participation in other training events and programs that offer certification. The local training events were conducted in November 2016 & November 2017 at the Terre Haute Wastewater Utility. Event flyers are shown in [Attachment 12 - Erosion and Sediment Control Workshop Information](#).
 - ii. May 5, 2016 the Indiana Office of Community and Rural Affairs conducted a Green Infrastructure Curriculum and Training workshop at the Terre Haute Wastewater Utility.
 - e) MS4 personnel responsible for plan review, inspection and enforcement of construction activities shall receive, at a minimum, annual training addressing appropriate control measures, inspection protocol and enforcement procedures. Identify training provided to MS4 personnel responsible for these activities during this reporting period.
 - i. In addition to the training provided by the MS4, the plan reviewer/inspector for the City attends the LTAP Stormwater Drainage Conference, the MS4 Annual Meeting and INDOT Road School. The County inspector participates in stormwater webinars, Hoosier River Watch, Clay Co. Contractors Breakfast, and attend Rule 5/Storm water sessions at IASWCD Annual Conference.
 - f) Identify updates or revisions to the storm water construction ordinance or other regulatory mechanism made during this reporting period.
 - i. There have been revisions to the ordinances in response to an audit by IDEM in 2016. The revised ordinance language is included in [Attachment 13 - Construction & Post Construction Ordinance](#)
 - g) Other:
 - i. No additional items to report for this MCM

PART I: POST-CONSTRUCTION STORM WATER RUN-OFF CONTROL - MINIMUM CONTROL MEASURE

21. List the BMPs for post-construction storm water run-off control identified in your SWQMP Part C and then respond to the following:

Post-Construction Storm Water Run-Off Control Program BMPs

7-1 Post-Construction Storm Water Quality Control Ordinance

7-2 Operational and Maintenance Plan for Structural Storm Water BMPs

- a) Identify progress made towards development and implementation of each BMP in the SWQMP including timetables and measurable goals during this reporting period.

BMP 7-1 Post-Construction Storm Water Quality Control Ordinance	
Implementation Actions	Status
Put Ordinance into effect by summer of 2008	Completed
Report	Updated information is provided in each biennial report
Measurable Goals	Status
The number, type and location of structural BMPs installed	This information is maintained by the City and County Engineers office. The temporary and permanent structural BMPs utilized in this area typically include construction entrances, stream crossings, diversion structures, inlet protection, slope drains, sediment ponds, rock-lined and grass-lined channels, catch basins and drywells. The County SWCD reported the following numbers of post-construction BMPs installed during this reporting period: 62 installed on County projects, 15 installed on City sites, 6 at ISU, 3 at Rose-Hulman and 17 installed in West Terre Haute. Specific details are available upon request thru the engineer's office. All nonresidential impervious areas within the Terre Haute Sanitary District were mapped, resulting in a total impervious area of 4,280 acres.
The number, type and location of structural BMPs inspected	
The number, type and location of structural BMPs maintained or improved to function properly	
The type and location of non-structural BMPs utilized	
The estimated or actual acreage or square footage of pervious and impervious surfaces mapped in the MS4 area (if applicable)	
Programmatic Goals	Status
The number of storm water wetlands, wet ponds and bio-retention cells in the county, the type of structure and/or wetland, structure size and the number of acres drained by them	Cottage Condos PHIII - Wet Pond - 3.9 Acres, Terre Vista Glen - Wet Pond - 6.6 Acres, The Woods on Sidenbender - Wet Pond - 2.4 Acres. Additional information may be determined by the City or County Engineer's office by reviewing submitted plans, as-built drawings, GIS information or map overlays, upon request.
The number of grass filter strips installed and the number of acres they drain	No new information available
The number of grass swells installed, their length and the number of acres drained by them	Sycamore Crossings Road (City Project) - 170 LF - 0.25 Acres drained
The acreage of forest habitat created	No new information available
The number of hydrodynamic controls installed, the type of control and the number of acres drained by them	No new information available

BMP 7-2 Operational and Maintenance Plan for Structural Storm Water BMPs	
Implementation Actions	Status
Meet with MS4 Operators and Permit Entity Stormwater Operators by October 2008	Completed
Identify Model Operational and Maintenance Plan by December 2008	Post construction operation and maintenance plan must be submitted with the SWPPP and a notarized maintenance agreement. BMPs must be from a preapproved list in the Standards & Specifications document. Refer to City Ordinance Section 9-172 in Attachment 13 - Construction & Post Construction Ordinance

Draft Operational and Maintenance Plan by March 2009	Complete
Final Operational and Maintenance Plan by July 2009	Complete
Implement Operational and Maintenance Plan by August 2009 and throughout the term of the permit	Complete
Update Operational and Maintenance Plan as necessary, annually	The Standards and Specifications document will be updated as necessary to include new information and remove outdated or ineffective BMPs from the preapproved list.
Measurable Goals	Status
The number, type and location of structural BMPs maintained or improved to function correctly	The MS4 has not detected nor been notified of any post-construction structural BMP malfunctioning after installation.
Programmatic Goals	Status
Development of the Operational and Maintenance Plan for structural BMPs by August 2009	Completed
The development of incentives for the proper operation and maintenance of privately owned structural BMPs	This measurable goal has not been completed. <i>Explanation shown below in item 21(b).</i>
The frequency of inspection and maintenance activities	Rose-Hulman, ISU and IvyTech clean and inspect their stormwater devices at regular intervals making repairs or replacements as necessary. In residential areas, maintenance is responsibility of the property owner once a contractor has signed off on a job in the City and County. The contractor provides the property owner with inspection and maintenance information at the end of the job. The ordinance says all post construction BMPs shall be inspected and maintained in good condition by the owner, in accordance with the Terre Haute Standards and Specifications, the Indiana Storm Water Quality Manual, and/or the post construction operations and maintenance manual to provide the intended storm water quality benefits. Following construction completion, maintenance of BMPs shall be the long-term responsibility of the facility's owner. The Authorized Enforcement Agency has the authority to perform long-term, post construction inspection of all public or privately owned BMPs. The inspections will follow the operation and maintenance procedures included in the Terre Haute Standards and Specifications, the Indiana Stormwater Quality Manual, or the operation and maintenance plan submitted with the approved plans for each specific BMP. The inspection will cover physical conditions, available water quality storage capacity, and operational condition of key facility elements. Noted deficiencies and recommended corrective action will be notified by the Authorized Enforcement Agency and will be required to take all necessary measures to correct such deficiencies. If the owner fails to correct the deficiencies within the allowed time period, as specified in the notification letter, the Authorized Enforcement Agency will pursue enforcement actions.

- b) Describe implementation problems encountered and changes due to ineffectiveness or infeasibility during this reporting period.
- i. The MS4 has not developed incentives for the proper operation and maintenance of privately owned structural BMPs as of the date of this biennial report. The MS4 had been considering implementation of a stormwater utility fee when the original SWQMP was being designed. An incentive program would have been an aspect of the fee and credit dynamic of the billing system. However, with an increase of the wastewater utility user fee occurring during the same time period, the municipality decided to delay the stormwater utility development for the time being. This measurable goal will likely be removed during the next SWQMP revision.
- c) Describe program implementation partnerships and explain successes and barriers.
- i. The Vigo County SWCD and the City of Terre Haute Engineering Department are responsible for the review and final approval of post-construction storm water quality control plans. Post construction BMPs shall be inspected and maintained in good condition by the owner, in accordance with the Terre Haute Standards and Specifications, the Indiana Storm Water Quality Manual, and/or the post construction operations and maintenance manual to provide the intended storm water quality benefits. Following construction completion, maintenance of BMPs shall be the long-term responsibility of the facility's owner. The Authorized Enforcement Agency has the authority to perform long-term, post construction inspection of all public or privately owned BMPs. Additionally, each permit entity is responsible for the inspection and enforcement of post-construction BMPs in their jurisdiction. If the City or County believes these inspections are unsatisfactory, they reserve the right to inspect and enforce the ordinance as they see fit.
- d) MS4 area personnel responsible for implementation of the post-construction minimum control measure shall receive, at a minimum, annual training. Identify training provided for this minimum control measure during this reporting period.
- i. The post-construction topic is a training aspect of the Vigo County Erosion and Sediment Control annual training event
- e) Identify updates or revisions to the post-construction storm water ordinance or other regulatory mechanism made during this reporting periods.
- i. The Construction and Post Construction Ordinances were updated in response to an audit by IDEM. The complete text of the City of Terre Haute Ordinance is available in [Attachment 13 - Construction & Post Construction Ordinance](#). The County Ordinance contains all the same language as the City's regulations. Some of the highlights include the following changes:
 1. Appropriate post construction BMP(s) can be selected from a pre-approved list of BMPs specified in the Terre Haute Standards and Specifications.
 2. Any development or redevelopment, regardless of disturbed area, discharging to infiltration measures shall be required to install pretreatment BMPs in accordance with the Terre Haute Standards and Specifications.
 3. Hotspot developments which produce higher levels of pollutants and/or present a higher potential risk for spills, leaks, or illicit discharges regardless of the disturbed area may be required to install pretreatment BMPs at the discretion of the Authorized Enforcement Agency.
 4. The SWPPP submittal shall include an Operation and Maintenance Manual for all post construction BMP(s) included in the project and a notarized Maintenance Agreement, providing for the long-term maintenance of those BMPs, both of which shall be recorded with the deed for the property on which the project is located.
 5. The noted BMPs must provide at least an 80% removal rate of Total Suspended Solids (TSS) at the 50-125 micron range. Practices other than those specified in the pre-approved list may be utilized. However, the burden of proof, as to whether the

performance and ease of maintenance of such practices will be according to the guidelines provided in the Terre Haute Standards and Specification, would be placed with the applicant.

6. All post construction BMPs shall be inspected and maintained in good condition by the owner, in accordance with the Terre Haute Standards and Specifications, the Indiana Storm Water Quality Manual, and/or the post construction operations and maintenance manual to provide the intended storm water quality benefits. Following construction completion, maintenance of BMPs shall be the long-term responsibility of the facility's owner.
7. Gasoline outlets and refueling areas must install appropriate practices to reduce lead, copper, zinc, and other hydrocarbons in stormwater runoff. These requirements will apply to all new facilities and existing facilities that replace their tanks.

f) Other:

- i. No additional items to discuss for this MCM

PART J: MUNICIPAL OPERATIONS POLLUTION PREVENTION AND GOOD HOUSEKEEPING - MINIMUM CONTROL MEASURE

22. List the best management practices for municipal operations pollution prevention and good housekeeping identified in your SWQMP Part C and then respond to the following:

Municipal Operations Pollution Prevention and Good Housekeeping Program BMPs

- 8-1 Storm Water Systems / BMP Cleaning
- 8-2 Street Sweeping
- 8-3 Remediation of Outfall Scouring Conditions
- 8-4 Materials Storage
- 8-5 Spill Prevention and Response
- 8-6 Vehicle and Equipment Maintenance
- 8-7 Vehicle Washing
- 8-8 Pesticide and Fertilizer Use
- 8-9 Recycling and Disposal
- 8-10 Flood Management Projects

- a) Identify progress made towards development and implementation of each BMP in the SWQMP including timetables and measurable goals during this reporting period.

BMP 8-1 Storm Water Systems / BMP Cleaning	
Implementation Actions	Status
Develop storm water collection system and BMP cleaning and maintenance program by January 2009	Completed
Implement storm water collection system and BMP cleaning and maintenance program by March 2009 and throughout the term of the permit	Completed
Measurable Goals	Status
Estimated or actual linear feet or percentage and location of MS4 conveyances cleaned or repaired	Each of the inlets and catch basins in the Terre Haute Sanitary District are cleaned 20-25 times every year by the Wastewater Utility Collections Department. The sanitary district has 383 miles of sanitary sewer, 87 miles of storm sewer and 156 miles of combined sewer. The Terre Haute Street Department brings street sweeping waste to the Terre Haute Wastewater Utility for disposal with the catch basin debris. Combined, this material fills at least 2 dump truck loads, or roughly 20 tons, per week. Collected

	material is delivered to the landfill for final disposal.
Estimated or actual amount of material by weight collected from catch basin, trash rack or other structural BMP cleaning	Materials from Terre Haute sewer and inlet cleaning fill a 16 cubic yard dumpster three times every week. IvyTech collects 200-300 pounds of debris from the stormwater collection devices annually.
Amount of debris removed on annual basis	<i>(see above)</i>
Programmatic Goals	Status
Implement maintenance and cleaning schedule	Completed
Complete maintenance and cleaning schedule for BMPs	Completed

BMP 8-2 Street Sweeping	
Implementation Actions	Status
Develop street sweeping program and schedule by July 2009	Completed
Map street sweeping program by August 2009	Completed
Obtain and or maintain equipment by September 2009	Completed
Implement street sweeping program by October 2009 and throughout the term of the permit	Completed
Measurable Goals	Status
Estimated amount of material removed by street sweeping activities	Street sweeping, leaf pickup, catch basin cleaning and removal of debris in and around culvert pipes generates more than 20,000 tons of material annually in MS4 area. 2-3 tons are collected in Seelyville plus a few tons from the Rose-Hulman campus. Sweeping debris fills a 4 cubic yard dumpster every week at ISU. West Terre Haute has a new street sweeper and they are conducting street sweeping and leaf pickup according to schedules. They will track volumes collected for the next reporting period.
Programmatic Goals	Status
Perform street sweeping according to schedules	The Terre Haute Street Department sweeps approximately 700 curb miles of streets. They are sweeping the streets everyday that temperatures are above 40°. Street sweeping occurs twice annually on Rose-Hulman's campus. Seelyville cleans the streets in the spring of each year. ISU swept every day from mid-march thru September, covering about 1/3 of campus daily. West Terre Haute purchased a new sweeper vac in the Fall on 2015 and will be cleaning all of the street and catch basins at least twice each month, weather permitting.

