



**Environmental
Protection Agency**

John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

July 10, 2012

RE: PORTAGE COUNTY
CITY OF KENT
PERMIT NO. 3GQ00076*BG
MUNICIPAL STORM WATER PROGRAM
INSPECTION

Ms. Jennifer Barone
Community Development Director
City of Kent
930 Overholt Road
Kent, OH 44240

Dear Ms. Barone:

Ohio EPA has completed an audit for a portion of your municipal storm water program. Our audit primarily focused on implementation of minimum control measure (MCM) #4: Construction Site Storm Water Runoff Control and MCM #5: Post-Construction Storm Water Management in New Development and Redevelopment. This program is a requirement of the Ohio EPA General Storm Water National Pollutant Discharge Elimination System (NPDES) Permit for Small Municipal Separate Storm Sewers Systems (MS4s) OHQ000002 and Ohio Administrative Code 3745-39.

On June 14, 2012, Ohio EPA met with you and other representatives of the City of Kent to determine compliance with the NPDES permit and the Storm Water Management Plan (SWMP) submitted by the City in March 2003. In performing this audit, Ohio EPA implemented a modified version of the Municipal Storm Water Program Evaluation Guide developed by the United States Environmental Protection Agency.

Attached are the Municipal Storm Water Program Evaluation, File Review, and Field Inspection Worksheet(s) completed for your community. Please review these documents in detail to determine specific elements where your construction and post-construction programs need improvement. In addition, you will find comments suggesting ways to improve your MS4 program. The following is a summary of our audit findings:

Violations

- **Failure to update construction and post-construction ordinance(s) within two years of permit renewal.** This is a violation of Part III.B.4.a.i and Part III.B.5.c of the Ohio EPA General Storm Water NPDES permit #OHC000002. The City was required to revise their ordinances to be equivalent with the technical requirements set forth in the Ohio EPA NPDES General Storm Water Permit for Construction Activities #OHC000003. This was to be completed within two years of when the City's coverage under the MS4 general permit was granted, i.e., by June 3, 2011. Please provide the EPA with a plan of action and time frame for updating the ordinances.
- **Failure to ensure the implementation of post-construction best management practices (BMPs) on all new construction and redevelopment projects that disturb one (1) or more acres (including those less than one (1) acre that are part of a**

larger common plan of development or sale). This is a violation of Part III.B.5.a of the NPDES permit. This violation was noted for projects associated with the downtown redevelopment project and the Riverbend East Subdivision Phase V project. No post-construction BMPs were provided for the Cambria Hotel & Conference Center and no post-construction BMPs were indicated on the Storm Water Pollution Prevention Plans (SWP3) for the City of Kent's Project (E. Erie/S. Depeyster/Alley 5/ Parking Lot). This also indicates that the City of Kent is not requiring municipal construction projects to comply with City storm water ordinances. As the entity with control over the master plan for the downtown redevelopment project, the City of Kent must ensure that all parties, including the City, comply with post construction BMP requirements.

- **Failure to develop a program to ensure adequate long-term operation and maintenance (O&M) of post-construction BMPs.** This is a violation of Part III.B.5.d and Part III.B.5.f of the Ohio EPA General Storm Water NPDES permit # OHQ000002. The City must develop a program to ensure the long-term maintenance of all publicly-owned post-construction BMPs and those privately-owned post-construction BMPs within developments that obtained NPDES permits on or after April 21, 2003. Ohio EPA recommends that each facility be inspected at least once a year either by the City or the party responsible for long-term maintenance. The City is working towards compliance with this requirement, but they have not finalized their O&M standards, long-term maintenance agreements, or the inspection forms. The City's code requires the submittal of an inspection report from those responsible for maintaining privately owned post construction BMP's annually; however, the City has yet to collect any, and has never sent out any letters to remind those responsible that it is required.
- **Failure to escalate enforcement to achieve compliance with the local construction site ordinance.** This is a violation of Part III.B.4.a.vi of the Ohio EPA General Storm Water NPDES permit # OHQ000002. Our file review and interview revealed that the City is deficient in written Notices of Violation under City of Kent letterhead for non-compliance with Chapter 1199 (e.) of the municipal code (Erosion Controls). The City was only able to provide documentation of e-mails between the Community Development Engineer and contractors describing erosion and sediment control issues; none of which contained specific code violations or a specific timeframe for corrective action to be completed. NOV's for non-compliance are expected to exist, whereas e-mails simply won't have the same impact. Stop work orders and court actions are also permitted by Chapter 1199 but are rarely implemented. Yet, during the field inspections for this audit, as well as other inspections conducted by the Ohio EPA, personnel noted many compliance issues that would require an enforcement action. The City must develop an enforcement escalation protocol so as to provide inspectors and the Community Development Engineer with a clear policy on when to take enforcement to the next level and how that is to be achieved. The City also needs to ensure written inspection reports are sent to the legal entity, which holds NPDES permit-coverage, and the entity responsible for day-to-day management of site operations such as installation and maintenance of erosion and sediment controls. Ohio EPA suggests that the inspectors develop a form that could be used during the inspection and then **left with the contractor** for written notification of violations or deficiencies, or, the City may attach a cover letter to the inspector's report that notifies site operators what codes have been violated and establishes a deadline for corrective actions and compliance.
- **Failure to submit a Notice of Termination (NOT) within 45 days of reaching final stabilization on municipal construction projects.** This is a violation of Part IV.A of the Ohio EPA General Storm Water NPDES permit #OHC000003. Our records show

that the City of Kent still has an active permit under the Ohio EPA General Storm Water NPDES Permit for Construction Activities at Stonewater (AKA Admore Drive) but indicated during the interview that the project was completed and has reached final stabilization. Please submit an NOT for this project immediately.

Deficiencies

- The City's ordinance does not establish a minimum threshold for active construction sites subject to the City's storm water codes, and requires the City to perform inspections not only once per month, but after a half inch (0.5") or greater rainfall. The City indicates that they do not have the adequate resources to "keep up" with these standards. The City recently began using engineering technicians to perform construction site inspections in response. If the City does not find that this addresses the issue, Ohio EPA recommends that the City amend its construction site inspection program to match Ohio EPA requirements. The NPDES permit only requires the City to inspect active construction sites once per month and only those sites where the larger common plan of development or sale disturbs one (1) or more acres of land. The City may also wish to amend the Storm Water Management Plan to allow less frequent inspections on uncompleted, yet inactive sites as discussed during the audit and add a definition of "construction activities" to the storm water ordinance.
- The City currently does not have any sort of database to track active construction sites and post construction BMP's within the City (other than an Excel spreadsheet). It is recommended that the City review software to track such information for easy access by inspectors. However, the City is currently working on establishing a database for tracking post construction BMP's within the City and should also be able to map all of their privately owned post construction BMP's once the database is up and running.
- The City has not been verifying the submission of Individual Lot Notice of Intent (NOI) as part of the plan review and building permit process. It is very important that NOI's are submitted while individual lots are being built since it is very common that the subdivision's NOI does not cover this activity (since typically individual lots are sold to other developers after the subdivision in its entirety is completed). Although an individual lot might typically disturb less than an acre of land, it is part of a larger uncompleted, yet common plan of development or sale, and thus requires NPDES permit coverage.
- Engineering technicians require more training on sediment and erosion control as well as post-construction BMP design and long-term maintenance to ensure the approved SWP3s are being properly implemented. Our field observations found compliance issues such as failure to establish a sediment storage volume within sediment basins during construction, as well as failure to delay placement of bioretention soil mix in bioretention cells until upslope areas are stabilized. The City inspector did not demonstrate knowledge about these key issues and no e-mail or other City documentation was found citing these concerns. As the knowledge and experience of the Engineering technicians grows, the City may want to consider authorizing them to immediately cite certain non-compliance issues. This will allow more direct communication with the site operators and more timely corrective action.
- It is very important that the Community Development Engineer fully understands the meaning of a larger common plan of development or sale, and can begin to review storm water plans in a more cohesive manner. For example, it was observed during the file review process that the Downtown Redevelopment Project (consisting of four (4) separate smaller projects) is technically part of a larger common plan of development or

sale, and combined disturbed over ten (10) acres of land. However, the plans were reviewed separately rather than in a cohesive matter, and post construction BMPs were not adequate enough to meet the requirements of redevelopment established in the NPDES Permit #OHC000003 under section III.G.2.e.

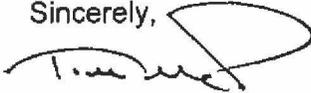
- The City currently does not provide minimum inspection, maintenance and reporting requirement language in its contracts with third party inspectors utilized on municipal construction projects. It is essential that third party inspectors (when applicable) conduct inspections and report stormwater related issues in compliance with the City's NPDES permit for the construction project. Ohio EPA recommends that these reports be provided to the Community Development Engineer who can then take enforcement action as needed.
- Although the City has been providing numbers to Ohio EPA in the Annual Report, it does not appear that the City has a system to track construction site inspection findings, enforcement actions, complaints, or NOI submittal to accurately generate the numbers reported to Ohio EPA. Please clarify how the City has been generating the numbers reported to Ohio EPA required under Part III.B.4.d of the NPDES permit, and how the City plans to generate these numbers in the future.
- The City's storm water public education and outreach program should include more than one mechanism and target at least five (5) different storm water themes over the permit term. At least one of the themes should *target the development community*, as required by Part III.B.1.c of the NPDES permit. This is a reminder that this requirement must be met no later than January 29, 2014.
- In our review of the University Edge project, it appears that the City did not enforce Chapter 1201 of the municipal code: Riparian and Wetland Buffers. A stream and wetland complex appears to exist on the south and southeast sides of the site. Site development has resulted in an encroachment within twenty-five feet (25') of the stream in the vicinity of the storm water management pond. Per Chapter 1201.02, all watercourses draining an area less than one-half (1/2) of a square mile and having a defined bed and bank are subject to a minimum of a twenty-five foot (25') setback on both sides of the watercourse. If a variance from Chapter 1201 was provided to the developer, please submit a copy with your response as well as the rationale for granting the variance. If no variance to Chapter 1201 exists, please describe the corrective action that you will take to ensure future compliance with Chapter 1201 of the municipal code and the mitigation that you will require for the infringement at the University Edge development. If the City does not believe that an infringement has occurred, please provide documentation supporting your position.
- Although the City does have a low-impact development code, it is simply a design alternative and is not required. Ohio EPA expects future storm water regulations to require a certain amount of on-site storm water infiltration, capture and reuse. Low-impact development codes will help you meet these requirements. The City should consider strengthening the low-impact development code and integrating it into standards such as strict design and building codes. Further, the City should more aggressively promote the existing code on projects such as the Downtown Redevelopment. Although some LID practices are planned, they have not been incorporated to the extent possible to meet post-construction requirements. LID practices that could have been incorporated into the design, had the City asked, include green roofs, sidewalk or parking lot bioretention, cisterns and other rainwater harvesting techniques.