BMP 8-3 Remediation of Outfall Scouring Conditions	
Implementation Actions	Status
Inspect 25% of outfalls as part of the outfall mapping program (BMP 5-2) by January 2009	Completed
Inspect 50% of outfalls as part of the outfall mapping program (BMP 5-2) by January 2010	Completed
Inspect 75% of outfalls as part of the outfall mapping program (BMP 5-2) by January 2011	Completed
Inspect 100% of outfalls as part of the outfall mapping program (BMP 5-2) by January 2012	Completed
Complete scour repairs on 25% of mapped outfalls by August 2010	Completed

Complete scour repairs on 50% of mapped outfalls by August 2011	Completed
Complete scour repairs on 75% of mapped outfalls by August 2012	Completed
Complete scour repairs on 100% of mapped outfalls by August 2013	Completed
Measurable Goals	Status
Number and location of stormwater outfall areas remediated from scouring conditions	Rose-Hulman's outfalls are screened monthly. Outfalls and culvert pipes are protected and any erosion corrected and documented in their maintenance management system. No additional remediation has been required.
Programmatic Goals	Status
Map of outfalls	Completed
Inspection schedule	Completed

BMP 8-4 Materials Storage	
Implementation Actions	Status
Complete survey of municipal storage facilities by June 2009	Completed
Develop and implement procedures for proper materials storage by September 2009	Completed
Develop facility inspection forms by September 2009	Completed
Training of employees at municipal operations various dates 2008/2009, annually	<i>(refer to Attachment 14: Municipal Facility Inspection & Training)</i>
Inspection by MS4 Operator annually, various dates 2008/2009, annually	<i>(refer to Attachment 14: Municipal Facility Inspection & Training)</i>
Measurable Goals	Status
Number and locations of Municipal owned salt and sand storage facility areas covered or otherwise improved to minimize stormwater exposure	The County has two large salt domes that are effective structural storage practices. The city has one salt dome. Rose-Hulman's salt for de-icing is stored inside the Grounds Services shop. Seelyville, like many of the smaller municipal facilities, keeps bagged ice melt material inside a maintenance building. ISU has a newly constructed salt storage building on campus that allows for mixing and loading under a roof inside the building. West Terre Haute has sand in a covered building that is used to provide grit on slick spots. If salt mix is needed, they have their distribution trucks loaded at the County garage. County-wide, the average tonnage of winter road deicing materials used varies according to the weather. During this reporting period, we calculated that nearly 5,000 tons of sand and 2,400 tons of salt have been used per year.
Number and location of entity owned facilities that have containment for accidental releases	All of the municipal facilities are utilizing secondary containment practices inside and outside their facilities. Chemicals are stored inside trays, drip pans are used under equipment and vehicles, and spill kits are labeled and used regularly. Structural containment devices are inspected at regular intervals and repaired or replaced as needed.

Programmatic Goals	Status
Employee training	In most cases, general training for employees responsible for material storage includes walking thru the facility with the employees taking time to point out and discuss proper storage procedures. Additional training utilized has included web-based videos, DVDs, or printed materials.
New facilities or upgrades to existing facilities for material storage	The fueling areas at municipal facilities include secondary containment or double walled tanks. All fueling areas have spill cleanup materials nearby. The use of secondary containment trays and pans at all facilities continues to be strongly encouraged.

BMP 8-5 Spill Prevention and Response

Implementation Actions	Status
Develop and implement procedures for spill prevention and response by September 2009	All municipal facility procedures for spill prevention and response have been established. If any changes are required, they will be made immediately. No changes were required during this reporting period.
Training of employees at municipally operated facilities at various dates in 2008/2009, annually	<i>(refer to Attachment 14: Municipal Facility Inspection & Training)</i>
Measurable Goals	Status
Number and location of MS4 entity facilities that have containment for accidental releases of stored polluting materials	All facilities are using the recommended secondary containment practices.
Programmatic Goals	Status
Inventory of potential pollutants at municipal facilities	Current inventories are maintained by each facility. Generalized material inventories are part of the site specific SWPPPs.
Development of SPCC plans for municipal facilities	ISU and Rose-Hulman have SPCC plans and they are in compliance with the rules. Employees are trained annually and spill kits are located at fueling and oil storage areas.
Training of employees	<i>(refer to Attachment 14: Municipal Facility Inspection & Training)</i>

BMP 8-6 Vehicle and Equipment Maintenance

Implementation Actions	Status
Develop and implement procedures for vehicle maintenance and maintenance facility operation by September 2009	Seelyville and West Terre Haute use commercial facilities for maintenance. The remaining entities have in-house maintenance departments.
Training of employees at municipal operations and facilities at various dates in 2008/2009 and annually	<i>(refer to Attachment 14: Municipal Facility Inspection & Training)</i>
Site visits/inspections by the MS4 operator at various dates in 2008/2009 and annually	<i>(refer to Attachment 14: Municipal Facility Inspection & Training)</i>
Measurable Goals	Status
Estimated gallons of recycled vehicle fluids and oil filters	In total, the municipal facilities of the MS4 group recycle an estimated 5,500 gallons of oil, 2,000 oil filters and up to 500 gallons of antifreeze per year.
Programmatic Goals	Status
Employee training	<i>(refer to Attachment 14: Municipal Facility Inspection & Training)</i>
Gallons of recycled vehicle fluids and oil filters	385 gallons of waste antifreeze, 5270 gallons of waste oil, 1710 used oil filters

BMP 8-7 Vehicle Washing	
Implementation Actions	Status
Develop and implement procedure requiring vehicle washing activities only take place in designated locations by September 2009	Complete
Train employees on proper vehicle and equipment washing procedures and prevention of stormwater runoff pollution at various dates in 2008/2009 and annually	<i>(refer to Attachment 14: Municipal Facility Inspection & Training)</i>
Measurable Goals	Status
Practices implemented at vehicle and equipment washing facilities	Some City and County departments have indoor wash bays others use commercial facilities. West Terre Haute and Seelyville use commercial facilities. ISU, Rose-Hulman and IvyTech all have indoor wash bays with floor drains tied to oil water separators. All staff personnel are trained as to where to wash vehicles and equipment.
Programmatic Goals	Status
Review of vehicle washing facilities and procedures	Complete
Updates to vehicle washing facilities and procedures to prevent contamination of storm water runoff or arranging for washing vehicles at off-site commercial facilities	Complete, continuing to remind fire departments that they cannot discharge soapy water to the storm drainage system.
Notify employees of vehicle washing procedures	Completed during annual training.

BMP 8-8 Pesticide and Fertilizer Use	
Implementation Actions	Status
Develop plans and procedures for proper use, application, handling, storage, mixing, loading and transportation of pesticides and fertilizers in accordance with the Office of the Indiana State Chemist's guidance requirements by September 2009	All materials are stored inside buildings. Each entity is encouraged to only order what will be used for that season to prevent long term storage issues and stockpiling of potentially hazardous chemicals. Personnel responsible for the application of chemicals in public areas like golf courses are certified applicators with the office of the Indiana State Chemist and they receive annual training. Other personnel using over-the-counter weed killer or other similar products receive more generalized training on proper handling use and disposal.
Provide training for municipal pesticide and fertilizer applicators at various dates in 2008/2009 and annually	<i>(refer to Attachment 14: Municipal Facility Inspection & Training)</i>
Measurable Goals	Status
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	In total, roughly 600 acres of land including sidewalks, parking lots, fencerows, parks, cemeteries, sports fields and golf courses receive some application of fertilizers, pesticides or herbicides.
Programmatic Goals	Status
Review of storage and handling facilities and application equipment and procedures	Completed
Reduction of pesticide and fertilizer use	SWPPPs and training programs promote and encourage natural landscaping practices.
Use, application, storage, mixing, handling and transportation facilities and practices that are in compliance with Office of the State Chemist's guidelines	Reviewed during inspections, any deficiencies are corrected immediately.
Employee training	<i>(refer to Attachment 14: Municipal Facility Inspection & Training)</i>

Tracking of pesticide and fertilizer application	Each facility is responsible for their own equipment calibration and application tracking records.
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BMP 8-9 Recycling and Disposal

Implementation Actions	Status
Develop and implement procedures for recycling and waste disposal by September 2009	Completed, included in facility SWPPPs and training program.
Training of employees working at affected facilities at various dates in 2008/2009 and annually	(refer to Attachment 14: Municipal Facility Inspection & Training)
Measurable Goals	Status
Estimated or actual amount of material, segregated by type, that has been used at municipal facilities and recycled	Commonly recycled materials include paper, plastic, cardboard, food and beverage cans, batteries and automotive fluids. Rose-Hulman is operating with a 25% diversion rate. ISU's Recycle Mania 2017 competition collected 110,908 pounds of recyclable materials from the campus over a ten week period. This is a 60% increase in materials collected compared to the previous year making ISU Recycle Center top in the State of Indiana. They have received awards for the Indiana Recycling Coalition Conference six out of seven years. ISU's recycling information is available in Attachment 11: ISU Recycle Center Report . The other MS4 entities are continually trying to improve their recycling efforts but their actual numbers are not tracked.
Estimated or actual amount of material, segregated by type, that has been used at municipal facilities and disposed of at hazardous waste facilities	The majority of the hazardous waste in the MS4 is from universities. All waste is properly managed and documented. Specific amounts of hazardous materials are maintained by each entity. In 2017 ISU reported 1,000 pounds in non-acute lab pack waste, 600 pounds of flammable paint, 475 pounds of bulk acid, 350 pounds of bulk flammable liquid, 170 pounds of ink solvent rags, 50 pounds of broken fluorescent lamps and 1.5 pounds of acute lab pack waste. Estimated volumes for the other entities include 8,000 pounds per year from Rose-Hulman including crushed bulbs, aerosols, contaminated rags, lab waste, acids, etc. IvyTech has up to 1,440 pounds of hazardous waste annually.
Programmatic Goals	Status
Implementation of recycling and hazardous waste disposal at all municipal operations facilities	Completed
Employee training	Completed

BMP 8-10 Flood Management Projects

Implementation Actions	Status
Inventory and map water quality controls installed at flood management facilities by December 2008 and annually	Complete
Develop and implement procedures to review proposed flood management projects for pollution prevention device installation by January 2009 and throughout the term of the permit	Complete

Develop and implement procedures to review existing flood management projects to determine in upgrades are feasible for the structure by January 2009 and throughout the permit term	Complete
Integrate storm water pollution prevention devices and practices in the design of new flood management facilities by January 2009 and throughout the term of the permit	Complete, some MS4 entity members are a part of the area-planning group. They will suggest and promote the installation and use of pollution prevention devices, where applicable. Additionally, new projects must meet the requirements of the construction & post-construction ordinances.
Measurable Goals	Status
Number of water quality controls installed at existing flood management facilities and the type of control	The City maintains and operates the Conover Levee located at the US 41 SR 63 split just north of Maple Avenue and a flood control reservoir (Hulman Lake). The land-side of the levee has been cleared of trees, seeded, mulched and mowed. The pipe has been inspected and the area around the flap-gate was cleared of debris and protected from erosion.
Number of new flood management facilities in which water quality controls have been constructed and the type of control	In 2013, the City has a construction project on Hulman Lake dam. The dam was raised nearly 5 feet to increase the holding capacity during heavy rain events. The spillway was re-contoured and new drains were installed. The area received new seed and mulch to prevent erosion. No new projects have been constructed since that time.
Programmatic Goals	Status
Pollution prevention devices installation in flood management facilities	BMP practices installed include seed, mulch, erosion protection, flap-gate maintenance, new drainage pipes, etc.

- b) Describe implementation problems encountered and changes due to ineffectiveness or infeasibility as it relates to pollution prevention and good housekeeping at MS4 owned and operated facilities during this reporting period.
- i. All municipal facilities with runoff control plans should be conducting periodic self-inspections. The annual inspections conducted during this reporting period by the MS4 Coordinator revealed a few facilities that had not complied with that requirement. Those facility managers were issued a written notice of noncompliance on 02/05/2018 and the issue was resolved promptly. Pollution prevention plans and training are now back on track for the next permit period.
- c) Identify stormwater BMPs installed or initiated at MS4 owned and operated facilities.
- i. All materials are stored in a manner that prevents the accidental contamination of storm water. Storage facilities are constructed or retrofitted to protect materials for exposure to precipitation and runoff. Secondary containment is used inside and outside the facilities. Employees are trained on proper storage, use and cleanup procedures.
 - ii. All deicing materials are protected from the weather. Stockpiles of materials are contained in appropriate storage buildings. Bagged materials are kept on pallets, shelves or impervious surfaces away from rainwater and snow melt.
 - iii. All personnel involved with maintenance, fueling, material handling and storage, grounds keeping, and other similar jobs where pollutants may come in contact with stormwater receive training with periodic refresher courses.
 - iv. Vehicles and equipment are kept on regular maintenance schedules to check for and repair any leaks that may develop promptly.

- d) Identify and describe appropriate storm water training provided to MS4 employees. Employees are required to have a minimum training once per year.
 - i. Rose-Hulman maintenance, grounds and custodial staff along with the supervisors complete stormwater training annually. This is conducted at the same time as the SPCC planning. Rose-Hulman created a campus-specific training session lasting one-hour covering these two topics due to the interconnected activities of the programs. This session has been developed into a video presentation of this year's classroom presentation. Embedded in this training are the Proper Refueling and Concrete Washout videos provided by the Tippecanoe County Partnership for Water Quality.
 - ii. Other entities are using Excal Visual videos, site-specific PowerPoint presentations, employee toolbox talks, printed materials and/or quizzes to meet the training requirements of this MCM.