- Although the City has a number of codes that encourage balanced growth, there is little in the code to incentivize it or make it the standard requirement. Codes that can be improved to make them more friendly to storm water program goals include, but are not limited to: use of low-maintenance native vegetation, identifying areas where conservation development and low-impact development practices must be implemented, providing incentives for infill development and redevelopment, increasing vertical development limits, and providing incentives for development and redevelopment along corridors with public transportation, walking and biking options.
- The City has not yet completed mapping of the entire MS4 system. As a reminder, the City must complete mapping within five (5) years of NPDES permit renewal, i.e., June 3, 2014.

Please review my comments and provide me with a letter of response indicating the actions you will take to address my concerns. **Your response should be received no later than August 10th, 2012.** Please note that this response does not replace the requirement to submit an Annual Report. Your annual report for 2012 will be due on April 1, 2013.

If you have any questions, please contact me at (330) 963-1128 or timothy.mcparland@epa.state.oh.us or John Kwolek, Ohio EPA, District Engineer, Division of Surface Water at (330) 963-1251 or john.kwolek@epa.state.oh.us.

Sincerely,



Tim McParland
Assistant to the District Engineer
Division of Surface Water

TP/cs

cc: Gene Roberts, Service Director, City of Kent w/ Enclosure
Jerry Fiala, Mayor, City of Kent w/ Enclosure
ec: Dan Bogoevski, Ohio EPA, DSW, NEDO
John Kwolek, Ohio EPA, DSW, NEDO

Attachments: Enclosure

Municipal Storm Water Program Evaluation

Construction and Post-Construction Component Worksheet

Date of Evaluation	June 14, 2012
Evaluator Name, Title	Dan Bogoevski, DSW, NEDO John Kwolek, DSW, NEDO Tim McParland, DSW, NEDO
MS4 Permittee	City of Kent (3GQ00076*BG)

Instructions: Use this worksheet as a guide for questioning MS4 staff and reviewing applicable documents. Keep in mind that additional questions may be necessary based on local regulations, MS4 permit requirements, implementation strategies, or water quality issues. Remember to obtain copies of any applicable documents or files which may assist in writing the MS4 evaluation report.

Staff Interviewed		
Name	Department/Agency	Phone Number/Email
Gene Roberts Service Director	Service Department	(330) 678-8105 Roberts@kent-ohio.org
Pat Homan Engineering Technician	Engineering Department	(330) 678-8106 homan@kent-ohio.org
Jennifer Barone Community Dev. Dir.	Planning & Zoning Dept.	(330) 676-7309 barone@kent-ohio.org

Ordinance/Legal Authority	
Interview Questions	Response
Construction Ordinance	
Ordinance used to require storm water BMPs at construction sites?	YES
Name and/or code section(s)	1199: Erosion Controls (Sets Standards) 1193: Resource Management Plans (Requires the Storm Water Management Plan)
Date initially enacted:	3/3/2004
Threshold for coverage (e.g., 1 acre, 100 cubic yards, etc.) <i>NOTE: 1 acre is minimum requirement.</i>	There is no threshold for construction. Disturbance of 1 or more acres (for post-construction only).

Ordinance/Legal Authority	
Interview Questions	Response
<p>Exclusions from coverage allowed: ***See Note 1 on Pg.11</p>	<p>The Community Development Engineer may be able to exclude sites from coverage on a case-by-case basis. Anything exempt from filing a Development Permit is also exempt from the standards of the City's ordinances with respect to Stormwater. This may include agricultural silvicultural, and oil or gas exploration activities. <i>It is recommended that the language in the City's Ordinances be updated to reflect the exclusions from coverage allowable by the Community Development Engineer to avoid any confusion.</i></p>
<p>Does your construction program include the following types of construction activity:</p> <p>Single-family residential?</p> <p>Multi-family residential?</p> <p>Commercial development?</p> <p>Institutional development (schools or government facilities)?</p> <p>Mixed-use development?</p> <p>Non-subdivided development?</p> <p>Non-exempt construction on agriculturally-zoned lands? (barn on a farm)</p> <p>Non-silvicultural tree clearing?</p> <p>Your own municipal construction projects?</p> <p>Construction and demolition debris landfills?</p>	<p style="text-align: center;">YES</p> <p style="text-align: center;">YES</p> <p style="text-align: center;">YES</p> <p style="text-align: center;">YES</p> <p>For Kent State University (KSU), the City only does plan approvals and site inspections if the discharge is to the City of Kent MS4. KSU performs plan reviews for the other campus construction projects. Student Green is a KSU project, but ultimately discharges to City of Kent MS4. The City needs to add this project to their inspection list. They are not inspecting the whole project, only the apron at the entrance at this time.</p> <p style="text-align: center;">YES</p> <p style="text-align: center;">YES</p> <p style="text-align: center;">YES</p> <p style="text-align: center;">NO *** See Note 2 on Pg.11</p> <p style="text-align: center;">YES</p> <p style="text-align: center;">YES</p>

Ordinance/Legal Authority	
Interview Questions	Response
Construction by other public entities within your political jurisdiction, e.g., a county road project within a municipality?	YES
Earth disturbance associated with open spaces and parks (e.g., trails within a park or parking lot improvements at a park)?	YES
Private pond construction?	YES
Construction of wind or solar panel farms?	YES
Establishment of borrow or spoil areas that service multiple, unrelated construction projects?	YES
Utility construction projects (including tree clearing along utility corridors or pipeline projects that cross multiple political jurisdictions)?	YES
<i>NOTE: The intent of this is to simply highlight the scope of regulated construction activity that the MS4 may have to contend with.</i>	
Does ordinance regulate the discharge of pollutants other than sediments on a construction site (e.g., construction wastes, fuel tanks, cement truck washwater, trash, chemicals, etc.)?	YES Section 1199.05
Has ordinance been updated to reflect minimum requirements of Ohio EPA NPDES permit #OHC000003?	NO
Date of updates?	<i>*Construction ordinance has not been updated to meet the requirements of the current Ohio EPA NPDES permit #OHC000003</i>
<i>NOTE: MS4 permit #OHQ000002 required updates within 2 years of permit renewal.</i>	<i>(For example, sediment basin volume requirements, silt fence limitations, etc.)</i>
Date of MS4 Permit Renewal:	6/3/2009 (Updates were required by 6/3/2011)

Ordinance/Legal Authority	
Interview Questions	Response
Post-Construction Ordinances	
Ordinances used to require post-construction storm water BMPs on new development or redevelopment projects:	YES (But not updated)
Treatment of Water Quality Volume (WQv) Name and code section:	YES 1199.06
Date initially enacted:	March 3, 2004
Has this ordinance been updated to reflect the minimum requirements of Ohio EPA General Permit #OHC000003?	NO
Date of update:	<i>The City updated on February 20, 2008, but the ordinance has not been updated to reflect requirements of the current NPDES permit #OHC000003, e.g., no forebay and micropool for dry extended detention, no pocket wetlands, no alternative BMP approval from Ohio EPA on large construction, no use of i% to calculate C.</i>
Riparian and Wetland Setback Ordinance Name and code section:	YES Chapter 1201: Riparian and Wetland Buffers
If YES, does ordinance require protection of native vegetation within riparian area or can manicured lawns be established?	YES Chapter 1201.03(b)(2)
If YES, does ordinance allow the location of storm water infrastructure within the riparian setback?	NO Chapter 1201.03(f) *However, field observations at University Edge indicate that the ordinance is not being enforced.
Runoff Reduction (e.g., infiltration or mitigation of a recharge volume)? Name and code section:	NO
BMPs designed to control temperature for discharges to cold water habitat streams? Name and code section:	N/A There are no cold water habitat streams in the City.

Ordinance/Legal Authority	
Interview Questions	Response
<p>Encouraging Green Infrastructure or low-impact development practices: Allow downspout disconnection and use of open storm water conveyance systems?</p>	<p>YES The downspout has to discharge into a swale, rain garden, or infiltration system, but not on grade.</p>
<p>Names and code sections:</p>	<p>1203.03 (4)</p>
<p>Permit the installation of rain gardens and other bioretention facilities? Names and code section:</p>	<p>YES 1203.03(2) and 1199.06</p>
<p>Allow rainwater harvesting (rain barrels and cisterns)? Name and code section:</p>	<p>YES 1203.03(4)</p>
<p>Allow or require the use of pervious pavement systems? Name and code section:</p>	<p>YES 1203.03(3)</p>
<p>Allow reduction in the size of traditional storm water management structures if LID used? Name and code section:</p>	<p>YES 1203.02(a) ***See Note 3 on Pg.11</p>
<p>Provide a credit to a storm water utility fee if LID is used? Describe:</p>	<p>YES The developer can apply to the Service Director for credit. However, is the credit spelled out in the local code? The City needs to make it sound economically encouraging.</p>
<p>Balanced Growth Principles, i.e., other non-structural ordinances or codes that promote better site design: Allow conservation design as a subdivision layout (retain ≥ 40% open space by maintaining existing zoned density) Standard or variance required?</p>	<p>YES STANDARD But, it is still considered an alternative option. The City needs to provide incentives to broaden its use.</p>
<p>Name and code section:</p>	<p>Chapter 1132</p>
<p>Encourage the use of vegetation that requires little to no maintenance in common areas (e.g., meadow vegetation vs. mowed lawn) Name and code section:</p>	<p>NO ***See Note 4 on Pg.11</p>

Ordinance/Legal Authority	
Interview Questions	Response
<p>Reduce impervious area created by commercial parking lots (e.g., update codes so that they are context-specific, allow shared parking, landbanked parking, parking garages rather than surface lots, etc.)***</p> <p>Name of code section</p>	<p style="text-align: center;">YES (But can be improved) ***See Note 5 on Pg.11</p> <p style="text-align: center;">Chapter 1167</p>
<p>Allow sidewalks on only one side of the road in residential neighborhoods</p> <p>Name and code section:</p>	<p style="text-align: center;">YES</p> <p>The City requires a variance for everything except industrial development. Chapter 1187.</p>
<p>Zoning that encourages smart growth in compact neighborhoods or mixed-use development:</p> <p style="padding-left: 40px;">If YES, does zoning create walkable neighborhoods with access to commercial areas and employment centers? Describe:</p>	<p style="text-align: center;">YES</p> <p style="text-align: center;">YES</p> <p>Downtown overlay district that has created mixed-use development; in some residential areas walking trails connect to the schools.</p>
<p style="padding-left: 40px;">If YES, does this zoning provide incentives for vertical development rather than horizontal sprawl? Describe:</p>	<p style="text-align: center;">NO</p> <p>Height limitations based on zoning, open space requirements may limit sprawl.</p>
<p style="padding-left: 40px;">If YES, does this zoning encourage a range of housing options for people of various incomes? Describe how:</p>	<p style="text-align: center;">NO</p>
<p style="padding-left: 40px;">If YES, do you provide incentives for infill development or development in the core? Describe incentive programs:</p>	<p style="text-align: center;">NO</p>

Ordinance/Legal Authority	
Interview Questions	Response
<p>If YES, does zoning direct growth in areas where there are a variety of transportation choices (walking, biking, public transportation vs. just the car)? Describe how:</p> <p><i>NOTE: Post-construction storm water management, land use planning and building and zoning codes must be linked together to create a meaningful storm water program.</i></p>	<p>NO</p> <p>(But public bus system exists along main routes.)</p>
Provisions within Ordinances:	
<p>Do permit or plan approvals have to be issued before construction activities that disturb 1 or more acre can commence?</p> <p>Plan Approvals Construction:</p> <p>Post-Construction:</p> <p>Permits & Type (Building, Grading, etc.) Construction:</p> <p>Post-Construction:</p> <p>Does your definition of "construction activities" include any grading, grubbing, filling, clearing or excavating activity?*</p>	<p>YES</p> <p>YES</p> <p>YES</p> <p>(Zoning, Building & Engineering Permits required. Filling, Grading and Excavating permits also exist.)</p> <p>YES</p> <p>NO</p> <p><i>*There is no definition.</i></p>
<p>Are plans for storm water controls used during construction submitted separately from plans that depict post-construction BMPs?</p>	<p>NO</p>

Ordinance/Legal Authority													
Interview Questions	Response												
Describe the submission process and the timing of plan submission:	Developer submits construction plans. These include the SWP3 which is comprehensive of both construction and post-construction. It is then submitted to Community Development for approval. The plan is then approved, approved as noted (conditional approval), or must be resubmitted. Once approved, developer is issued a Site Permit and a copy of the approved plans. Stamped approval on plans and permit form (green card must be posted on site).												
Does your ordinance explicitly specify selection criteria or minimum acceptable BMP design? Construction Post-Construction	YES Chapter 1199.02 YES Chapter 1199.06 (Also includes reference to current edition of Ohio's <i>Rainwater and Land Development</i> manual.)												
CONSTRUCTION SITE ENFORCEMENT AUTHORITY													
Types of enforcement mechanisms available for construction site issues per your ordinance:	<table style="width: 100%; border: none;"> <tr> <td style="width: 70%;">Notices of Violations (NOV)</td> <td style="text-align: right;">YES</td> </tr> <tr> <td>Administrative fines</td> <td style="text-align: right;">NO</td> </tr> <tr> <td>Stop-work orders</td> <td style="text-align: right;">YES</td> </tr> <tr> <td>Civil penalties</td> <td style="text-align: right;">NO</td> </tr> <tr> <td>Criminal penalties</td> <td style="text-align: right;">YES</td> </tr> <tr> <td>Other (Describe):</td> <td style="text-align: right;">Permit Revocation</td> </tr> </table>	Notices of Violations (NOV)	YES	Administrative fines	NO	Stop-work orders	YES	Civil penalties	NO	Criminal penalties	YES	Other (Describe):	Permit Revocation
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Other (Describe):	Permit Revocation												
Which type of enforcement action have you most commonly implemented?	Usually just a warning letter (e-mail or verbal typically). The City has issued a few stop work orders, but none recently. Enforcement action has never escalated beyond that.												
Describe the enforcement mechanism used when the following compliance situations are encountered on construction sites: 1. Construction has commenced without a permit or plan approval	Stop work order												

Ordinance/Legal Authority											
Interview Questions	Response										
2. A BMP indicated on the SWP3 has not been installed or requires maintenance (first incidence)	E-mail or letter										
3. A BMP is required but not shown on the SWP3	E-mail or letter										
4. A BMP has not been installed or maintained despite prior notification from the MS4 (repeated incidences)	Notice of Violation ***See Note 6 on Pg.11										
5. If using a third party inspection service provider, e.g., the SWCD, MS4 receives inspection report indicating repeated non-compliance issue	N/A The City of Kent does not use a third party service for the construction program.										
Describe the last enforcement action your community has taken against a contractor or developer for non-compliance with construction site requirements and provide the documentation to demonstrate the action.	After a half-inch (0.5") or greater rain event, the City performs a site inspection and sends out e-mails or letters to sites with compliance issues. However, no documentation was provided to validate this claim.										
Have your enforcement protocols and procedures for construction site issues been formalized in a written enforcement escalation plan?***	NO ***See Note 7 on Pg.11										
POST-CONSTRUCTION ENFORCEMENT AUTHORITY											
Types of enforcement mechanisms available for post-construction site issues per your ordinance:	<table style="width: 100%; border: none;"> <tr> <td style="width: 80%;">Notices of Violations (NOV)</td> <td style="text-align: right;">YES</td> </tr> <tr> <td>Administrative fines</td> <td style="text-align: right;">NO</td> </tr> <tr> <td>Stop-work orders</td> <td style="text-align: right;">YES</td> </tr> <tr> <td>Civil penalties</td> <td style="text-align: right;">NO</td> </tr> <tr> <td>Criminal penalties</td> <td style="text-align: right;">YES</td> </tr> </table>	Notices of Violations (NOV)	YES	Administrative fines	NO	Stop-work orders	YES	Civil penalties	NO	Criminal penalties	YES
Notices of Violations (NOV)	YES										
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Ordinance/Legal Authority	
Interview Questions	Response
Which type of enforcement action have you most commonly implemented?	The Engineering Department Inspector creates a punch list for completed sites. Bond money is not released until everything is completed per the approved plans. Long-term maintenance is not there yet. The entity responsible for long term maintenance is required to hire a qualified individual to complete inspections and submit reports to the City but the City has not been enforcing this part of the code.
Describe the enforcement mechanism used when the following compliance situations are encountered regarding post-construction: <ol style="list-style-type: none"> 1. The post-construction BMP has been installed too early in the construction process (e.g., the permanent WQv outlet has been installed when the sediment control outlet is still required, or the bioretention soil has been placed prior to upland areas being stabilized) 2. The post-construction BMP has not been maintained (first incident) 3. The post-construction BMP has not been maintained after multiple notifications 4. A homeowner has cut down trees in the riparian setback area (if applicable) 5. A homeowner has installed a shed in a vegetated filter strip disrupting sheet flow runoff 	<p style="text-align: center;">Letter or e-mail</p> <p style="text-align: center;">Note: This was an issue on the Family Dollar site, but the City has never notified the developer of the problem.</p> <p style="text-align: center;">Letter or e-mail</p> <p style="text-align: center;">Notice of Violation (Has never occurred yet because the program is still in development)</p> <p>The City will require the homeowner to replant trees.</p> <p>Building permit is required, but better coordination is required to ensure compliance with post-construction requirements. Would probably be told to remove the shed because it wouldn't have been a permitted build.</p>
Describe the last enforcement action your community has taken against a contractor or developer for non-compliance with post-construction site requirements and provide the documentation to demonstrate the action.	City has not taken any yet. <i>Not having developed a program to ensure long-term maintenance of post-construction BMPs is a violation of the MS4 Permit.</i>

Ordinance/Legal Authority		
Interview Questions	Response	
Have your enforcement protocols and procedures for post-construction issues been formalized in a written enforcement escalation plan?	NO	
Applicable Documents	Reviewed	Obtained
Sediment and Erosion Control Ordinance	YES	YES
Post-Construction Storm Water BMP Ordinances(s)	YES	YES
Enforcement escalation plan or procedures Construction: Post-Construction:	Does not exist	Does not exist