- e) Other:
 - i. No additional information to report for this MCM

PART K: CERTIFICATION AND SIGNATURE

The individual listed in "PART A: GENERAL INFORMATION - MS4 OPERATOR" must sign the following certification statement:

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

Type or Print Name: Debra Padgett

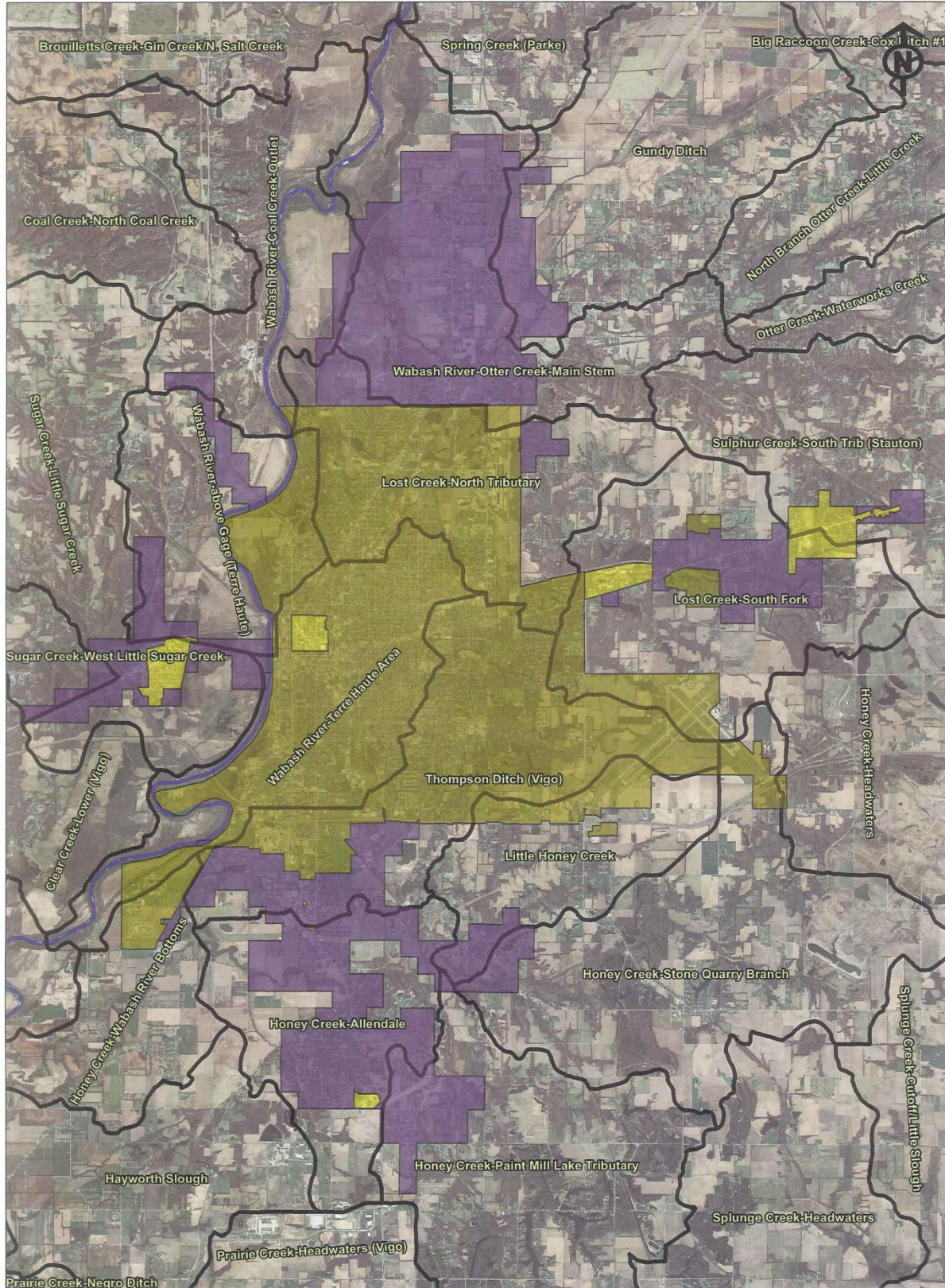
Signature: 

Date: 4-16-18

Attachment Contents

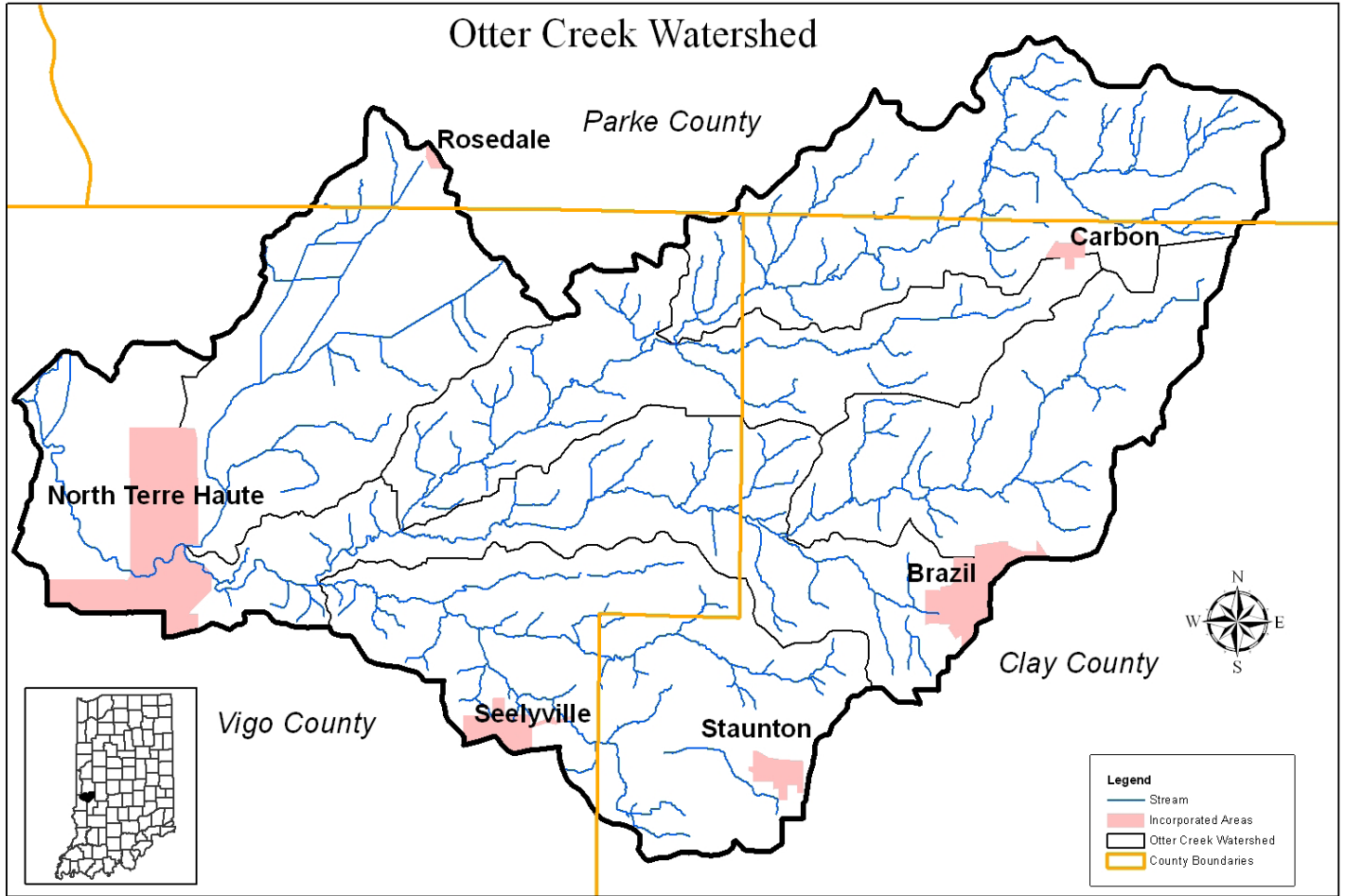
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Attachment 1 - Current Map of MS4 Boundary Areas



- Legend**
- Terre Haute
 - Seelyville, West TH, RHIT, IVYTech, ISU
 - Vigo Co (remaining 2010 UA)

Attachment 2 - Otter Creek Watershed Map



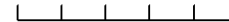
This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

Sources:
Data - Obtained from the State of Indiana Geographic Information Office Library

Mapped By:
 Cory Fischer, OWQ
 01/10/2013

Map Projection: UTM Zone 16 N **Map Datum:** NAD83

0 1 2 3 4 5 Kilometers



0 1 2 3 4 5 Miles



Attachment 3 - Wabash River Local Limits Analysis Results

ANALYTICAL RESULTS								
Project:		Wabash River LL Testing						
Pace Project No.:		50146729						
Sample: Wabash River LL Testing		Lab ID: 50146729001	Collected: 06/02/16 12:40	Received: 06/07/16 12:40	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total		Analytical Method: EPA 200.7 Preparation Method: EPA 200.7						
Iron	1.1	mg/L	0.10	1	06/15/16 11:16	06/16/16 09:22	7439-89-6	
200.8 MET ICPMS		Analytical Method: EPA 200.8 Preparation Method: EPA 200.8						
Arsenic	0.0011	mg/L	0.0010	1	06/13/16 08:00	06/14/16 17:24	7440-38-2	
Cadmium	ND	mg/L	0.00020	1	06/13/16 08:00	06/14/16 17:24	7440-43-9	
Chromium	0.0022	mg/L	0.0020	1	06/13/16 08:00	06/14/16 17:24	7440-47-3	
Copper	0.0024	mg/L	0.0010	1	06/13/16 08:00	06/14/16 17:24	7440-50-8	
Lead	ND	mg/L	0.0010	1	06/13/16 08:00	06/14/16 17:24	7439-92-1	
Nickel	0.0033	mg/L	0.00050	1	06/13/16 08:00	06/14/16 17:24	7440-02-0	
Selenium	ND	mg/L	0.0010	1	06/13/16 08:00	06/14/16 17:24	7782-49-2	
Zinc	0.013	mg/L	0.0030	1	06/13/16 08:00	06/14/16 17:24	7440-66-6	
245.1 Mercury		Analytical Method: EPA 245.1 Preparation Method: EPA 245.1						
Mercury	ND	ug/L	0.20	1	06/12/16 17:11	06/13/16 10:49	7439-97-6	1d

ANALYTICAL RESULTS								
Project:		Wabash River Local Limits Test						
Pace Project No.:		50147131						
Sample: Wabash River LL Testing		Lab ID: 50147131001	Collected: 06/09/16 08:47	Received: 06/10/16 13:37	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total		Analytical Method: EPA 200.7 Preparation Method: EPA 200.7						
Iron	0.85	mg/L	0.10	1	06/15/16 11:16	06/16/16 09:40	7439-89-6	
200.8 MET ICPMS		Analytical Method: EPA 200.8 Preparation Method: EPA 200.8						
Arsenic	0.0013	mg/L	0.0010	1	06/15/16 08:30	06/15/16 22:39	7440-38-2	
Cadmium	ND	mg/L	0.00020	1	06/15/16 08:30	06/15/16 22:39	7440-43-9	
Chromium	ND	mg/L	0.0020	1	06/15/16 08:30	06/15/16 22:39	7440-47-3	
Copper	0.0025	mg/L	0.0010	1	06/15/16 08:30	06/16/16 14:04	7440-50-8	
Lead	ND	mg/L	0.0010	1	06/15/16 08:30	06/15/16 22:39	7439-92-1	
Nickel	0.0026	mg/L	0.00050	1	06/15/16 08:30	06/16/16 14:04	7440-02-0	
Selenium	ND	mg/L	0.0010	1	06/15/16 08:30	06/15/16 22:39	7782-49-2	
Zinc	0.0051	mg/L	0.0030	1	06/15/16 08:30	06/15/16 22:39	7440-66-6	
245.1 Mercury		Analytical Method: EPA 245.1 Preparation Method: EPA 245.1						
Mercury	ND	ug/L	0.20	1	06/22/16 13:23	06/22/16 17:16	7439-97-6	
335.4 Cyanide, Total		Analytical Method: EPA 335.4 Preparation Method: EPA 335.4						
Cyanide	ND	mg/L	0.0050	1	06/14/16 09:19	06/15/16 11:55	57-12-5	

ANALYTICAL RESULTS								
Project:		Wabash River Local Limits Test						
Pace Project No.:		50147854						
Sample: Wabash River LL Testing		Lab ID: 50147854001	Collected: 06/20/16 10:15	Received: 06/21/16 11:40	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total		Analytical Method: EPA 200.7 Preparation Method: EPA 200.7						
Iron	0.31	mg/L	0.10	1	06/24/16 11:14	06/28/16 10:57	7439-89-6	
200.8 MET ICPMS		Analytical Method: EPA 200.8 Preparation Method: EPA 200.8						
Arsenic	0.0013	mg/L	0.0010	1	06/28/16 08:30	06/28/16 18:04	7440-38-2	
Cadmium	ND	mg/L	0.00020	1	06/28/16 08:30	06/28/16 18:04	7440-43-9	
Chromium	0.0038	mg/L	0.0020	1	06/28/16 08:30	06/28/16 18:04	7440-47-3	
Copper	0.0023	mg/L	0.0010	1	06/28/16 08:30	06/28/16 18:04	7440-50-8	
Lead	ND	mg/L	0.0010	1	06/28/16 08:30	06/28/16 18:04	7439-92-1	
Nickel	0.0046	mg/L	0.00050	1	06/28/16 08:30	06/28/16 18:04	7440-02-0	
Selenium	ND	mg/L	0.0010	1	06/28/16 08:30	06/28/16 18:04	7782-49-2	
Zinc	0.0088	mg/L	0.0030	1	06/28/16 08:30	06/28/16 18:04	7440-66-6	
245.1 Mercury		Analytical Method: EPA 245.1 Preparation Method: EPA 245.1						
Mercury	ND	ug/L	0.20	1	06/28/16 12:58	06/28/16 19:52	7439-97-6	
335.4 Cyanide, Total		Analytical Method: EPA 335.4 Preparation Method: EPA 335.4						
Cyanide	ND	mg/L	0.0050	1	06/22/16 12:10	06/23/16 12:25	57-12-5	

Attachment 4 - Public Survey Analysis

2015-2016-2017 Storm Water Quality Awareness Survey Comparison

The City of Terre Haute, Vigo County, Seelyville, West Terre Haute, Indiana State University, Ivy Tech, and Rose-Hulman are the Clean Water Coalition of the Wabash Valley. We are interested in knowing the levels of awareness and concern of area residents regarding pollution prevention and storm water issues. Your participation in this brief survey will provide guidance to us as we address our storm water problems and implement the Clean Water Act requirements in our communities. Please answer the following questions by checking the appropriate box next to each question. Thank you!