Notes
<p>1) To align with NPDES permit program, the only exclusions allowed are (a) if rainfall erosivity factor, R, is < 5 for the project, (b) construction is "routine maintenance" to re-establish the original line, grade or hydraulic capacity of storm water infrastructure, i.e., ditch cleaning and detention basin dredging, where < 5 acres is disturbed, (c) silvicultural disturbances, (d) agricultural disturbances or (e) construction related to oil & gas well exploration. For more information, please refer to our website at: http://www.epa.ohio.gov/dsw/storm/routine_maint.aspx</p> <p>2) Cutting trees is not regulated. The City allows for residents to clear cut. Clear cutting is <i>not</i> a silvicultural disturbance and is <i>not</i> exempt from the NPDES program. The local ordinance needs to include clear cutting in its definition of "construction activities" and require coverage under the NPDES permit for General construction activities #OHC000003 if greater than 1 acre is cleared.</p> <p>3) The City will allow reduction in the size of traditional storm water management structures if low-impact development is used, but this has never occurred. If the City established a system or standard (credit system) that project engineers could follow, the City would probably see a lot more of this (and low-impact development in general) on future projects.</p> <p>4) Maintenance code requires grass to be kept < 12 inches. There are many low-maintenance grasses that don't grow abnormally fast or tall. An approved species list could ensure no conflict with the local code. The code could be rewritten to allow taller meadow grasses where it makes sense (like open spaces). Further, the benefits of low-maintenance grasses should be a topic for your public education program to change perceptions about this.</p> <p>5) Shared parking and landbanking is permitted, but no parking space maximum has been established. Pervious pavement is encouraged but not required.</p> <p>6) The city has not been spelling out "Notice of Violation (NOV)". This is critical language necessary for compliance. Further, the NOV should identify the local code being violated and establish a deadline for compliance.</p> <p>7) Written into code 1199.07, but not an official procedure practiced in the field. The City needs to be consistent and follow an official procedure that clearly identifies when enforcement must be escalated, what the penalties are at each level and who is responsible for each step.</p>

Construction Project Inventory																	
Interview Question	Response																
<p>Do you keep an inventory of construction projects that are actively occurring in your community? If YES, how?</p> <p>Do you track construction projects <1 acre (e.g., individual lot within a subdivision or small addition to a business)?</p>	<p>YES</p> <p>The Community Development Engineer tracks when plans are submitted on a spreadsheet. Also, a database exists which documents the permits issued. The CDE cross-references with that.</p> <p>YES</p>																
<p>How often is your inventory of construction projects updated?</p>	<p>At least monthly.</p>																
<p>Information tracked:</p>	<table style="width: 100%; border: none;"> <tr> <td style="width: 80%;">Project status</td> <td style="text-align: right;">NO</td> </tr> <tr> <td>***See Note 1 on Pg. 13</td> <td></td> </tr> <tr> <td>Inspection Findings</td> <td style="text-align: right;">YES</td> </tr> <tr> <td>Enforcement Actions</td> <td style="text-align: right;">YES</td> </tr> <tr> <td>Complaints</td> <td style="text-align: right;">YES</td> </tr> <tr> <td>***See Note 2 on Pg.13</td> <td></td> </tr> <tr> <td>NOI submittal</td> <td style="text-align: right;">YES</td> </tr> <tr> <td>***See Note 3 on Pg.13</td> <td></td> </tr> </table>	Project status	NO	***See Note 1 on Pg. 13		Inspection Findings	YES	Enforcement Actions	YES	Complaints	YES	***See Note 2 on Pg.13		NOI submittal	YES	***See Note 3 on Pg.13	
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***See Note 3 on Pg.13																	
<p>Are site inspections at active construction sites conducted at a frequency of at least once per month?</p> <p>If construction sites are not inspected at least once per month, how do you prioritize or determine inspection frequency? Criteria used:</p> <p>Is this inspection criteria and frequency explicitly stated in your SWMP?</p>	<p>YES</p> <p>Monthly and after a 0.5-inch rainfall. The rain event inspection is established in the SWMP. ***See Note 4 on Pg.13</p> <p>Sites are typically inspected at least once per month; however sites with steeper slopes have priority over those which do not.</p> <p>NO</p>																

Number of active construction sites on date of interview (for subdivisions where only individual lot construction is occurring, count the entire subdivision or phase of subdivision as one site):	<p style="text-align: center;">48 *** See Note 5 on Pg.13</p> Site #1: East Erie St./S. Depeyster Parking Lot Most recent inspection date: 6/1/12 Prior inspection date: 5/9/12 Site #2: The Province Most recent inspection date: 6/1/12 Prior inspection date: 5/9/12	
Applicable Documents		
List of active construction projects	Reviewed	Obtained
List of projects covered under a state/EPA general permit	YES	YES

Notes
<p>1) Project status can be tracked using the existing system established by the City. However, the City is not good at keeping this system up to date. A box located in the office is used to put plans in if a project is on hold.</p> <p>2) Complaints are tracked in the system, but are not well coordinated with the Community Development Director.</p> <p>3) Could be improved. The current system does not track individual lot NOIs, nor does it list NPDES permit #'s on the spreadsheet.</p> <p>4) This exceeds the minimum performance standards in the NPDES permit for small MS4s. If the City is overwhelmed, you should consider revising the SWMP as allowed by Part III.D. of the NPDES permit.</p> <p>5) This number is generated from the City's spreadsheet. However, Ohio EPA records indicate approximately 58 active sites within the City during the time of the interview.</p> <p>Note: Ensuring NPDES coverage should be part of the plan review process. In theory, Ohio EPA records should match the City's records, which is not the case. Please ensure that those sites which are now complete and stabilized submit a Notice of Termination (NOT). This is required to be submitted within forty-five (45) days of completion.</p>

Post-Construction BMP Inventory	
Interview Question	Response
Are post-construction BMPs tracked? *** They must be shown on MS4 map. Does this include all types of BMPs, e.g., riparian setback area, green roof or pervious pavement as well as bioretention cells and extended detention ponds?	<p style="text-align: center;">WORK IN PROGRESS *** See Note 1 on Pg.15</p> <p style="text-align: center;">YES *** See Note 2 on Pg.15</p>

Information tracked:	Location	YES	
	Type	YES	
	Maintenance Requirements ***See Note 3 on Pg.15	NO	
	Inspection findings ***See Note 4 on Pg.15	NO	
Database used?	TO BE DETERMINED – STILL IN DEVELOPMENT		
Number of private post-construction structural BMPs installed in community:	46 (According to Spreadsheet)		
Applicable Documents		Reviewed	Obtained
Inventory of Post-Construction BMPs		YES	YES

Construction and Post-Construction BMP Standards	
Interview Questions	Response
CONSTRUCTION BMPs	
How has your community established standards for erosion and sediment control?	YES Chapter 1199.02 Chapter 1193.03(a)(7) Current edition of the <i>Rainwater and Land Development</i> (RLD) Manual is referenced as well.
Do your erosion and sediment control standards include BMP selection criteria?	NO Not in ordinance, but RLD manual includes it.
Do your construction site standards account for different needs for different times of the year (e.g., growing season vs. winter)? Please elaborate:	YES The City has been enforcing the standards established in the RLD Manual even though it is not specifically required by the ordinance.
Do your standards include operation and maintenance requirements?	YES (Basic standards in RLD Manual, but the City has not developed or adopted anything beyond that.

Construction and Post-Construction BMP Standards		
Interview Questions	Response	
POST-CONSTRUCTION BMPs		
How has your community established standards for post-construction BMPs?	Chapter 1199.06 <i>Rainwater and Land Development</i> Manual	
Do your post-construction standards include BMP selection criteria?	YES	
Has your community established standards for post-construction BMP selection and design for small construction activities (i.e., where the larger common plan of development or sale disturbs < 5 acres)? If so, what are your standards?	YES (Refer to Chapter 1199.06) The City will require that BMPs commensurate with the site's impact on the watershed after construction is completed, as well as try to follow the current version of the <i>Rainwater and Land Development</i> manual. However, the City <i>does</i> allow the use of alternative BMPs that are not necessarily designed to treat the WQv within the prescribed drawdown time. The City needs to encourage better BMP choices during the plan review process rather than simply accepting alternative BMP choices on small construction sites. LID practices often provide benefits proprietary BMPs cannot.	
Do your standards include operation and maintenance requirements?	YES (Included in the <i>Rainwater and Land Development</i> manual)	
	Applicable Documents	Reviewed Obtained
	BMP guidance or technical document	YES YES

Notes
<p>1) An intern is developing a better program, but for now, they're simply tracked on a spreadsheet. The intern is pulling plans and making a copy of whatever shows the BMP and will have a summary sheet showing the name of the site, the date it was built, where it is located, the responsible party, and the type of BMP. The intern will also take pictures and create a GPS location for subsequent GIS mapping. The City will then work on developing an inspection checklist for long-term maintenance. So far, the City has all of the publicly-owned BMPs mapped, so this effort largely focuses on <i>privately</i>-owned post-construction BMPs built since April 21, 2003. Please provide Ohio EPA with a date by when this program will be completed.</p> <p>2) The City did not initially consider riparian buffers as a post-construction BMP that must be tracked, but will consider them from now on.</p>

- 3) A maintenance agreement has been required for commercial projects since approximately 2005, as well as been recorded with the plat as a covenant for subdivisions since the 1980's. However, these are largely limited to naming the responsible party and lack other significant details.
- 4) The City will only release the construction bond when an as-built inspection of the post-construction BMP is accepted and complete. Otherwise, the bond will not be released until the BMP is re-installed correctly. The tracking software update should facilitate this process. Although this system can be very effective to ensure initial construction of post-construction BMPs, it will not address long-term maintenance (LTM). Please ensure that the City is also tracking inspection findings for LTM.

Plan Review Procedures	
Interview Questions	Response
Who is responsible for erosion and sediment control plan review?	Jennifer Barone, Community Development Engineer (CDE) ***See Note 1 on Pg.21
If third party, is there an MOU or other agreement in place?	N/A
Is it current?	N/A
Who is responsible for post-construction plan review?	Jennifer Barone, Community Development Engineer (CDE)
If third party, is there an MOU or other agreement in place?	N/A
Is it current?	N/A
What training or professional certifications have plan review personnel received?	
Construction	P.E., CPESC
Post-Construction	P.E., CPESC
How many years of experience does plan review personnel have inspecting storm water BMPs?	
Construction	8+ years
Post-Construction	8+ years

Plan Review Procedures	
Interview Questions	Response
<p>How often do plan review personnel receive training?</p> <p>Construction</p> <p>Post-Construction</p>	<p>Once or twice per year.</p> <p>Once or twice per year.</p> <p>Training opportunities provided by the Ohio EPA are available at: www.epa.ohio.gov/ocapp/storm_water.aspx.</p>
<p>Do you use a checklist to conduct plan review?</p> <p>Construction</p> <p>Post-Construction</p> <p>If NO, what criteria is used to review plans?</p> <p>Construction</p> <p>Post-Construction</p>	<p>YES</p> <p>YES</p> <p>N/A</p>
<p>Size threshold for plan review (i.e. 1 acre, 10,000 square feet)?</p> <p>Construction</p> <p>Post-Construction</p>	<p>>1 acre disturbance</p> <p>>1 acre disturbance</p> <p>This is not specified in the City's ordinances, but the Community Development Engineer uses disturbance rather than parcel size.</p>
<p>Do you verify the submission of a Notice of Intent (NOI) or Individual Lot NOI to Ohio EPA as part of your plan review process?</p>	<p>NO</p> <p><i>The City has been verifying NOI's but not Individual Lot NOI's.</i></p>
<p>Do you require a pre-construction meeting with developers and/or contractors?</p> <p>Is the sequence of implementation of sediment and erosion controls discussed during these meetings?</p> <p>Is the timing of installation of post-construction BMPs discussed during these meetings?</p>	<p>YES</p> <p>YES</p> <p>NO</p> <p>***See Note 2 on Pg.21</p>

Plan Review Procedures		
Interview Questions	Response	
Does your community have standard conditions of plan approval?	NO Plans are either approved, approved as noted, or denied. If approved, they receive a permit but there are no standard conditions for approval established by the City at this time.	
Do they include erosion and sediment control and/or post-construction water quality requirements?	N/A	
Does your community require a performance bond that can be used to pay for BMPs (site stabilization) in the event the developer does not complete the project?	YES	
Does your community require a long-term maintenance plan for post-construction BMPs?	YES ***See Note 3 on Pg.21	
If YES, is the plan required to include the following:		
Identify the party responsible for long-term maintenance?	YES	
A list of routine and non-routine maintenance tasks and the frequency for their performance?	NO	
A map that identifies the types and locations of post-construction BMPs and their maintenance or access easements?	NO	
A list of deed restrictions, conservation easements or environmental covenants required to maintain post-construction BMPs in perpetuity?	YES	
Is this plan kept on file or input into a database for future reference to ensure the required tasks are being completed?	YES (Kept in files)	
Applicable Documents	Reviewed	Obtained
Copy of standard conditions of approval	N/A	N/A
Example of standard conditions applied to an approved project	N/A	N/A
Checklist used by plan reviewers	YES	YES

Project Inspections	
Interview Questions	Response
CONSTRUCTION SITE INSPECTIONS	
Who is responsible for erosion and sediment control site inspection?	Jennifer Barone, CDE Pat Homan, EDI Bob Climes, EDI (Previous to Feb 2012, CDE was only inspector.)
If third party, is there an MOU or other agreement in place?	N/A
Is it current?	N/A
POST-CONSTRUCTION INSPECTIONS	
Who is responsible for post-construction site inspection?	As-Built: Pat Homan & Bob Climes, Engineering Department Inspectors (EDI) Long-term Maintenance: Responsible party ***See Note 4 on Pg.21
If third party, is there an MOU or other agreement in place?	N/A
Is it current?	N/A
Is an "as-built" inspection conducted at the time a post-construction BMP is installed to ensure compliance with the approved BMP construction plan?	YES An As-Built inspection is part of the City's final site inspection. However, up until February of 2012 sites were not inspected on a monthly basis, so verification of the BMP's installation was hit or miss.
Does the MS4 conduct inspections for long-term maintenance of privately-owned post-construction BMPs?	NO
If YES, at what frequency?	N/A
If NO, does the MS4 collect inspection reports from the responsible party? At what frequency?	Inspection reports are required in the City's code, but they have not collected any from anyone yet. The City does not send out letters to remind the responsible party either.
CONSTRUCTION & POST-CONSTRUCTION INSPECTION QUESTIONS	
Findings from construction and post-construction inspections tracked in a database?	YES (So far only for construction inspections)

Project Inspections		
Interview Questions	Response	
<p>What training or professional certifications have site inspection personnel received?</p> <p>Construction</p> <p>Post-Construction</p> <p>How many years of experience does site inspection personnel have inspecting storm water BMPs?</p> <p>Construction</p> <p>Post-Construction</p> <p>How often do site inspection personnel receive training?</p> <p>Construction</p> <p>Post-Construction</p>	<p>Engineering Department Inspectors: CESSWI CDE: CPESC and P.E. (Same for construction and post-construction)</p> <p>See Note 5 on Pg.21</p> <p>See Note 5 on Pg.21</p> <p>Engineering Department Inspectors: At least once annually. Inspectors also receive storm water related magazines as well (this applies for both construction and post-construction). CDE also receives training once or twice per year.</p>	
<p>Do you use a checklist or the approved plan to conduct site inspections?</p> <p>Construction</p> <p>Post-Construction</p> <p>If NO, what standards are used to determine if a site is in compliance?</p> <p>Construction</p> <p>Post-Construction</p>	<p>YES</p> <p>NO Only as of February 2012 has a checklist been used. Prior to that, no checklist was used.</p> <p>N/A</p> <p>ED1 will review the approved plans and note whether or not the site is consistent with them as part of the final inspection. No long-term maintenance inspections yet.</p>	
Applicable Documents	Reviewed	Obtained
Most recent inspection staff training records	YES	YES
Example of active construction project inspection checklist	YES	YES
Example of inspection record to verify "as-built" of post-construction BMP's (Family Dollar "punch" list).	YES	YES

Project Inspections			
Interview Questions		Response	
Records from inspection tracking database or filing system		YES	YES
Checklist for inspecting long-term maintenance of post-construction BMPs		Does not exist	Does not exist

Notes
<p>1) The ordinances in place do not explicitly mention the requirement of a SWPPP (Storm Water Pollution Prevention Plan). It is advisable that a section be added to the code which details what exactly a SWPPP is as well as its required contents. Ohio EPA defines the SWPPP (or SWP3) as a comprehensive storm water management plan that addresses erosion and sediment controls (ESC's) and non-sediment pollutant controls during construction, as well as post-construction water quality controls.</p> <p>2) The Community Development Engineer stated that pre-construction meetings are held on "larger" construction projects, but there is no defined process for deciding which sites fall under this category. A pre-construction meeting to discuss SWP3 implementation is recommended for <i>all</i> projects subject to NPDES requirements. A pre-construction meeting should discuss the BMPs on the approved plan and the expected sequence of construction. During this meeting, the City should highlight which BMPs are to be installed during each stage of construction so that the contractor is fully aware and understands your expectations.</p> <p>3) Currently, what the City calls a "Maintenance Agreement" is simply identification of the responsible party on the plat map. However, this is only the case for "larger" projects and may not exist for all projects within the city which disturb an acre or more and are subject to NPDES requirements. Ohio EPA requires developers subject to NPDES permits to develop a stand-alone long term maintenance plan for all post-construction BMPs as part of the SWP3. The City should be reviewing the plan for adherence to your standards as part of the plan review process. Your long-term maintenance program for post-construction BMPs should ensure compliance with this plan. The items that follow in the interview are required content of the long-term maintenance plan.</p> <p>4) Long term maintenance inspections must be conducted by the responsible party per a specified frequency and submitted to the Community Development Engineer. However, the City has not received a report from anyone ever.</p> <p>5) EDI's received certification in 2009. Final site inspections for post-construction BMP (as-builts) since late 1990's. But no specific storm inspection for either construction or post-construction prior to Feb 2012.</p>

MS4-Owned Construction Projects	
Interview Questions	Response
Projects designed in-house or contracted?	Both. Depends on the magnitude of the project.

MS4-Owned Construction Projects	
Interview Questions	Response
For those designed in-house, have designers been trained in storm water BMP implementation?	Most in-house designs do not disturb 1 or more acres, but if they do, designers consult with the CDE (who <i>has</i> been trained in storm water BMP implementation)
Checklist used during the design and/or review of public construction projects?	YES (Same as with private construction projects)
Are projects greater than one acre covered by a general construction permit (has an NOI been submitted)?	YES
If contracted planners and engineers are used for the design of MS4-owned projects, does the contract language specify that sediment and erosion control and post-construction storm water BMPs be incorporated into the design?	YES The Scope of Service includes these requirements. Additional site-specific language is typically added if the site is located near a large wetland area or surface water of the State.
Are municipal construction projects inspected for compliance with the SWP3? If YES, who is responsible for inspection municipal construction projects for compliance with storm water regulations? Are they inspected with the same frequency for BMP compliance as a private construction project?	YES To avoid a conflict of interest, the firm or department that designed the SWP3 should <i>not</i> also inspect the site for compliance. (Same inspection staff as for private projects) YES
Project inspectors trained? Frequency:	YES At least once annually.
If contracted inspectors are utilized, are minimum inspection, maintenance and reporting requirements specified in the contract?	N/A The City of Kent utilizes their own staff to conduct inspections.
For municipally-owned post-construction BMPs, how often are they inspected to ensure long-term maintenance?	Only in response to problems.