2015: 122 surveys completed

2016: 92 surveys completed

2017: 40 surveys completed


1. The Clean Water Coalition should place the following level of importance on addressing storm water pollution problems:			
High	2015: 88%	2016: 73%	2017: 73%
Moderate	2015: 26%	2016: 26%	2017: 25%
Low	2015: 1%	2016: 1%	2017: 3%
2. What is the largest source of storm water pollution in Indiana?			
Industrial discharges and untreated sewage	2015: 22%	2016: 35%	2017: 15%
Sediment (suspended dirt particles) and oil/grease	2015: 15%	2016: 9%	2017: 15%
Pesticides & herbicides	2015: 38%	2016: 35%	2017: 43%
I am not sure	2015: 29%	2016: 30%	2017: 33%
3. A watershed is:			
A swamp or marshy area	2015: 11%	2016: 9%	2017: 15%
A large flooding event	2015: 6%	2016: 5%	2017: 20%
An area of land that drains to a common point	2015: 83%	2016: 86%	2017: 68%
4. Where does the stormwater that enters a storm drainage system go?			
Straight to the creek	2015: 25%	2016: 30%	2017: 23%
To the wastewater treatment plant	2015: 38%	2016: 25%	2017: 30%
Into the ground	2015: 18%	2016: 16%	2017: 30%
I am not sure	2015: 19%	2016: 33%	2017: 23%
5. Muddy water from construction sites can seriously affect the health of a stream.			
True	2015: 88%	2016: 91%	2017: 100%
False	2015: 2%	2016: 2%	
I am not sure	2015: 11%	2016: 7%	
6. Allowing grass clippings, oil, detergent or other substances to enter the storm sewer system can harm fish and other aquatic life.			
True	2015: 93%	2016: 90%	2017: 93%
False	2015: 2%	2016: 2%	2017: 3%
I am not sure	2015: 4%	2016: 8%	2017: 5%
7. The state and federal government provide funding assistance to help cities and towns comply with costly storm water programs.			
True	2015: 39%	2016: 40%	2017: 23%
False	2015: 22%	2016: 21%	2017: 20%
I am not sure	2015: 39%	2016: 38%	2017: 60%
8. I would describe my level of awareness of the local programs for recycling and used oil/toxic waste drop off as:			
Unaware	2015: 19%	2016: 26%	2017: 28%
Somewhat aware	2015: 73%	2016: 63%	2017: 60%
Well informed	2015: 8%	2016: 11%	2017: 13%
9. I would describe my participation in recycling and toxic waste drop-off programs as:			
Rare to never	2015: 17%	2016: 23%	2017: 28%
Moderate	2015: 62%	2016: 48%	2017: 53%
Frequent	2015: 21%	2016: 29%	2017: 20%
10. If I had more information about pollution prevention and recycling programs I would participate:			
No more	2015: 3%	2016: 8%	2017: 8%
A little more	2015: 54%	2016: 50%	2017: 55%
A lot more	2015: 43%	2016: 42%	2017: 38%
11. How much money would you be willing to spend each month for local programs to reduce pollution and improve waterways?			
\$1 - \$3	2015: 40%	2016: 32%	2017: 40%
\$4 - \$6	2015: 33%	2016: 46%	2017: 43%
\$7 - \$9	2015: 22%	2016: 16%	2017: 10%
None	2015: 5%	2016: 5%	2017: 5%

WHEN YOUR CAR'S LEAKING OIL ON THE STREET, REMEMBER IT'S NOT JUST LEAKING OIL ON THE STREET.



When it rains all of the oil and other automotive fluids that leak from your car onto the street are washed right into the storm drain and straight out to the streams and lakes that end up in our Washbasin River!

Now, imagine the number of cars in the area and you can imagine the amount of oil, antifreeze, and other fluids that find their way from leaky gaskets into our waterways. Yuck!



The message brought to you by Terre Haute Wastewater Treatment Utility Municipal Separate Storm Sewer System (MS4) program 3200 South State Road 63 Terre Haute, IN 47802 (812) 244-5500

Clean water is important to all of us.

It is up to all of us to keep waterways clean. In recent years, water pollution from industries and factories has been greatly reduced. Now, more than 60% of water pollution is caused by things like cars leaking oil, runoff of fertilizers on farms and gardens, and by failing septic tanks. All these sources add up to a big pollution problem. Each of us can do small things to help clean up our water too—and that adds up to a pollution solution!

Why do we need clean water?

Having clean water is of primary importance for our health and economy. Clean water provides recreation, commercial opportunities, fish habitat, drinking water, and adds beauty to our landscape. All of us benefit from clean water. All of us have a role in getting and keeping our lakes, rivers, streams & ground water clean.

What's the problem with motor oil?

Oil does not dissolve in water. It lasts a long time and sticks to everything from beach sand to bird feathers. Oil and petroleum products are toxic to people, wildlife, and plants. One quart of motor oil can pollute 250,000 gallons of water. One gallon of gasoline can pollute 750,000 gallons of water! Oil that leaks from our cars onto roads and driveways is washed into storm drains, and then usually flows directly into a lake or stream. Used motor oil is the largest single source of oil pollution in lakes, streams, and rivers. Americans spill 1.80 million gallons of used oil each year. This is 3.6 times more than the oil spilled by Exxon Valdez in Alaska!

Clean Water Tips:

- How can you use and change your motor oil and keep our waterways clean?
 - Shop wisely. Check for oil leaks regularly and fix them promptly. Keep your car tuned up to reduce oil use.
 - Use ground cloths or drip pans under leaking vehicles and during engine work. Clean up spills immediately. Collect all used oil in containers with tight fitting lids. Do not mix different engine fluids together.
 - Recycle used motor oil. Many auto repair shops will accept used oil for recycling.
 - Buy recycled (re-refined) motor oil to use in your car.
 - Never dump any oil, antifreeze or other automotive fluid on the ground, in a ditch or down a storm drain.
 - That's illegal dumping and you could receive a hefty fine!




A wet wipe, also known as a wet nap, wet towel or moist towelette is a small, moistened piece of paper or non-woven cloth. Wet wipes can serve a number of household purposes from cleaning everything from a baby's bottom to floors, toilet seats, and other surfaces around the home.

When these items are flushed down the drain, they enter the City of Terre Haute's sanitary sewer system where they can wrap around the impellers of the pumps of our sewage pumping stations, making them inoperable.


It is important that these pumping stations continue to operate normally and keep wastewater flowing away from your homes and toward the treatment plant for disposal. Any obstruction of the flow of wastewater in the sewer may cause raw, untreated wastewater to backup into your homes, causing unsanitary conditions and a multitude of adverse health effects.

Please instruct every member of your household to dispose of wet wipes properly.

Throw them into the wastepaper basket - DO NOT FLUSH!

For more information, please contact the Terre Haute Wastewater Utility at (812) 244-2500.

GREASE MENACE






A real pain in the DRAIN.

Storm Water Pollution Found in Your Area!

This is not a citation.

This notice is to inform you that our staff found the following pollutants in the separate storm sewer system servicing your area.

- Motor Oil
- Oil Filters
- Antifreeze/Transmission Fluid
- Paint
- Solvent/Degreaser
- Cooling Grease
- Detergent
- Home Improvement Waste (concrete, mortar, etc.)
- Pet Waste
- Yard Waste (leaves, grass, mulch)
- Excessive Dirt and Gravel
- Trash
- Construction Debris
- Pesticides/Fertilizers
- Other

For more information or to report an illegal discharge of pollutants into stormwater call (812) 244-5500.



Pretreatment Department
Terre Haute Wastewater Utility
3200 South State Road 63
Terre Haute, IN 47802

Waste Water Pollution Found in Your Area!

This is not a citation.

This notice is to inform you that our staff found the following pollutants in the waste water collection system servicing your area.

- Fuel (gasoline, diesel, kerosene, etc.)
- Solvent/Degreaser
- Motor Oil
- Antifreeze
- Medications
- Paper, Plastic, or Foam Tableware
- Cooking Grease
- Home Improvement Waste
- Shop Towels/Rags/Baby Wipes
- Paint/Paint Thinner
- Un-ground Garbage
- Radioactive Material
- Metal Shavings
- Ashes, Cinders, Sand, Rocks, or Straws
- Whole Blood, Hair, Fleshing, or Entrails
- Other

For more information or to report an illegal discharge of pollutants into stormwater call (812) 244-5500.

Pretreatment Department
Terre Haute Wastewater Utility
3200 South State Road 63
Terre Haute, IN 47802

PET WASTE, WATER QUALITY & YOUR HEALTH




PET WASTE IS A HEALTH HAZARD AND A WATER POLLUTANT.

PROTECT YOUR HEALTH AND OUR WATERWAYS...

CLEAN UP AFTER YOUR PET!

The SOLUTION TO STORMWATER POLLUTION!

Make your home a homeowner's guide to healthy habits for clean water.



EPA United States Environmental Protection Agency

HOUSEHOLD WASTE CHART

The following chart from the Water Environment Federation will show you effective ways to dispose of household waste and contribute to a sustainable clean environment.

Blue waves indicate products which can be poured down the drain with plenty of water. If you have a septic tank, additional caution should be exercised when dumping these items down the drain. In fact, because septic systems rely on healthy bacteria, there are certain chemical substances that cannot be used with them. Be sure to read the labels to determine if a product could damage septic systems.

KITCHEN	TYPE OF WASTE	DISPOSAL
Aluminum cleaners		W
Ammonia-based cleaners	AS	W
Bug sprays		W
Drain cleaners		W
Egg shells		W
Floor care products		W
Furniture polish		W
Metal polish with solvent		W
Window cleaner		W
Oven cleaner (wet type)		W
Fats, oils and greases (product of trim)		W
BATHROOM	TYPE OF WASTE	DISPOSAL
Bathroom cleaners		W
Dispers (baby wipes)		W
Deodorants		W
Toilet bowl cleaner		W
Tub and tile cleaners		W
Pharmaceutical products or drugs (liquid or used)		W
Personal care products (antiperspirants, perfume, deodorants, permanent eye makeup, hair, nail, polish, eye, wax)		W
CAUTION	TYPE OF WASTE	DISPOSAL
Fertilizer		W
Fungicide		W
Herbicide		W
Insecticide		W
Rat poison		W
Wood killer		W

Yellow triangles indicate materials which should not be poured down the drain, but can be safely disposed of in a sanitary landfill or incinerator. Note that medicines can often be taken to a community drug take-back program or mixed with undesirable substances such as kitty litter or coffee grounds. Pills (except narcotic) can also be dissolved and mixed with regular trash. Be sure the material is properly contained before it is put out for collection or carried to the landfill. The red octagons indicate hazardous wastes or materials that should be saved for a community-wide collection day or given to a licensed hazardous waste contractor when left over or unused. (Even the empty containers should be taken to a licensed contractor if one is available.)

GARAGE	TYPE OF WASTE	DISPOSAL
Antifreeze		W
Automatic transmission fluid		W
Auto body repair products		W
Battery acid (or battery)		W
Brake fluid		W
Car wax with solvent		W
Diesel fuel		W
Fuel additives		W
Fuel oil		W
Gasoline		W
Kerosene		W
Metal polish with solvent		W
Motor oil		W
Other oils		W
WORKSHOP	TYPE OF WASTE	DISPOSAL
Cutting oil		W
Deck cleaners/stains		W
Glue (solvent based)		W
Glue water based	AS	W
Paint (latex)		W
Paint (oil based)		W
Paint (auto)		W
Paint (model)		W
Paint brush cleaner with solvent		W
Paint brush cleaner with TSP	AS	W
Paint stripper		W
Paint stripper (wet base)		W
Paint thinner		W
Primer		W
Rust remover (wet phosphoric acid)		W

Green leaves indicate material that can be recycled or reused or shared with neighbors or family members. If there is a recycling program in your area, take the materials there. If not, encourage local officials to start a recycling program.

The information contained in this chart is intended as a general guideline. Laws and regulations may vary from state to state. For more information on the safest way to dispose of these and other products, contact your area's solid and hazardous waste department or federal or state environmental agency. Check manufacturer's label for specific disposal guidelines.

AS - Can be poured down the drain with plenty of water.
W - Cannot be poured down the drain, but can be safely disposed of in a sanitary landfill or incinerator.
H - Hazardous waste.
R - Recycle, reuse, or share.

Did YOU KNOW?

Grass clippings and leaf litter are storm water pollutants.

Yard debris, including leaves and other organic plant material like shrubbery trimmings and grass clippings, are a significant source of stormwater pollution. When you blow your lawn waste into the street it can clog storm drains and cause drainage and flooding issues. Storm drains are not connected to the wastewater treatment plant. There is no treatment to remove the debris from the water before it reaches nearby lakes, streams, or our Washbasin River.

Why are grass clippings and leaf litter harmful? As this waste breaks down in local waterways, it adds excess nutrients like nitrogen and phosphorus to the water. This leads to unwanted and uncontrolled algae and invasive aquatic weeds.


What is so bad about algae? Algae will naturally occur in lakes and ponds, but excess nutrients can lead to an imbalance and high levels of algae. Apart from looking unsightly, excessive algae blooms can block out sunlight and deplete the oxygen level in the water, which can lead to fish kills.

What can you do to protect water quality while keeping your yard maintained?