MS4-Owned Construction Projects		
Interview Questions	Response	
Which department is responsible for conducting these inspections?	Central Maintenance Division *** See Note 1 on Pg.23	
Applicable Documents	Reviewed	Obtained
MS4-owned project storm water design standards and/or checklist	Same as for private	Same as for private
Contract language for active public project not developed or inspected in-house	YES	YES

Outreach and Education		
Interview Questions	Response	
Type of training provided to construction operators:	*** See Note 2 on Pg.23	
Designers and Engineers:	Nothing required.	
Attendance required?	N/A	
Training frequency?	Only once since 2003 (Notification of new regulations)	
Number of operators trained:	N/A	
Training topics:	ESC regulations for the City	
Presentations given by MS4 staff to professional groups?	NO	
Brochures or outreach materials targeted at operators:	Only one letter (sent out in 2004) making operators aware of the local codes related to construction activities.	
How/when is the information distributed?	Direct mail.	
Website used to educate operators?	NO (Only a copy of the City's ordinances is available on their website)	
Web address:	www.kentohio.org	
Applicable Documents	Reviewed	Obtained
Training materials	N/A	N/A
Brochures, outreach materials - (Letter sent in 2004)	YES	YES

Notes
<p>1) The City has used Ohio EPA videos on Pollution Prevention and Good Housekeeping in the past, but not necessarily specific to the maintenance requirements of post-construction BMP's.</p> <p>2) The City has made developers aware of the code once it went into effect in 2004. Pre-development meetings are held with developers and ESCs are discussed at that time. However, <i>at least one PIPE activity must be targeted to the development community during the current NPDES permit term. None have been reported. Please ensure that your PIPE program targets this group with at least one message by January 29, 2014.</i></p>

CONSTRUCTION & POST-CONSTRUCTION FILE RECORDS REVIEW

In addition to interviewing staff, select 2 to 3 approved projects with erosion and sediment control plans to review with the permittee. You are essentially conducting a file review. Try to choose different project types (residential, commercial) and sizes. Also, if one exists, review a public project plan to see if the permittee is applying equivalent standards to municipal construction.

Construction Project #1 Name: University Edge 3GC05559*AG 9.3 ac	
<p>BMPs adequately incorporated into the plan to address erosion control, sediment control, and housekeeping?</p>	<p>NO</p> <p>Construction Related Issues:</p> <ul style="list-style-type: none"> • BMPs were only functional at final grade. No phased ESC plan for initial and interim grades. However, BMPs at final grade were designed per the current Ohio RLD and NPDES requirements (excluding the detention basin, see below). • Construction sequence does not include the installation of the temporary sediment basin or permanent detention basin either. <p>Post-Construction Related Issues:</p> <ul style="list-style-type: none"> • The Riparian setback between the sediment basin and the existing stream is not being maintained per the City's local code. No evidence of variance to encroach on riparian setback was identifiable within the files although one should have been required based off of the City's responses during the interview process. Also, outlet protection was shown in the stream channel which is not acceptable. An E-mail sent on 4/4/11 indicates the City looked into wetland issues on the site but was inconclusive. A permit from the Army Corps of Engineers is required to place fill in a surface water of the State. It does not appear that a permit has been issued for this project. • No forebays provided at inlets to dry extended detention basin for post-construction.
<p>Design specifications and details for all BMPs included on the plans?</p>	<p>YES</p>

Construction Project #1 Name: University Edge 3GC05559*AG 9.3 ac

Maintenance requirements specified?	YES
Have any NOVs or other enforcement actions been issued for this site.	No NOVs were in the file. The City documented compliance issues, but did not address them in any way other than conducting an on-site meeting on 11/29/2011. No documentation of the items discussed at the meeting was available.

Notes:
 An NPDES General Construction permit for the University Edge was obtained in July 2011. The Engineering Permit for the site was issued by the City on September 30, 2011. Monthly inspections appear to have occurred through December 2011, but no further inspections were conducted until March 2012 (according to the file). The earliest record of the City of Kent inspection for storm water BMPs is October 5, 2011. An E-mail was sent on 10/14/11 reporting compliance issues but did not specify a timeframe to complete the necessary corrective actions. The first formal site inspection by Ohio EPA was conducted on November 21, 2011. An inspection conducted on November 23, 2011 by Pat Homan indicated that the sediment basin was not built per the approved plan (Approximately 6-7 weeks after start of construction). This also led to an on-site meeting. A follow-up inspection was conducted on December 15, 2011 but was only conducted to investigate off-site tracking issues. No documented inspections from Dec 15, 2011 to March 9, 2012 were in the file.

Construction Project #2 Name: Sheetz Gas Station 3GC02356*AG 1.98 ac	
BMPs adequately incorporated into the plan to address erosion control, sediment control, and housekeeping?	<p style="text-align: center;">YES</p> <p>Post-Construction Related Issues:</p> <ul style="list-style-type: none"> • The construction sequence does not discuss the installation of bioretention cells. It is critical that the bioretention cells be installed only after the site has been permanently stabilized to ensure that the facility can infiltrate runoff per design specifications. • No long-term maintenance plan is evident.
Design specifications and details for all BMPs included on the plans?	YES
Maintenance requirements specified?	NO
Have any NOV's or other enforcement actions been issued against this site?	No NOV's sent, but minor issues such as silt fence repair and off-site tracking were noted in the spreadsheets. Communication with the on-site contractor about storm water related issues was noted but documentation was not available.
<p>Notes:</p> <p>Inspections of the demolition of the preexisting site started in Fall of 2009. No SWP3 was approved to address the BMPs necessary during the demolition phase, although it is likely that greater than one acre of land was disturbed during this process. As of Nov 28, 2011, the site was permanently stabilized with an 80% vegetative growth density. Inspections generally were conducted monthly according to the file. A StormTech alternative post-construction BMP with an Isolator Row is being used in addition to the conventional bioretention cell as well. Bioretention cells have not yet been installed and are awaiting the completion of the Crain Ave. bridge project. Thus, construction on this site is not yet complete.</p>	

Construction Project #3 Name: E. Erie/S. Depeyster/Alley 5/Parking Lot 3GC05935*AG 3.25 ac

<p>BMPs adequately incorporated into the plan to address erosion control, sediment control, and housekeeping?</p>	<p style="text-align: center;">NO</p> <p>Construction Related Issues:</p> <ul style="list-style-type: none"> • ESC's weren't clear on S. Depeyster.. The existing storm sewer was not fully protected from sediment laden runoff. • No singular cohesive SWP3 was used. Rather, plans are split into Part 1 (Erie/Depeyster) and Part 2 (Alley 5 and Parking Lot). It was unclear if the two parts were completed at the time of NOI submittal. <p>Post-Construction Related Issues:</p> <ul style="list-style-type: none"> • SWP3 does not provide any post-construction BMPs. A note on the plan specifically states that post-construction BMPs will be "provided by others".
<p>Design specifications and details for all BMPs included on the plans?</p>	<p style="text-align: center;">YES</p>
<p>Maintenance requirements specified?</p>	<p style="text-align: center;">YES</p>
<p>Have any NOV's or other enforcement actions been issued against the site?</p>	<p>No NOV's have been issued yet. The project was added to the City's inspection list as of May 8, 2012 but no compliance issues were indicated at that time.</p>
<p>Notes: An inspection report from Nov 5, 2011 indicates that the demolition of the preexisting site had started for this project already and thus should have required ESC's and BMP's during this phase. The SWP3 only addressed ESC's and BMP's required during the construction process and post-construction, even though it is likely that greater than one acre was disturbed during the demolition process.</p>	

Now, select up to 3 projects from the NOI list that have been completed since the date that the community enacted its post-construction ordinance. Pick projects from a variety of project types (commercial, residential, institutional) and sizes (< 5 acres and 5 or more acres). If one exists, review a public project to ensure that plans included provisions for post-construction BMPs.

Post-Construction Project #1 Name: Downtown Redevelopment 10.41 ac (Various NOI's)	
Date that project was accepted by community or otherwise deemed "completed"	N/A (Still active)
<p>Were post-construction BMPs provided for all drainage areas associated with the developed site?</p> <p>List the post-construction BMPs provided:</p> <p>***See Notes Section Below</p>	<p>NO</p> <p>***See Notes Section Below</p> <p>YES</p> <ul style="list-style-type: none"> • PARTA is using a hydrodynamic separator. • Cambria has no post-construction BMP • PF Kent Buildings A&B are directing their runoff (including runoff associated with the rooftops) towards Alley 5. • Alley 5 will be constructed of permeable pavers with an under-drain system underneath. However, it is not certain if the permeable pavement system is designed to meet the NPDES requirements. Refer to the specifications from the <i>Rainwater and Land Development</i> manual.
Design specifications and details for all BMPs included on the plans?	NO
Were post-construction BMPs selected appropriate for their drainage areas, site and soil conditions?	<p>NO</p> <p>All four (4) sites are part of what is known as a larger common plan of development or sale that disturbs 5 or more acres. Thus, regardless of the size of each individual component, these sites are subject to the large construction requirements of the NPDES permit. However, the projects were reviewed separately as small construction projects by the City of Kent and thus do not consist of appropriate post-construction BMP's.</p> <p>***See Notes Section Below for more details</p>
Did the community verify the installation of post-construction BMPs per the approved plan at the time the project was completed?	N/A (Site is still active)

Post-Construction Project #1 Name: Downtown Redevelopment 10.41 ac (Various NOI's)

Does MS4 have a copy of the long-term maintenance plan?	NO
Who does the plan say is responsible for long-term maintenance?	Does Not Exist (The plan is currently being developed)
Has the MS4 conducted any long-term maintenance inspections or collected any long-term maintenance inspection reports from the responsible party?	N/A

Notes: The Downtown Redevelopment consists of four separate projects (all part of a larger common plan of development or sale):
 PARTA Transportation Center, NPDES Permit# 3GC05570*AG (4.75 ac)
 Cambria Hotel & Conference Center, NPDES Permit# 3GC05563*AG (0.91 ac)
 PF Downtown Kent Buildings A & B, NPDES Permit# 3GC05708*AG (1.5 ac)
 E. Erie/S. Depeyster/Alley 5/Parking Lot, NPDES Permit# 3GC05935*AG (3.25 ac)

 Total Disturbed Area = 10.41 ac

The Community Development Engineer reviewed the plans as separate entities rather than a larger common plan of development or sale, and thus concluded that no post-construction BMP was necessary for the Cambria Conference Center (since it is < 1ac). However, since all four (4) projects are considered redevelopment, NPDES Permits require that the larger common plan of development or sale must provide Water Quality Treatment for a minimum of 20% of the total Water Quality Volume, or reduce the overall impervious area of the site prior to redevelopment by a minimum of 20% after construction. It is very unlikely that the post-construction BMP's approved by the CDE meet either of these requirements and there are no calculations to prove such.

In addition, NPDES permits do *not* allow the use of alternative BMP's (the hydrodynamic separator at PARTA site) for large construction projects, i.e. where the larger common plan of development or sale disturbs five (5) or more acres, without written consent from the Ohio EPA. Approval of such alternative BMP's for large construction sites without Ohio EPA's written consent is a **direct violation of Part III.G.2.e of Ohio EPA's NPDES Permit #OHC000003 for storm water associated with construction activities.**

The City could not provide Ohio EPA with an approved final and cohesive post-construction BMP plan for the Downtown Redevelopment. The GPD report only discussed pervious pavement and bioretention cells as *recommended* options for post-construction BMP's and provided drawings at the 50% design level, which consisted of an underdrain system not suited to discharge runoff in the appropriate timeframe established by the NPDES permits and the *Rainwater and Land Development* manual. The City needs to provide Ohio EPA with final design specifications for the post-construction BMP's that will be implemented for the sites along with the appropriate calculations necessary to justify which one of the redevelopment requirements is met with the approved post-construction plans.

Post-Construction Project #2 Name: Riverbend East Sub-div. Phase 5 3GC02559*AG (5.5 ac)	
Date that project was accepted by community or otherwise deemed "completed"	N/A (Still active)
Were post-construction BMPs provided for all drainage areas associated with the developed site? List the post-construction BMPs provided?	NO DA #1: 4.0 acres are directed to a proposed detention basin. However, the detention basin is simply a sediment basin and no extended detention is evident in the design of the outlet structure to meet proper drawdown requirements. DA #2: 2.13 acres are directed to curb inlets in Phase 2. These curb inlets are discharged to the City's MS4 without treatment.
Design specifications and details for all BMPs included on the plans?	NO
Were post-construction BMPs selected appropriate for their drainage areas, site and soil conditions?	NO Dry extended detention basins are generally not recommended water quality practices where the contributing drainage area is less than ten acres (<10 ac.) due to "clogging" potentials from the small orifice size required to drain the Water Quality Volume (WQv) in forty-eight (48) hours. Design features such as micropools and reverse flow outlets can help to alleviate those concerns, but generally speaking, BMPs such as bioretention cells, enhanced swales and sand filters may be more appropriate for smaller drainage areas. In addition, no BMP is provided for DA #2. So, this is not appropriate.
Did the community verify the installation of post-construction BMPs per the approved plan at the time the project was completed?	N/A (The site is still active)
Does MS4 have a copy of the long-term maintenance plan?	NO
Who does the plan say is responsible for long-term maintenance?	Does Not Exist

Post-Construction Project #2 Name: Riverbend East Sub-div. Phase 5 3GC02559*AG (5.5 ac)

Has the MS4 conducted any long-term maintenance inspections or collected any long-term maintenance inspection reports from the responsible party?	NO
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Notes:
The cover sheet for River Bend East Subdivision Phase 4 & 5 indicates that Phase 4 is covered by NPDES Permit# 3GC01829*AG. Phase 4 is the extension of Elizabeth Ct, while Phase 5 is Cindy Circle. Phase 4 drains to the existing curb catch basins in Phase 2, which then discharges directly to the City's MS4 without treatment. Phase 5 and the yards on the East side of Elizabeth Ct. drain to a detention basin. However, the outlet structure for the basin is simply a sediment control riser (8" PVC with 1" holes spaced 4" apart) and is not designed appropriately to ensure a proper draw down time for post-construction. A new outlet structure needs to be designed and the appropriate calculations necessary to ensure a proper drawdown time for the associated Water Quality Volume must be proposed. Please identify the steps the City of Kent will take to ensure the post-construction BMPs for Riverbend Phase V meet NPDES requirements.

CONSTRUCTION FIELD REVIEW WORKSHEET

Name of MS4: City of Kent
MS4 Permit No: 3GQ00076*BG

Name of Site: E. Eric/S. Depeyster Parking Lot/Alley 5 (Municipal Project)	
Location: NW Corner of Haymaker & Depeyster	NPDES Permit: #3GC05935*AG
Date of Inspection: 6/14/12	Time of Inspection 2:55 PM
Name of Inspector: Pat Homan	
Others Present During Inspection: Dan Bogoevski, DSW, NEDO John Kwolek, DSW, NEDO Tim McParland, DSW, NEDO Mike Englehart, Karvo Paving	

1. Did MS4 inspector identify himself to the project superintendent or site foreman and state the purpose of his inspection?

YES

Pat had good demeanor with the site foreman (Mike Englehart). He kept him focused on the SWP3 and pointed out the detail drawings for the BMP's on site. However, the inspector was not initially familiar with the SWP3 for this project. Once he became comfortable with the plan, he did much better.

2. Did the MS4 inspector ask if any amendments have been made to the SWP3 since his or her last inspection?

NO

No SWP3 plan was on site. Mike Englehart was the new foreman who was recently assigned to the job when the previous foreman was injured. Thus, there was no one on site that had prior knowledge of the SWP3.

3. Did the MS4 inspector review the site inspection reports required of the developer once every 7 days and within 24 hours of a 0.5-inch or greater rainfall?

NO

Inspectors should always verify that the developer/contractor is performing these required inspections by asking to see the storm water inspections log.

4. Did the inspector reference the approved SWP3 or use it as the basis of his or her inspection?

YES

5. Did the inspector follow-up on any compliance issues found during his or her last inspection?

NO

Pat did not have a copy of the last inspection findings with him on site.

6. Compliance issues identified by inspector during this inspection:
- **No rock construction entrance in place off of S. Water Street as shown on the SWP3.**
 - **Dumpster did not have a cover over it**
 - **Dandy Bags were used as Inlet Protection (IP) but were not shown on the plan. Construction of BMPs should match the detail in the SWP3.**
 - **Spill kits for the fuel tanks were not available on site**
7. Deficiencies or NPDES violations not noted by the MS4 inspector during this inspection:
- **Existing inlets along Depeyster were not protected and were covered in dirt.**
 - **Grates were missing from multiple catch basins, thus making installation of IP as detailed in the SWP3 impossible.**
 - **IP 2-4 was not properly installed. It was simply placed on top of a sheet of plywood to appear as if it is functional.**
 - **One of the fuel tanks on site was missing a protective dike.**
 - **Street sweeping was required along existing asphalt on Depeyster (the road was covered with so much dirt that the existing asphalt was indistinguishable).**
 - **Mortar mix wash water was visible on exposed earth (although not part of the parking lot project). The inspector should have located the associated project foreman to discuss the matter and direct him/her to use BMPs.**
 - **Only part of the site was inspected (E. Erie and S. Depeyster were not inspected) because the inspector only had Part 1 of the two-part SWP3.**

8. Did the MS4 inspector ask the project superintendent or site foreman to accompany him or her on the inspection?

NO

The inspector did not seek to locate the project superintendent until after the inspection was completed. Ohio EPA recommends that inspectors offer the superintendent the chance to accompany them so they can see compliance issues first-hand.

9. Did the MS4 inspector recap his findings upon completion of his or her inspection?

YES

10. Is the community planning on taking any enforcement actions based on the results of today's inspection? If so, what are those actions? *(NOTE: Ask community to send you a copy of the enforcement action.)* Did the inspector provide a deadline for corrective action? If so, provide details.

The inspector filled out an inspection report (USEPA Form), but a copy was not provided to the contractor. The purpose of conducting site inspections is to ensure that the developer/contractor complies with construction site runoff control regulations. If the City does not communicate inspection findings to the developer/contractor on site, the intent of this requirement is not being met. As this is a City-operated project, the City of Kent should have discussed the findings with the contractor and instructed him to install BMPs by a certain deadline (consistent with your local code).

Additional Comments:

- **Inspector was not familiar with the plans, even though the project started approx. 4 weeks ago. He stated that the CDE (Jennifer) had been conducting the previous inspections.**

- **Inspector should not be afraid to interrupt the contractor/developer when conducting a compliance inspection. Do not give the contractor/developer the impression that compliance with storm water regulations are of lesser importance than other matters.**

(See Attached Photos)



Figure 1: Trash, debris, and a milky liquid on exposed soil near an uncovered dumpster.



Figure 2: A fuel tank lacking a protective dike and spill kit.



Figure 3: Inlet protection simply placed on top of a sheet of plywood (will not function as is).



Figure 4: Existing inlet on Depeyster covered in dirt and lacking adequate inlet protection



Figure 5: Depeyster Street is covered in sediment and needs to be swept regularly.



Figure 6: Mortar mix washed out on exposed soil.

CONSTRUCTION FIELD REVIEW WORKSHEET

Name of MS4: City of Kent
 MS4 Permit No: 3GQ00076*BG

Name of Site: University Edge	
Location: Rhodes Rd. & Glad Blvd.	NPDES Permit: #3GC05559*AG
Date of Inspection: 6/14/12	Time of Inspection: 5:10 PM
Name of Inspector: Pat Homan	
Others Present During Inspection: Dan Bogoevski, DSW, NEDO John Kwolek, DSW, NEDO Tim McParland, DSW, NEDO Phil Rowe, Continental Building Systems	

1. Did MS4 inspector identify himself to the project superintendent or site foreman and state the purpose of his inspection?