- Mow your lawn often enough so no more than one-third the length of the grass is removed. Taller grass has deeper roots - that prevents soil loss & helps the rain soak into the ground.
- Leave the clippings on the lawn or compost them. Be sure to sweep or blow clippings off paved surfaces and back onto the lawn. Intentionally blowing or placing lawn waste in the street is illegal and you could receive a citation and a fine.
- Fertilize only when necessary, or not at all if it might rain in the next day or two.
- In the fall, place leaves for municipal collection in the tree row - NOT IN THE STREET.
- Clean up after your pets. Scoop up pet waste and put it in the trash.
- Only use dry cleanup methods (broom and dustpan or absorbent material) for spills of chemicals or oils; never have a spill into a storm drain!
- Directing your roof drains to a rain garden can significantly reduce the stormwater runoff from your property.





To learn more about stormwater pollution prevention in your area, Contact the Terre Haute Wastewater Utility, MS4 Coordinator at (812) 244-5511
<http://www.terrehautecleanwater.com/stormwater.html>



DECHLORINATION DURING HYDRANT FLUSHING AND MAIN BREAKS


BEST MANAGEMENT PRACTICES GUIDANCE DOCUMENT

Best Management Practices



For Auto Repair Facilities

Prepared by the Terre Haute Wastewater Utility for the control of pollutants discharged in the sanitary collection system
October 2009



Best Management Practices

A Handbook for Terre Haute's Food Service Establishments

January 2013

Filling? Dredging? Excavating?

WHAT IS A WETLAND?

WHAT ALL THE FUSS ABOUT WETLANDS?

HOW DO YOU APPLY FOR 401 WQC/ ISOLATED WETLAND PERMITS?

HOW DO YOU APPLY FOR 404 WQC/ ISOLATED WETLAND PERMITS?

YOUR PROJECT MAY REQUIRE SECTION 401 WATER QUALITY CERTIFICATION (401 WQC) OR ISOLATED WETLAND PERMITS

WHEN DO YOU NEED AN 401 WQC OR ISOLATED WETLAND PERMITS?

WHEN DO YOU NEED AN 404 WQC OR ISOLATED WETLAND PERMITS?

HAVE MORE QUESTIONS? NEED MORE INFORMATION?

Terre Haute Wastewater Utility STORMWATER INSPECTION FORM

for Municipal, Commercial, and Industrial Facilities

Inspection Date: _____ Inspector: _____
 Inspection Type: _____ Additional Details: _____
 Facility Name: _____
 Address: _____
 Contact Person: _____ Phone: _____
 Principal Activity: _____ NPDES Permit: _____

Does any stormwater enter the City of Terre Haute's MS4 system?
 Outfall Location(s) and Receiving Stream: _____ Yes No

BEST MANAGEMENT PRACTICES:

WASTES AND RECYCLING:

Storm drains located near dumpsters or recycling areas? Yes No
 Area enclosed and free of leaks, waste and debris? Yes No
 Adequate trash containers provided? Yes No
 Lids present on all containers? Yes No
 Does the company properly dispose of Hazardous Wastes? Yes No

OUTDOOR LOADING AND UNLOADING OF MATERIAL:

Are storm drains located in loading and unloading areas? Yes No
 Is the area free of spills and debris? Yes No
 Using proper handling procedures with materials? Yes No
 Indoor areas equipped to prevent discharges to outdoors? Yes No

OUTDOOR MATERIAL STORAGE:

Are storm drains located in outdoor storage areas? Yes No
 Do the areas have overhead cover? Yes No
 Is the area paved and bermed? Yes No
 Are all containers properly labeled? Yes No
 Is secondary containment properly used? Yes No
 Is secondary containment free of spills and rainwater? Yes No
 Are containment areas preventing discharges effectively? Yes No
 Is there a spill kit nearby? Yes No

OUTDOOR EQUIPMENT OPERATIONS AND MAINTENANCE:

Are storm drains located in equipment O&M areas? Yes No
 Do the areas have overhead cover? Yes No
 Is the area paved and bermed? Yes No
 Is secondary containment properly used? Yes No

VEHICLE MAINTENANCE AND REPAIR:

Is there a designated vehicle maintenance area? Yes No
 Is it within a building or covered area? Yes No
 Are storm drains located in the maintenance area? Yes No
 Is there a designated area for draining and replacing fluids? Yes No
 Do floor drains discharge to an oil/water separator? Yes No

VEHICLE & EQUIPMENT FUELING:

Are storm drains located near fueling areas? Yes No
 Are fueling areas bermed? Yes No
 Are spill kits available nearby? Yes No
 Are automatic shut-off nozzles used? Yes No
 Are fuel tanks protected from damage by vehicles? Yes No
 Have leak detection system been installed? Yes No

OUTDOOR VEHICLE & EQUIPMENT WASHING:

Is there a designated wash area? Yes No
 Is the wash area properly bermed? Yes No
 Are storm drains located in the wash area? Yes No
 Is the wash water discharged to the sanitary sewers? Yes No

BUILDING REPAIR, REMODELING & CONSTRUCTION:

Are construction activities occurring at this facility? Yes No
 Is waste material disposal handled properly? Yes No
 Is construction covered by a RULE 5 permit? Yes No
 Are erosion and sediment controls in place? Yes No
 Is the construction area free of discharge? Yes No

NON-STORMWATER MANAGEMENT:

Are there signs of illegal connections or illicit discharges? Yes No
 Is there evidence of unauthorized releases to waterways? Yes No

OTHER:

Are parking lots free of significant spills and leaks? Yes No
 Facility is cleaned regularly to prevent pollution? Yes No
 Pressure washing is conducted on buildings or pavement? Yes No
 Street sweeping is conducted on buildings or pavement? Yes No
 Stormwater conveyances are inspected and maintained? Yes No

DOCUMENTATION REVIEW:

Spill Prevention Control & Countermeasure Plan required? Yes No
 Storm Water Pollution Prevention Plan required? Yes No
 When was the latest update to the Plan? _____
 Does the facility keep a spill log book? Yes No
 Employees trained on spill cleanup? Yes No
 Employees trained on stormwater pollution prevention? Yes No
 Training records up to date? Yes No
 Date of last training: _____

CORRECTIVE ACTIONS:

Is corrective action needed? Yes No
 Follow-up inspection needed? Yes No

VIOLATIONS:

No violations have been noted at this time
 No violations have been noted, but corrective action described above is recommended
 Violation(s) of the City's Stormwater Ordinance or other applicable regulations were found.
 Illegal discharge of pollutants into the MS4 or Receiving Waters.
 Illegal connection to the storm drainage system.
 Improper implementation of required BMPs.
 Other: _____

Specific action REQUIRED to correct the violation above: _____

Vigo County Erosion & Sediment Control Workshop

Date: 11/16/2017
 Time: 08:00 - 12:00
 Terre Haute Wastewater Utility
 3200 South State Road 63
 Terre Haute, IN 47802

It's time again for the Annual Rule 5 Erosion and Sediment Control Contractor's Workshop! We have a lot of great presentations and demonstrations lined up for you and your construction site crew. Complete your Annual Training Requirement! Please register as soon as possible to reserve your seat. Space is limited!

Register today! 812-244-5500



Schedule of Events

Vigo County Erosion & Sediment Control Workshop
 Thursday, November 16, 2017
 Terre Haute Wastewater Utility

Time	Event	Other information
8:00 - 8:15	Registration	Please enjoy coffee & donuts
	Sign in at the front desk	
8:15 - 8:30	Introductions, Goals & Targets	Terre Haute MS4
8:30 - 9:30	IDEM Rule 5 Discussion	IDEM Office of Water Quality
9:30 - 9:50	Inspector Responsibilities & Qualifications	Christopher B Burke Engineering
9:50 - 10:00	10 minute break	
10:00 - 10:45	Effective Maintenance Strategies for BMPs	Christopher B Burke Engineering
10:45 - 11:45	BMP Product Demonstrations	D2 Land & Water Resource
11:45 - 12:00	Workshop Survey	Please complete the workshop survey to help us plan our next training event!

CLEAN WATER Terre Haute Wastewater Utility Phone: 812-244-5500
 3200 South State Road 63 Fax: 812-242-0317
 Terre Haute, IN 47802 Email: dclco@wmduf.com

Recognizing & Reporting Illicit Discharges & Illegal Connections

Attachment 7 - News Articles, Television Reports, and Event Announcements

12/1/2015	Seminar Wednesday: Some thoughts on directions for local sustainable development, funding	ISU Today
12/2/2015	West Terre Haute to receive \$1 million in grant money from the state	WTHI-TV
2/2/2016	Seminar Wednesday: Don't stop with Google: Finding sustainability information	ISU Today
2/6/2016	Rose-Hulman students seek ways to help neighborhood thrive	Tribune Star
2/10/2016	Geologists study lead levels in Terre Haute	WTHI-TV
2/17/2016	Earth & Environmental Systems Lecture Series presents Stephen Aldrich	ISU Today
2/17/2016	Social Justice Summit registration now open	Indiana Statesman
2/19/2016	Inventory to take stock of number and condition of city's trees	Tribune Star
2/29/2016	Seminar Wednesday: How pesticides and herbicides disrupt endocrine systems	ISU Today
3/1/2016	Award-winning author Paul Fleischman to speak	ISU Today
3/6/2016	Trash causes concerns with residents in Terre Haute	WTHI-TV
3/21/2016	Earth Day 2016 is coming	ISU Today
3/30/2016	Green Cleaning	WTWO/WAWV
4/2/2016	Woods students, volunteers brave strong winds to clean up West Terre Haute wetlands	Tribune Star
4/9/2016	Earth Day at Indiana State promises biggest production yet	Indiana Statesman, Brazil Times, ISU Today
4/14/2016	ISU to celebrate Earth Day with Sustainability Festival	Tribune Star
4/15/2016	ISU turning Donaghy Day into community help day	Tribune Star
4/20/2016	Indiana receives C- for water quality monitoring in national report	Tribune Star
4/20/2016	Sustainability Festival at ISU	WTWO/WAWV
4/21/2016	Litter sends misleading message that community doesn't care	Tribune Star
4/26/2016	Seminar Wednesday: Sustainable technology projects developed by ISU students	ISU Today
5/1/2016	ISU leading Hoosiers in urban forestry	WTWO/WAWV
5/5/2016	Dissertation defense	ISU Today
5/19/2016	Market Down in Recycling	WAWV
5/26/2016	Sustainable campus tour this Friday	ISU Today
6/12/2016	Pair of new community gardens sprout in Valley	Tribune Star
6/16/2016	Electronics recycling session set for Saturday morning	Tribune Star
6/18/2016	Cutting ties with your old electronics, groups host e-scrap drive	WTHI
7/1/2016	Sustainability -- Here and Abroad	STATE Magazine
7/10/2016	Soil & Water District offers cost share well water testing	Tribune Star
7/30/2016	Free program, field tour for women farmland owners	Tribune Star
7/31/2016	Reservation deadline approaches for OLC Field Day	Tribune Star
8/5/2016	Moisture vs. crops	WTWO/WAWV
8/14/2016	Mark Bennett: Terre Haute's 'Emerald Necklace'	Tribune Star
8/22/2016	Another successful Donaghy Day for Indiana State University students	WTHITV
9/7/2016	Cities have reasons for wanting lawn clippings out of street	Tribune Star
9/16/2016	Indiana State again among top national, 'green' colleges	ISU Today
9/18/2016	Overabundance of nutrients harms Otter Creek Watershed	Tribune Star
10/23/2016	Sycamore cross country, track & field teams help keep Wabashiki clean	Tribune Star
10/31/2016	Healthy Rivers program reaches 35,200 acres	Tribune Star
11/30/2016	Cover crops help provide heritage of better soil quality	Tribune Star
12/31/2016	NRCS announces EQIP application deadline	Tribune Star
1/5/2017	Stream of ideas: Lost Creek keeps knowledge flowing for Rose-Hulman students	Tribune Star
1/29/2017	Extension office to present sessions on water, soil quality	Tribune Star
2/5/2017	Pooling common efforts means more good water statewide	Tribune Star
3/8/2017	Today is the last day to order rain barrels, tumbling composters from Soil and Water District	Tribune Star
3/9/2017	Where the rubber meets the ravine	Tribune Star
3/11/2017	EPA budget cuts big worry for states dependent of funds of clean water, air	Tribune Star
4/3/2017	Ouabache Land Conservancy protects natural resources for future generations	Tribune Star
4/4/2017	Terre Haute making progress on long-term sewer plan	Tribune Star
4/10/2017	Salt keeps icy roads safe. It's also putting North America's freshwater lakes at risk	Tribune Star
4/11/2017	Organizations leaving environmental footprints on our community	Tribune Star
5/4/2017	Turn to the River plans to connect downtown to Wabash River in innovative way	Tribune Star
5/21/2017	Clay conservation agency plans June 17 water quality workshop	Tribune Star
6/25/2017	Rain barrels, composters available from Vigo County Soil, Water Conservation District	Tribune Star
8/22/2017	Sustainable solar energy for Terre Haute	WTHITV
8/25/2017	Vigo, Sullivan watershed projects receive DNR grants	Tribune Star
9/14/2017	Hoosier mayors urged to look at clean energy, green jobs	Tribune Star
10/15/2017	ISU prof, class to study tree health problem at Fowler Park	Tribune Star
10/19/2017	Discussion on environmental justice	ISU Today
9/24/2017	New study released on "no-till" effects on water pollution	WIBQ
9/26/2017	Clean-up Terre Haute set for this weekend, put trash in its place	WIBQ
11/27/2017	That trash you throw out every day? It doesn't just disappear.	WTHI-TV
11/29/2017	Otter Creek Drainage project meeting is Dec. 13	Tribune Star

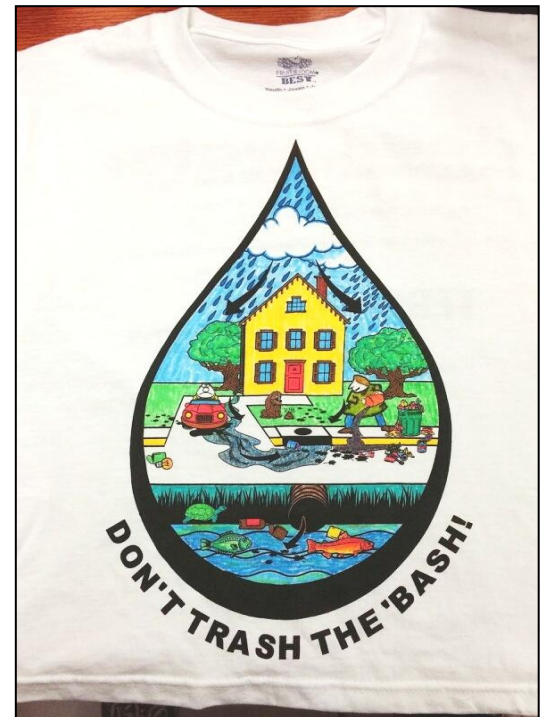
Attachment 8 - "Don't Trash the 'Bash" Coloring T-Shirts

clean water
COALITION OF THE WABASH VALLEY

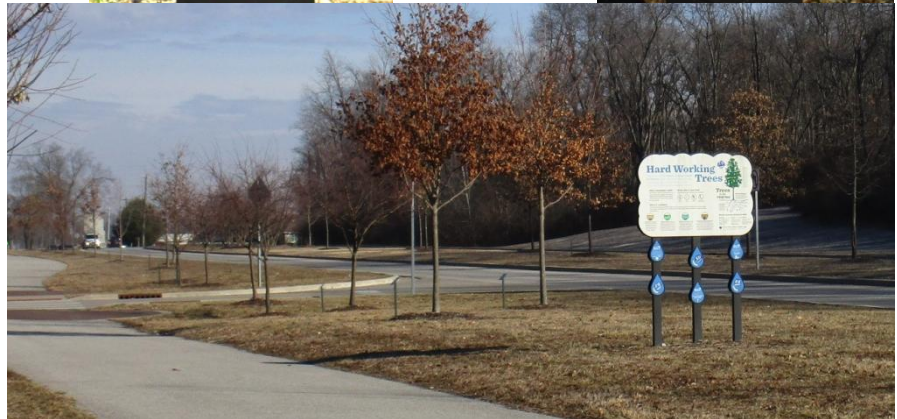
*Terre Haute, Vigo County, West Terre Haute, Seelyville, Indiana State University,
Rose-Hulman Institute of Technology, Ivy Tech Community College*

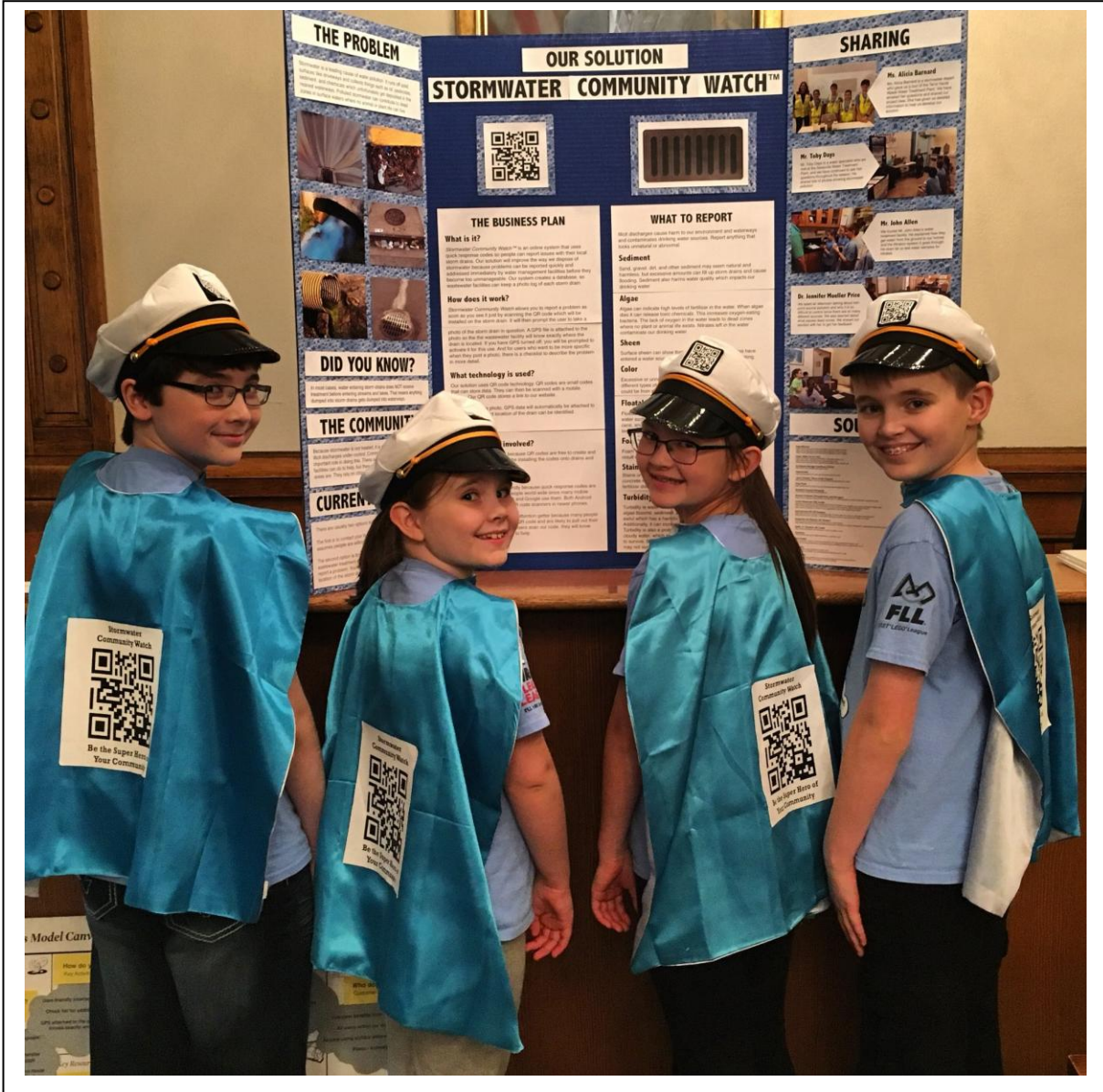
Visit us on the web at **TerreHauteCleanWater.com**

TERRE HAUTE
A LEVEL ABOVE



Attachment 9 - Trees and Stormwater Sign





**FACILITIES MANAGEMENT DEPARTMENT
2016 - 2017 ANNUAL REPORT
RECYCLE CENTER**

INDIANA STATE UNIVERSITY

2016-17 Recycle Review

Overall recycle collection increased by 5% from the previous year with 1,973,344 pounds received from the ISU drive through facility and the ISU Campus combined. This is an increase of 100,300 pounds of material. There was a 43% decrease in E-scrap and increases in cardboard, books, colored/mixed paper, printers mix, glass and plastic.

The ISU Campus was involved in the national RecycleMania 2017 competition, which was a ten week period from January 22, 2017 through April 1, 2017. The total amount of recycle material collected during the period from campus was 110,908 pounds. This is a 60% increase in materials collected compared to the previous year. The total waste for the period was 515,960 pounds. This is a 6% decrease from the previous year. The ISU Recycle Center received an award at the Indiana Recycling Coalition Conference in June for collecting the most in the areas of paper, corrugated cardboard, bottles and cans during the RecycleMania competition in the State of Indiana. We have received awards six years out of seven years for our competition in RecycleMania.

We continue reviewing additional items to collect from the waste stream and plan to increase overall totals.

Respectfully Submitted



Paul A. Reed
Manager, Recycling & Waste Management



ISU RECYCLE CENTER - TOURS/PRESENTATIONS/EVENTS
Fiscal Year 2016-2017
(2,435 participants)

2016	FALL SEMESTER	#att	2017	SPRING SEMESTER	#att
7/12/2016	ISU Camp Invention	21	2/15/2017	ISU HRD 335	32
7/13/2016	ISU Camp Invention	14	3/16/2017	Breakfast Optimist Club	22
7/14/2016	ISU Camp Invention	21	3/23/2017	Deming Elementary/Trees	300
7/18/2016	ISU Camp Invention	25	3/28/2017	Union Hospital Environmental Svcs	2
7/19/2016	ISU Camp Invention	28	4/11/2017	Ernie Pyle Elem. School 4th Grade	34
7/20/2016	ISU Camp Invention	15	4/18/2017	Campus Ministries	20
7/21/2016	ISU Camp Invention	20	4/25/2017	Kimmie's Kids Daycare	17
7/22/2016	ISU Camp Invention	20	4/27/2017	ISU Student	1
8/3/2016	YMCA Summer Day Camp	38	5/1/2017	Dixie Bee Girl Scouts	27
8/3/2016	YMCA Summer Day Camp	23	5/9/2017	Fayette Elementary Kindergarten	61
8/3/2016	YMCA Summer Day Camp	40	5/16/2017	Parke Co Conservation Day 5th Gr	186
9/6/2016	Brazil Home School Group	55	6/22/2017	Dawn's Daycare	12
9/13/2016	Sugar Grove Elem. 5th Grade	61	6/23/2017	YMCA Summer Day Camp	50
9/13/2016	Terre Town Elementary 5th Grade	103	6/23/2017	YMCA Summer Day Camp	50
9/13/2016	Dixie Bee Elementary 5th Grade	102			
9/13/2016	Rio Grande Elementary 5th Grade	82			
9/13/2016	Hoosier Prairie Elem. 5th Grade	55			
9/14/2016	West Vigo Elementary 5th Grade	29			
9/14/2016	Meadows Elementary 5th Grade	45			
9/14/2016	DeVaney Elementary 5th Grade	81			
9/14/2016	Davis Park Elementary 5th Grade	59			
9/14/2016	Consolidated Elem. 5th Grade	63			
9/14/2016	Fayette Elementary 5th Grade	32			
9/14/2016	Lost Creek Elementary 5th Grade	92			
9/15/2016	Saint Patrick's Elem. 5th Grade	30			
9/15/2016	Riley Elementary 5th Grade	69			
9/15/2016	Ouabache Elementary 5th Grade	44			
9/15/2016	Fuqua Elementary 5th Grade	48			
9/15/2016	Franklin Elementary 5th Grade	48			
9/15/2016	Farrington Grove Elem. 5th Grade	66			
9/15/2016	Deming Elementary 5th Grade	49			
9/20/2016	ISU HRD 335	25			
11/11/2016	ISU EHS 210	28			
11/12/2016	Alpha Kappa Alpha	15			
12/1/2016	ISU AHS 111	31			
12/1/2016	ISU AHS 111	33			
12/7/2016	ISU COT Safety Class	11			

Attachment 12 - Erosion and Sediment Control Workshop Information



Please join us for a morning of informative and educational discussions from experts in the erosion and sedimentation prevention field at our fall contractor's workshop.

Discuss implementation of required pollution prevention plans, permits, and practices.

Complete your annual training obligations!

Attendees will learn more about maintenance and inspection requirements from State regulators.

Get your Rule 5 construction site prepared for winter!



Register Today! Space is limited.

Terre Haute Wastewater Utility, 3200 South State Road 63,
Terre Haute (812) 244-5500

November 18, 2016 Presenters:

Lori Gates

Sue Bock

D2 Land & Water

Vigo County Erosion & Sediment Control Workshop



Date: 11/16/2017

Time: 08:00 - 12:00

Terre Haute Wastewater Utility
3200 South State Road 63
Terre Haute, IN 47802

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Schedule of Events

Vigo County Erosion & Sediment Control Workshop

Thursday, November 16, 2017

Terre Haute Wastewater Utility

Time	Event	Other information
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	Sign in at the front desk	
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11:45 - 12:00	Workshop Survey	Please complete the workshop survey to help us plan our next training event!!



Terre Haute Wastewater Utility
3200 South State Road 63
Terre Haute, IN 47802

Phone: 812-244-5500
Fac: 812-232-5217
E-mail: alicia.barnard@terrehaute.in.gov

Attachment 13 - Construction & Post Construction Ordinance

FILED

OCT 24 2017

GENERAL ORDINANCE NO. 10, 2017

CITY CLERK

AN ORDINANCE AMENDING CHAPTER 9, ARTICLE 8. CONSTRUCTION SITE AND POST-CONSTRUCTION SITE STORM WATER CONTROL.

WHEREAS, the City of Terre Haute is a designated MS4 entity and is required by 327 IAC 15-13 (Rule 13) and a general NPDES permit to establish storm water quality measures to protect the public health, existing water uses, and aquatic biota; and,

WHEREAS, the Common Council finds it necessary to amend the *Code* from time to time to facilitate compliance with state and federal regulations to maintain Terre Haute's quality of water.

IT IS HEREBY ORDAINED by the Common Council of the City of Terre Haute as follows:

Section 1. *Terre Haute City Code*, Chapter 9, Article 8 is hereby amended with the addition of the underlined text and deletion of the stricken text as follows:

Sec. 9-160 Purpose/Intent.

a. Site Construction Control. The purpose of this Article is to establish requirements for storm water discharges from construction activities of one (1) acre or more so that the public health, existing water uses, and aquatic biota are protected. This Article establishes methods for controlling the introduction of pollutants into the municipal separate storm sewer system (MS4) in order to comply with the requirements of the National Pollutant Discharge Elimination System (NPDES) permit process. The objectives of this Article are:

1. To regulate construction activities disturbing more than one (1) acre of land as governed by 327 IAC 15-5; and

2. To require construction site operators to develop and implement a Construction Plan including a Storm Water Pollution Prevention Plan in order to receive a ~~Land Disturbance~~Building Permit from the City.

...

Sec. 9-161 Definitions.