YES

The usual superintendent was on vacation, but he did inform the superintendent on site of the purpose of his inspection.

2. Did the MS4 inspector ask if any amendments have been made to the SWP3 since his or her last inspection?

YES

The usual superintendent was not on site (Mr. Rowe was not aware if there have been amendments).

3. Did the MS4 inspector review the site inspection reports required of the developer once every 7 days and within 24 hours of a 0.5-inch or greater rainfall?

Yes. Pat asked for the reports but the superintendent on site (Phil Rowe) did not have access to them (and wasn't entirely sure where they were).

4. Did the inspector reference the approved SWP3 or use it as the basis of his or her inspection?

YES

5. Did the inspector follow-up on any compliance issues found during his or her last inspection?

NO

Pat did not have a copy of the last inspection findings with him on site.

6. Compliance issues identified by inspector during this inspection:
- **IP needs to be constructed per one of the detail drawings on the SWP3. He gave the superintendent good recommendations as to which type should be used where.**
 - **Dumpsters did not have cover on them**
 - **The fuel tank was lacking a protective dike and spill kit.**
 - **Not all concrete wash out actually made its way into the wash out pit.**
 - **IP needs to be maintained or completely replaced (some inlets were completely missing IP as well)**
 - **The silt fence needed maintenance (including removal of accumulated sediment)**
 - **Mortar mix and sand need to be covered**
 - **An existing storm sewer was ruptured and exposed to runoff. The plans indicate that this pipe discharged to the creek, but the inspector was not sure if this pipe was still functional or if it had been redirected to the sediment basin.**

7. Deficiencies or NPDES violations not noted by the MS4 inspector during this inspection:
- **Slopes along the perimeter of the site need to be stabilized if left undisturbed for 21 days or longer (Mr. Rowe was not familiar with temporary stabilization requirements).**
 - **No containment provided for mortar wash water/drywall mud in the courtyard of Building 3 (visible on exposed earth).**
 - **Trash and debris need to be cleaned up around the site.**
 - **The sediment basin had not been constructed per the plan (no sediment storage volume was apparent). As a result, the dewatering structure (skimmer) was sitting in the mud and not able to function as intended. In addition, no guide posts were in place to prevent the skimmer from floating around and possibly detaching from the outlet structure.**
 - **Vehicle leaks and other spills were visible on exposed earth.**
 - **The silt fence along the SE corner of the site had holes in it and needed to be replaced.**
 - **The topsoil stock pile needs to be temporarily stabilized if left undisturbed for 21 days or longer. There were no stabilization measures apparent for stockpiles.**
 - **Fill (concrete slabs and soil) were placed in the stream. This requires a permit from the Army Corps of Engineers. Also, the inspector did not identify possible violation of the community's riparian and wetland setback requirements.**

8. Did the MS4 inspector ask the project superintendent or site foreman to accompany him or her on the inspection?

YES

9. Did the MS4 inspector recap his findings upon completion of his or her inspection?

YES

10. Is the community planning on taking any enforcement actions based on the results of today's inspection? If so, what are those actions? *(NOTE: Ask community to send you a copy of the enforcement action.)* Did the inspector provide a deadline for corrective action? If so, provide details.

YES

This is the second (2nd) notification in regards to the silt fence on the West side of the site near the sediment basin requiring maintenance. No deadline for corrective action was provided. The City should be identifying the code being violated and establish a deadline for corrective action.

Additional Comments:

- **Inspector appeared to be much more comfortable while conducting this inspection compared to the others. He was also more familiar with the plans and knew better what to look for during his inspection**
- **The site appeared to have violated the City of Kent's riparian setback ordinance. The sediment basin and other disturbed areas were located less than twenty five (25) feet from the stream on the South side of the site. In addition, concrete slabs and soil were placed directly in the stream. However, Pat was not aware of any possible variances granted by the City during the plan review for this project.**

(See attached photos)



Figure 1: Catch basins throughout the site were lacking adequate inlet protection as detailed in the SWP3. Simply stretching geotextile fabric under the grate is not an acceptable practice.



Figure 2: Concrete trucks must ensure that all wash water and concrete waste is contained in the concrete wash pit and not in contact with disturbed earth.



Figure 3: Small catch basins located in the courtyards are vulnerable to sediment laden runoff and require inlet protection.



Figure 4: Mortar mix/drywall mud wash water was visible in the courtyard near the unprotected catch basins. All wash water must be contained until it can be disposed of properly.



Figure 5: Vehicle leaks and other spills throughout the site need to be excavated and disposed of properly.



Figure 6: Fuel tanks need to be contained by a protective dike and equipped with a spill kit.



Figure 7: The silt fence needs to be repaired or replaced as necessary in the SE corner of the site. Dirt pushed up against the fence must be removed to prevent further damage and ensure proper function.



Figure 8: The site appears to have violated the City's riparian setback ordinance. The edge of the site is less than 25 ft. from the stream, and no variance was granted for the site. Concrete slabs and soil were placed directly in the stream as well.



Figure 9: The dewatering device (skimmer) is lying in the mud, and will not function as is. The skimmer needs to be connected to guide posts to prevent the device from floating away and possibly disconnecting from the outlet structure as well. Also, the geotextile fabric under the grate needs to be removed.



Figure 10: The sediment basin is lacking the appropriate sediment storage volume detailed in the SWP3. It may have never been constructed, or it has already been filled to capacity and must be excavated to function as intended.



Figure 11: The slope around the perimeter of the site as well as any other areas that will remain undisturbed for 21 days or longer (including soil stockpiles) need to be stabilized immediately.



Figure 12: Although contained, all chemicals, mixers, sands, etc. must be covered by a lid or tarp while not in use.



Figure 13: Trash and debris around the site need to be placed in the dumpsters. Dumpsters need to be covered while not in use to prevent its contents from exposure to runoff.



Figure 14: A preexisting storm sewer was ruptured while grading the site. The sewer needs to be capped at the end or directed to the sediment basin immediately.

POST-CONSTRUCTION INSPECTION WORKSHEET

NOTE: Use two of the post-construction sites you performed a file review on. This will speed up the inspection process since you will already have familiarity with the plan.

Name of MS4: City of Kent
MS4 Permit No: 3GQ00076*BG

Name of Site: Family Dollar (Redevelopment)	
Location: 316 S. Water Street	NPDES Permit # 3GC05238*AG
Date of Inspection: 6/14/12	Time of Inspection: 1:45 PM
Name of Inspector: Pat Homan	
Post-Construction BMPs on this Site (list by drainage area)	
<p>DA #1: 0.272 ac. (North End) – Bioretention cell with traditional storm water management stacked on top.</p> <p>DA #2: 0.915 ac. (South End, Majority of Parking Lot) – Bioretention cell with traditional storm water management stacked on top.</p> <p>DA #3: 0.346 ac. (Along S. Water) – No BMP</p> <p>DA #4: 0.623 ac. (Along Cherry) – No BMP</p>	

1. Has the MS4 conducted an as-built inspection of the post-construction BMPs on this site?

YES

However, the City has found compliance issues (See Additional Comments). Pat is only authorized to inform Jennifer of compliance issues but not the developer. The City must communicate deficiencies to the developer and order corrective action.

2. Using the approved post-construction plan on file with the MS4, verify that the planned BMPs have been installed. If a post-construction BMP has not been installed, what does the MS4 intend to do about it?

The BMP's have been installed, but both of them require rebuild/repair. Both bioretention cells have been equipped with inappropriate outlet structures. In addition, the bioretention soil mix was put in place prior to site stabilization. As a result, the surface of both cells is caked with sediment which hinders its function. Bioretention cells are post-construction BMPs and not intended to control construction site runoff.

3. For post-construction BMPs properly installed, did the inspector use the approved long-term maintenance plan as his basis for inspection?

N/A

This was not a long-term maintenance inspection. The long term maintenance plan has not yet been accepted by the City at this time.

4. Long-term maintenance issues noted by the MS4 inspector during this inspection.
NOTE: If maintenance issues are found, ask the MS4 to provide you with a copy of their notification to the responsible party.
- **Both bioretention cells are silted in. This is because they were installed before the site was permanently stabilized. The silt needs to be removed and the dead plants need to be replaced so that the BMP can function as intended**
 - **The site has not reached an 80% or greater vegetative growth density as required by the City's ordinances. The site needs to be reseeded and watered as necessary.**
 - **The inlet protection needs to be removed from the catch basins on site.**
 - **The outlet structures in the bioretention cells are not the appropriate size. They need to be replaced with outlet structures as depicted in the approved SWP3.**

Issues not noted by the inspector:

- *The runoff intended to be directed to bioretention cell #2 was not sufficiently directed there. A swale needs to be incorporated to ensure that the runoff intended for bioretention cell #2 is properly directed there.*
 - *The drainage area to bioretention cell #1 may not be as required. It appeared that more runoff was directed onto S. Water Street than intended due to the slope of the parking lot entrance.*
 - *The outlet protection at the outfall was not properly reinforced with erosion matting as depicted in the SWP3.*
 - *No vegetative plan was included in the SWP3 with respect to the plant choices in the bioretention cells.*
5. Did the MS4 inspector demonstrate knowledge of post-construction BMP function and essential long-term maintenance issues?

With prodding by Ohio EPA, the inspector did identify *most* of the major issues with the site, but certainly not all of them. (See above)

Additional Comments:

- **Bob Climes was the inspector on site prior to Pat Homan and was never focused on sediment and erosion controls or post-construction BMPs.**
- **No construction site inspections were conducted prior to February 2012.**

(See attached photos)



Figure 1: The bioretention cell is silted in. The plants are dying, and the site has stabilization issues.



Figure 2: The outfall is lacking erosion protection matting as detailed in the SWP3.



Figure 3: It appears as if the bioretention cell does not receive the runoff that it's intended to due to the slope of the parking lot driveway.



Figure 4: The bioretention cell is silted in and the outlet structure is the incorrect size per the SWP3.