The following definitions shall apply in the interpretation and enforcement of this Article. Additional definitions for terms contained within this Article are provided at Sec. 9-131.

a. **Authorized Enforcement Agency.** The City of Terre Haute, Indiana Wastewater Treatment Superintendent (MS4 Operator) his employees or designees.

b. **Best Management Practices (BMPs).** Structural or nonstructural practices, or a combination of practices, designed to act as effective, practicable means of minimizing the

impacts of development and human activities on water quality. Traditional structural BMPs, including extended detention dry ponds, wet pond, infiltration measures, sand filtration systems, etc., are now common elements of most new development projects. Structural BMPs rely heavily on gravitational settling and/or the infiltration of soluble nutrients through a porous medium for pollutant removal. Nonstructural BMPs, which may be used independently or in conjunction with structural BMPs range from programs that increase public awareness to prevent pollution, to the implementation of control-oriented techniques (such as bioretention and stormwater wetlands) that utilize vegetation to enhance pollutant removal and restore the infiltrative capacity of the landscape.

bc. Construction Plan. A representation of a project site and all activities associated with the project including a Storm Water Pollution Prevention Plan. 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.

ed. Construction Site Access. A stabilized stone surface at all points of ingress or egress to a project site for the purpose of capturing and detaining sediment carried by tires of vehicles or other equipment entering or exiting the project site.

de. Contractor and or Subcontractor. An individual or company hired by the project site or individual lot owner, their agent, or the individual lot operator to perform services in the project site.

ef. Developer. Any person financially responsible for construction activity; or an owner of property who sells or leases, or offers for sale or lease any lots in a subdivision.

fg. Erosion. Detachment and movement of soil, sediment, or rock fragments by water, wind, ice, or gravity.

gh. Erosion Control. Any measure that prevents erosion.

hi. Grading. The cutting and filling of the land surface to a desired slope or elevation.

j. Hotspot. An area where the land use or activities are considered to generate runoff with concentrations of pollutants in excess of those typically found in storm water.

ik. Impervious Surface. Surfaces, such as pavement and rooftops, that prevent the infiltration of storm water into the soil.

jl. Indiana Storm Water Quality Manual. A reference manual developed by the State of Indiana that provides guidance on planning principals, as well as criteria for specific structural and non-structural storm water management practices.

m. Infiltration Measure. Practices that capture and temporarily store the design storm volume before allowing it to infiltrate into the soil. These practices include infiltration trenches, infiltration basins, dry wells, and underground infiltration practices.

kn. Land Disturbance or Land Disturbing Activity. Any man-made change of the land surface, including removing vegetative cover that exposes the underlying soil, excavating, filling, transporting, and grading.

lo. Measurable Storm Event. A precipitation event that results in a total measured precipitation accumulation equal to or greater than, one-half inch (0.5”) of rainfall.

mp. Project Site. The entire area on which construction activity is to be performed.

nq. Project Site Owner. A person required to submit the NOI and NOT letters to the Authorized Enforcement Agency and IDEM and is required to comply with the provisions of this Article, including either of the following:

1. A developer; or
2. A person who has financial and operational control of construction activities and project plans and specifications, including the ability to make modifications to those plans and specifications.

or. Sediment. Solid material (both mineral and organic) that is in suspension, is being transported, or has been moved from its place of origin by air, water, gravity, or ice and has come to rest on the earth’s surface.

ps. Sediment Control. Measures that prevent sediment from leaving a project site.

qt. Storm Drainage System. 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, inlets, piped storm drains, pumping facilities, retention and detention basins, natural and human-made or altered drainage channels, reservoirs, and other drainage structures.

ru. Subdivision. Any land that is divided or proposed to be divided into lots, whether contiguous or subject to zoning requirements, for the purpose of sale or lease as part of a larger common plan of development or sale.

sv. Technical Review and Comment Form. A form issued by the Authorized Enforcement Agency stating that the Storm Water Pollution Prevention Plan (SWPPP) is adequate or stating revisions needed in the SWPPP.

uw. Trained Individual. An individual who is trained and experienced in the principles of storm water quality, including erosion and sediment control as may be demonstrated by state registration, professional certification, experience, or completion of coursework that enable the individual to make judgments regarding storm water control or treatment and monitoring.

x. Waters of the United States. A term used in federal regulations that defines all water bodies regulated as waters of the U.S. It includes:

1. All water which may be susceptible to use in interstate or foreign commerce;
2. All interstate waters, including interstate wetlands;
3. All other waters, such as intrastate lakes, rivers, streams (including intermittent streams), mud flats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds; the use, degradation, or destruction of which could affect interstate or foreign commerce including any such waters;
4. All impoundments of waters otherwise defined as waters of the U.S.;
5. Tributaries of waters identified in this section;
6. The territorial seas;
7. Wetlands adjacent to waters.

Sec. 9-162 Applicability.

a. This Article covers any new development or re-development construction site resulting in the disturbance of one (1) acre or more of total land area, and other types of development specified in Sec. 9-172 regardless of the disturbed area. Persons must meet the general permit rule applicability requirements under 327 IAC 15-2-3. This Article also applies to disturbances of less than one (1) acre of land that are part of a larger common plan of development or sale if the larger common plan will ultimately disturb one (1) or more acres of land within the corporate limits of the City.

...

Sec. 9-165 Responsibility of Construction Site Owner.

- a. The project site owner has the following responsibilities:
 1. Ensure that, prior to the initiation of any land disturbing activities, a sufficient Construction Plan is completed and submitted to the Authorized Enforcement Agency and approved by the Authorized Enforcement Agency as discussed in Sec. 9-166 of this Article.
 2. Complete and submit to the Authorized Enforcement Agency and the Indiana Department of Environmental Management (IDEM) a sufficient Notice of Intent (NOI) letter and notification from Authorized Enforcement Agency indicating the Construction Plans are sufficient to comply with the requirements of 327 IAC 15-5-5.
 3. Make application for a ~~Land Disturbance~~ Building Permit and any other permits required by the City in accordance with procedures established by the City.
 4. Ensure compliance with this Article during:

- (a) the construction activity; and
 - (b) implementation of the Construction Plan.
5. Ensure that all persons engaging in construction activities on a permitted project site comply with the applicable requirements of this Article and the approved Construction Plan.
6. Provide the Authorized Enforcement Agency and IDEM with a sufficient Notice of Termination (NOT) letter, in compliance with the requirements of 327 IAC 15-5-8.
- b. For off-site construction activities that provide services (for example, road extensions, sewer, water, and other utilities) to a permitted project site, these off-site activity areas must be considered a part of the permitted project site when the activity is under the control of the project site owner.
 - c. For an individual lot where land disturbance is expected to be one (1) acre or more and the lot lies within a project site permitted under this rule, the individual lot owner shall:
 - 1. Ensure that, prior to the commencement of any land disturbing activity, a sufficient Construction Plan is completed and submitted to and approved by the Authorized Enforcement Agency;
 - 2. Complete his or her own Notice of Intent (NOI) letter and submit it to the Authorized Enforcement Agency and IDEM;
 - 3. Apply for a ~~Land Disturbance~~ Building Permit and any other permits required by the City in accordance with the procedures established by the City.
 - d. For an individual lot where the land disturbance is less than one (1) acre and the lot lies within a project site permitted under this rule, submittal of a Notice of Intent (NOI) letter and Construction Plan shall not be required. The individual lot operator shall:
 - 1. Comply with the provisions and requirements of the plan developed by the project site owner in accordance with the procedures established by the City;
 - 2. Comply with the provisions set forth in Sec. 9-168 of this Article; and
 - 3. Apply for a ~~Land Disturbance~~ Building Permit and any other permits required by the City in accordance with the procedures established by the City.

Sec. 9-166 Construction Plan Submittal, Review and Approval.

- a. A complete Storm Water Pollution Prevention Plan and erosion and sediment control plan shall be submitted to the Authorized Enforcement Agency for approval. At the time of submittal, the date and time will be recorded.
- b. The sufficiency of the Construction Plan shall be based upon Rule 5 regulations and₁ the design criteria described in the current City of Terre Haute ~~Construction Standards and~~

Specifications, and the design criteria described in the current Indiana Storm Water Quality Manual, as revised and amended from time to time.

c. Each applicant shall bear the name(s) and address(es) of the owner or developer of the project site, and of any consulting firm retained by the applicant together with the name of the applicant's principal contact at such firm.

d. Each application shall include a statement that any land clearing, construction or development involving the movement of earth shall be in accordance with the Storm Water Pollution Prevention Plan. The Authorized Enforcement Agency will review each application for a Rule 5 permit to determine its conformance with the provisions of this regulation and Rule 5. Within twenty-eight (28) days after receiving an application, the Authorized Enforcement Agency shall, in writing:

1. Approve the erosion and sediment control plan and SWPPP subject to such reasonable conditions as may be necessary to secure substantially the objectives of this regulation, and issue the Technical Review and Comment Form stating that the "Plan is Adequate";

2. Provide a Technical Review and Comment Form stating that the "Plan is Deficient" and indicating the reason(s) and procedure for submitting a revised application and/or submission.

e. The Technical Review and Comment Form from the Authorized Enforcement Agency stating that the "Plan is Adequate" and a ~~Land Disturbance~~ Building Permit shall be obtained prior to the initiation of any land disturbing activities.

f. Failure of the Authorized Enforcement Agency to act on an original or revised application within twenty-eight (28) days of receipt shall authorize the applicant to proceed in accordance with the plans as filed unless such time is extended by written agreement between the applicant and the Authorized Enforcement Agency.

g. After receiving a Technical Review and Comment Form stating that the "Plan is Adequate", if revisions to the Construction Plan require a change in measures appropriate to control the quality or quantity of storm water runoff, then revised plans must be submitted to the Authorized Enforcement Agency and receive the approval of the Authorized Enforcement Agency prior to implementation of the modified plan.

h. The applicant shall apply for and receive a ~~Land Disturbance~~ Building Permit from the Authorized Enforcement Agency and file a performance bond, letter of credit or other improvement surety in an amount deemed sufficient by the City. The surety shall, at a minimum, cover all costs of improvements, the repair of improvements, landscaping maintenance and inspection costs.

i. After receiving a Technical Review and Comment Form stating that the "Plan is Adequate" from the Authorized Enforcement Agency, and the ~~Land Disturbance~~ Building Permit as well as any other permits required by the City, and at least forty-eight (48) hours prior to the

start of construction, the following shall be submitted to the Authorized Enforcement Agency and IDEM:

1. Notice of Intent (NOI) Form;
2. A copy of the Technical Review and Comment Form stating that the “Plan is Adequate”; and
3. Proof of Publication as required by 327 IAC 15-5-5(9).

j. The project site owner must submit a Notice of Termination (NOT) letter to IDEM and transmit a copy of the NOT letter to the Authorized Enforcement Agency when all land disturbing activities have been completed, the entire project site has been stabilized and all temporary erosion and sediment control measures have been removed.

k. Upon receipt of the NOT, the Authorized Enforcement Agency shall make a final inspection of the site. Upon satisfaction that all conditions have been addressed the project site owner shall submit a written Surety Release Request to the City.

Sec. 9-167 General Requirements for Storm Water Quality Control.

All storm water quality measures and erosion and sediment controls necessary to comply with this Article must be implemented in accordance with the Construction Plan and be sufficient to satisfy the following requirements:

a. Sediment-laden water which otherwise would flow from the project site shall be treated by erosion and sediment control measures appropriate to minimize sedimentation.

b. Appropriate measures shall be implemented to minimize or eliminate wastes or unused building materials, including garbage, debris, cleaning wastes, wastewater, concrete truck washout, and other substances from being carried from a project site by run-off or wind. Identification of areas where concrete truck washout is permissible must be clearly posted at appropriate areas of the site. Wastes and unused building materials shall be managed and disposed of in accordance with all applicable statutes and regulations.

c. A stable construction site access shall be provided at all points of construction traffic ingress and egress to the project site.

d. Public or private roadways shall be kept cleared of accumulated sediment that is a result of run-off or tracking. Bulk clearing of sediment shall not include flushing the area with water. Cleared sediment shall be redistributed or disposed of in a manner that is consistent with all applicable statutes and regulations.

e. Storm water run-off leaving a project site must be discharged in a manner that is consistent with applicable state or federal law.

f. The project site owner shall post a notice near the main entrance of the project site. For linear project sites, such as a pipeline or highway, the notice must be placed in a

publicly accessible location near the project field office. The notice must be maintained in a legible condition and contain the following information.

1. A copy of the completed NOI letter and the NPDES permit number, where applicable.
2. A copy of the ~~Land Disturbance~~Building Permit issued by the City.
3. Name, company name, telephone number, e-mail address (if available), and address of the project site owner or a local contact person.
4. Location of the Construction Plan if the project site does not have an on-site location to store the plan.

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Sec. 9-171 Construction Site Inspection.

- a. A self-monitoring program by the project site owner is required during construction of any project regulated by this Article. A trained individual employed or retained by the project site owner shall prepare and maintain a written evaluation of the project site by the end of the next business day following each measurable storm event and at a minimum of one (1) time per week.
- b. The evaluation must address the maintenance of existing storm water quality measures to ensure they are functioning properly; and identify additional measures necessary to remain in compliance with all applicable statutes and rules.
- c. Written evaluation reports must include the following:
 1. the name of the individual performing the evaluation;
 2. the date of the evaluation;
 3. problems identified at the project site; and
 4. details of corrective actions recommended and completed.
- c. All evaluation reports for the project site must be made available to the Authorized Enforcement Agency, IDEM, or the United States Environmental Protection Agency within forty-eight (48) hours of a request.
- d. All persons engaging in construction activities on a project site must comply with the Storm Water Pollution Prevention Plan, this Article, Rule 5, and the City of Terre Haute ~~Construction-Standards and Specifications.~~

e. The Authorized Enforcement Agency will perform inspections and provide recommendations to evaluate the installation, implementation, and maintenance of control measures and management practices at any project site involved in construction activities. Construction project sites will be prioritized based on the nature and extent of the construction activity, topography, and the characteristics of soils and receiving water quality.

f. If after a recommendation is provided to the project site owner, corrective action is not taken, the Authorized Enforcement Agency will pursue enforcement pursuant to Sec. 9-173175.

Sec. 9-172 Post-Construction Controls for New Development or Redevelopment.

a. On areas that undergo new development or redevelopment, site construction resulting in disturbance of (1) acre or more total land area, the project site owner must submit to the Terre Haute Department of Engineering, a Storm Water Pollution Prevention Plan (SWPPP) that would show placement of appropriate post construction BMP(s) from a pre-approved list of BMPs specified in the Terre Haute Standards and Specifications. The SWPPP submittal shall include an Operation and Maintenance Manual for all post construction BMP(s) included in the project and a notarized Maintenance Agreement, consistent with the sample agreement provided in the Terre Haute Standards and Specifications, providing for the long-term maintenance of those BMPs, both of which shall be recorded with the deed for the property on which the project is located. The noted BMPs must be designed, constructed, and maintained according to the guidelines provided or referenced in the City of Terre Haute Standards and Specifications to provide an 80% removal rate of Total Suspended Solids (TSS) at the 50-125 micron range. Practices other than those specified in the pre-approved list may be utilized. However, the burden of proof, as to whether the performance and ease of maintenance of such practices will be according to the guidelines provided in the Terre Haute Standards and Specification, would be placed with the applicant. Details regarding the procedures and criteria for consideration of acceptance of such BMPs are provided in the Terre Haute Standards and Specifications. The Terre Haute Department of Engineering shall have full technical and administrative approval authority on the application and design of all post construction BMPs, conditions, definitions, and submittal requirements of construction plans and specifications and related documents as defined in 327 IAC 15-5-6.5(a)(8).

~~On areas that undergo new development or redevelopment, site construction resulting in disturbance of one (1) acre or more total land area, post construction control measures in the form of structural and/or non-structural best management practices are required. Post-construction storm water pollutant loading will be addressed through the Six (6) Minimum Control Measures, as provided in the MS4 Program, so that preconstruction loadings will not be exceeded. Post-construction storm water Best Management Practices (BMPs) shall follow Indiana's Storm Water Quality Manual as a guidance document. It is the goal of the Authorized Enforcement Agency to have full technical and administrative approval authority on the application and design of all post construction BMPs, conditions, definitions, and submittal requirements of Construction Plans and specifications and related documents as defined in 327 IAC 15-5-6.5(a)(8). Additionally, all post-construction storm water Best Management Practices, structural and/or nonstructural, shall be operated and maintained by the property owner in the manner approved by the City or its agents.~~

b. Any development or redevelopment, regardless of disturbed area, discharging to infiltration measures shall be required to install pretreatment BMPs in accordance with the Terre Haute Standards and Specifications.

c. Hot spot developments which produce higher levels of pollutants and/or present a higher potential risk for spills, leaks, or illicit discharges regardless of the disturbed area may be required to install pretreatment BMPs at the discretion of the Authorized Enforcement Agency

d. Gasoline outlets and refueling areas must install appropriate practices to reduce lead, copper, zinc, and other hydrocarbons in stormwater runoff. These requirements will apply to all new facilities and existing facilities that replace their tanks.

Sec. 9-173 Post Construction Storm Water Quality Submittals

a. All planned post construction BMPs shall be indicated on the submitted plans with design calculations included. The calculation methods as well as the type, sizing, and placement of all BMPs shall meet the design criteria, standards, and specifications outlined in the Indiana Stormwater Quality Manual and/or the City of Terre Haute Standards and Specifications.

b. Written operational and maintenance plans shall be submitted for all planned structural post construction BMPs to ensure long-term maintenance and functionality.

Sec. 9-174 Post Construction Site Inspection and Maintenance.

a. All post construction BMPs shall be inspected and maintained in good condition by the owner, in accordance with the Terre Haute Standards and Specifications, the Indiana Storm Water Quality Manual, and/or the post construction operations and maintenance manual to provide the intended storm water quality benefits. Following construction completion, maintenance of BMPs shall be the long-term responsibility of the facility's owner.

b. Post construction BMPs shall not be altered, revised, or replaced except in accordance with the approved plans, or in accordance with approved amendments or revisions to the plans.

b. The Authorized Enforcement Agency have the authority to perform long-term, post construction inspection of all public or privately owned BMPs. The inspections will follow the operation and maintenance procedures included in the Terre Haute Standards and Specifications, the Indiana Stormwater Quality Manual, or the operation and maintenance plan submitted with the approved plans for each specific BMP. The inspection will cover physical conditions, available water quality storage capacity, and operational condition of key facility elements. Noted deficiencies and recommended corrective action will be notified by the Authorized Enforcement Agency and will be required to take all necessary measures to correct such deficiencies. If the owner fails to correct the deficiencies within the allowed time period, as specified in the notification letter, the Authorized Enforcement Agency will pursue enforcement actions.

Sec. 9-173175 Enforcement.

a. Enforcement of this Article shall be subject to the severity of the infraction and the construction site operator's efforts to comply. The Authorized Enforcement Agency shall reserve the right to interpret enforcement on a case by case basis. Tiered enforcement will be practiced at the Authorized Enforcement Agency's discretion. The tiered enforcement may include:

1. Verbal warning to the construction site operator to make corrections.
2. Written warning to the construction site operator to make corrections within a specified period of time. The period of time shall take into account issues such as the severity of the problem, pending weather, seasonal conditions, and the level of effort necessary to correct the problem.
3. Warning of Non-Compliance with directions to the construction site operator that site conditions require immediate action.

1. Stop Work Order.

5. Revocation of ~~Land Disturbance~~Building Permit.

b. If abatement of a violation and/or restoration of affected property is required, the notice shall set forth a deadline within which such remediation or restoration must be completed. Said notice shall further advise that, should the violator fail to remediate or restore within the established deadline, the work will be done by a designated governmental agency or a contractor and the expense thereof shall be charged to the violator.

Sec. 9-174176 Injunctive Relief.

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Sec. 9-175177 Compensatory Action.

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Sec. 9-176178 Civil Penalty.

...

Sec. 9-177179 Violations Deemed a Public Nuisance.

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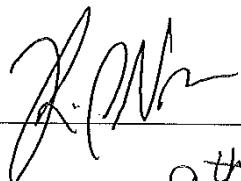
Sec. 9-178180 Remedies Not Exclusive.

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Section 2. All ordinances or parts of ordinances in conflict with the provisions of this ordinance are hereby repealed.

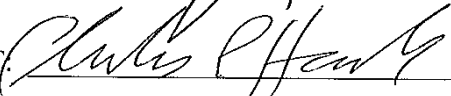
Section 3. If any section, clause, provision, or portion of this ordinance is adjudged unconstitutional or invalid by a court of competent jurisdiction, the remainder of this ordinance shall not be affected thereby.

Section 4. This ordinance shall be in full force and effect from and after its passage by the Common Council of Terre Haute, Indiana and approval of the Mayor and publication as required by law.

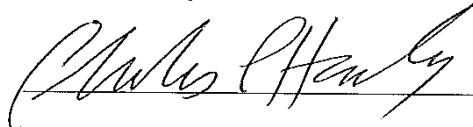
Introduced by:  Karrum Nasser, Councilman

Passed in open Council this 9th day of November, 2017.


 Karrum Nasser, President

ATTEST:  Charles P. Hanley, City Clerk

Presented by me to the Mayor this 13th day of November, 2017.

 Charles P. Hanley, City Clerk

Approved by me, the Mayor, this 13th day of NOVEMBER, 2017.

 Duke A. Bennett, Mayor

ATTEST:  Charles P. Hanley, City Clerk

Attachment 14 - Municipal Facility Inspection & Training

Annual Inspection Dates
MS4 Municipal Facilities
Permit period 11/5/13 to 11/4/18
Terre Haute Co-Permit INR040092

FACILITY	2013	2014	2015	2016	2017	2018
Terre Haute - Wastewater	<11/05/13	11/17/14	07/31/15	03/02/16	01/13/17	
Terre Haute - Street Dept	11/07/13	12/11/14	08/25/15	07/21/16	03/07/17	
Terre Haute - Transit Dept	11/07/13	12/11/14	08/25/15	07/21/16	03/07/17	
Terre Haute Fire Headquarters	<11/05/13	12/19/14	08/13/15	09/01/16	05/23/17	
Terre Haute Fire Training Center	<11/05/13	12/19/14	08/13/15	09/01/16	05/23/17	
Terre Haute Fire Station #2	<11/05/13	12/19/14	08/13/15	09/01/16	Not required	
Terre Haute Fire Station #3	<11/05/13	12/19/14	08/13/15	09/01/16	Not required	
Terre Haute Fire Station #5	<11/05/13	12/19/14	08/13/15	09/01/16	Not required	
Terre Haute Fire Station #6	<11/05/13	12/19/14	08/13/15	09/01/16	Not required	
Terre Haute Fire Station #7	<11/05/13	12/19/14	08/13/15	09/01/16	Not required	
Terre Haute Fire Station #8	<11/05/13	12/19/14	08/13/15	09/01/16	Not required	
Terre Haute Fire Station #9	<11/05/13	12/19/14	08/13/15	09/01/16	05/23/17	
Terre Haute Fire Station #11	<11/05/13	12/19/14	08/13/15	09/01/16	Not required	
Terre Haute - Dobbs Park	<11/05/13	12/12/14	08/11/15	08/25/16	05/10/17	
Terre Haute - Deming Park	<11/05/13	12/12/14	08/11/15	08/25/16	05/10/17	
Terre Haute - Rea Park	<11/05/13	12/12/14	08/11/15	08/25/16	05/10/17	
Terre Haute - Hulman Links	<11/05/13	12/12/14	08/11/15	08/25/16	05/10/17	
Terre Haute - Highland Lawn	<11/05/13	12/12/14	08/11/15	08/25/16	05/10/17	
Vigo Co. - North Highway Dept	<11/05/13	12/22/14	08/27/15	09/08/16	06/06/17	
Vigo Co. - South Highway Dept	<11/05/13	12/22/14	08/27/15	09/08/16	06/06/17	
Vigo Co. - Fowler Park	<11/05/13	12/18/14	08/18/15	08/04/16	05/02/17	
Vigo Co. - Prairie Creek Park	<11/05/13	12/18/14	08/18/15	08/04/16	05/02/17	
Vigo Co. - Hawthorn Park	<11/05/13	12/18/14	08/18/15	08/04/16	05/02/17	
Seelyville - Maintenance shop	11/25/13	04/17/14	09/01/15	12/07/16	04/25/17	
Rose-Hulman Institute of Technology	12/25/13	04/17/14	09/01/15	05/31/16	03/14/17	
Indiana State University	11/22/13	10/16/14	09/03/15	12/08/16	06/01/17	
Ivytech Community College	<11/05/13	10/21/14	09/08/15	12/08/16	Not completed	
West Terre Haute - Street Dept	<11/05/13	12/17/14	08/20/15	07/28/16	03/21/17	
West Terre Haute - Wastewater	<11/05/13	12/17/14	08/20/15	07/28/16	03/28/17	

Annual Training Dates
MS4 Municipal Facilities
Permit period 11/5/13 to 11/4/18
Terre Haute Co-Permit INR040092

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Terre Haute - Wastewater	<11/05/13	07/15/14	02/03/15	07/14/16	12/29/17	
Terre Haute - Street Dept	11/07/13	12/11/14	03/12/15	12/08/16	12/29/17	
Terre Haute - Transit Dept	11/07/13	12/11/14	03/12/15	12/08/16	12/29/17	
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Terre Haute Fire Station #2	<11/05/13	12/30/14	08/13/15	09/01/16	05/25/17	
Terre Haute Fire Station #3	<11/05/13	12/30/14	08/13/15	09/01/16	05/25/17	
Terre Haute Fire Station #5	<11/05/13	12/30/14	08/13/15	09/01/16	05/25/17	
Terre Haute Fire Station #6	<11/05/13	12/30/14	08/13/15	09/01/16	05/25/17	
Terre Haute Fire Station #7	<11/05/13	12/30/14	08/13/15	09/01/16	05/25/17	
Terre Haute Fire Station #8	<11/05/13	12/30/14	08/13/15	09/01/16	05/25/17	
Terre Haute Fire Station #9	<11/05/13	12/30/14	08/13/15	09/01/16	05/25/17	
Terre Haute Fire Station #11	<11/05/13	12/30/14	08/13/15	09/01/16	05/25/17	
Terre Haute - Dobbs Park	<11/05/13	12/12/14	04/02/15	12/09/16	12/29/17	
Terre Haute - Deming Park	<11/05/13	12/12/14	04/02/15	12/09/16	12/29/17	
Terre Haute - Rea Park	<11/05/13	12/12/14	04/02/15	12/09/16	12/29/17	
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Terre Haute - Highland Lawn	<11/05/13	12/12/14	04/02/15	12/09/16	12/29/17	
Vigo Co. - North Highway Dept	<11/05/13	10/23/14	10/22/15	10/20/16	10/26/17	
Vigo Co. - South Highway Dept	<11/05/13	10/23/14	10/22/15	10/20/16	10/26/17	
Vigo Co. - Fowler Park	<11/05/13	11/06/14	11/17/15	Not completed	Not completed NOV ISSUED 2/5/18	02/08/18
Vigo Co. - Prairie Creek Park	<11/05/13	11/06/14	11/17/15	Not completed	Not completed NOV ISSUED 2/5/18	02/08/18
Vigo Co. - Hawthorn Park	<11/05/13	11/06/14	11/17/15	Not completed	Not completed NOV ISSUED 2/5/18	02/08/18
Seelyville Water & Maintenance	<11/05/13	02/11/14 04/22/14	02/10/15 03/19/15	12/07/16	08/00/17	
Rose-Hulman	<11/05/13	12/03/14	10/22/15	11/01/16	10/31/17	
Indiana State University	<11/05/13	06/30/14	Not completed	12/12/16	12/11/17	
Ivytech Community College	<11/05/13	11/17/14	08/28/15	03/01/16 09/01/16	03/01/17 09/01/17	
West Terre Haute - Street Dept	<11/05/13	12/17/14	12/14/15	Undocumented	Undocumented	
West Terre Haute - Wastewater	<11/05/13	12/30/14	02/03/15	07/14/16	12/29/17	