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CUYAHOGA EUCLID

CITY OF EUCLID

3GQ00018 2011/08/16 MACPHERSON,  
LINDSIE

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**Environmental  
Protection Agency**

**Governor  
Lt. Governor  
Director**

August 16, 2011

RE: CUYAHOGA COUNTY  
CITY OF EUCLID  
PERMIT NO. 3GQ00018\*BG  
MUNICIPAL STORM WATER  
PROGRAM INSPECTION

Mr. Randy L. Smith  
Service Director  
City of Euclid  
585 East 222<sup>nd</sup> Street  
Euclid, OH 44123

Dear Mr. Smith:

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 August 10, 2011, Ohio EPA met with you and other representatives of the City of Euclid 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 Permits for Construction Activities, which include the following EPA NPDES Permits: OHC000003, OHCD0001 and OHCO00001. This was to be completed within two years of when

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the City's coverage under the MS4 general permit was granted (June 4, 2009). Ohio EPA recommends the City look to adopt the Chagrin River Watershed Partners model ordinances for erosion and sediment control and comprehensive storm water management, located at [www.crwp.org](http://www.crwp.org) under the Storm Water Phase II link. Please provide the EPA with a plan of action and time frame for passing the ordinance updates.

- **Failure to escalate enforcement to achieve compliance with the local construction site and post-construction ordinances.** This is a violation of Part III.B.4.a.vi of the NPDES permit. Our file review and interview revealed that the City does not send written Notices of Violation (NOVs) during the construction process under City of Euclid letterhead for non-compliance with Chapter 421-07 of the municipal code (Controlling Construction Site Erosion, Sediment, and Other Wastes and Storm Water Runoff). No actions such as stop work orders or court actions as permitted by Chapter 421-07 have been implemented to date. The City must develop and implement an enforcement escalation protocol so as to provide inspectors, the City Service Director, and other consulting firms with a clear policy on when to take enforcement to the next level and how that is to be achieved.

Ohio EPA recommends the City provide a written inspection report or NOV to the construction site operator(s) which holds NPDES permit-coverage, i.e., developer, homebuilder and/or contractor, to summarize inspection findings and compliance issues. The City should be aware that letters from the Cuyahoga Soil & Water Conservancy District (SWCD) are not considered NOVs unless the community's ordinance specifically gives the SWCD enforcement authority. The SWCD is simply notifying the community that there are compliance issues on the site, but they have no inherent enforcement authority in a municipality. If the City wishes to continue using the SWCD for inspections, one option would be for the City to attach a cover letter in Euclid letterhead summarizing the key violations and deficiencies found during the inspection and a time frame in which the work must be completed. Another suggestion would be for the City to develop a form that could be used by the SWCD and/or City staff during the construction site inspections and then left with the contractor for written notification of violations or deficiencies.

- **Failure to ensure all construction projects that result in a land disturbance of greater than or equal to one acre receives a Storm Water Pollution Prevention Plan (SWP3) approval prior to the commencement of construction on the site.** This is a violation of Part III.B.4.c and Part III.B.5.f of the Ohio EPA General Storm Water NPDES permit #OHC000002. The City should initiate a pre-construction meeting to discuss erosion and sediment controls and the sequence of construction, as well as to conduct a pre-construction SWP3 review and an initial inspection before construction commences on a site. Although the City stated that plan approval must occur prior the issuance of a general construction or building permit,

Ohio EPA noted that construction had commenced without plan approval or a pre-construction meeting for the Mount Saint Joseph Nursing Home project. Several months of SWCD construction inspection technical reports were submitted, but none of the reviewed reports stated that the SWP3 was not approved for the site. The City and the SWCD need to ensure that they are communicating and working together to *ensure permits are not issued by the City until a recommendation for SWP3 approval is issued from the Cuyahoga SWCD*. Please provide the EPA with documentation on the enforcement action taken on this matter and how issues such as this are to be handled in the future by the City and the Cuyahoga SWCD.

- **Failure to develop a program to ensure adequate long-term operation and maintenance (O&M) of privately-owned post-construction best management practices (BMPs).** This is a violation of Part III.B.5.d and Part III.B.5.f of the NPDES permit. All privately-owned post-construction BMPs on development and redevelopment sites that obtained NPDES permit coverage on or after April 21, 2003, must be included in your long-term maintenance program. The City has a Memorandum of Understanding with the Cuyahoga SWCD to conduct post-construction BMP inspections annually. Unfortunately, there does not seem to be any follow up on maintenance compliance issues until the SWCD's report for the following year. The City has not taken much of a stand on enforcement for post-construction compliance issues and could use improvement in this field. If there is no follow-up with the owner on required maintenance problems, the City is not adhering to their MS4 permit. The City's post-construction ordinance should include language to ensure that post-construction BMPs are maintained. Such language may include a time frame for compliance and further enforcement escalation protocols if there is a lack of compliance from the owner.
- **Failure to submit a Notice of Termination 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 Euclid has eight (8) active projects permitted under the Ohio EPA General Storm Water NPDES Permit for Construction Activities but indicated during the interview that six (6) of the projects were completed and have reached final stabilization. Please submit an NOT for these projects that are completed.

**Deficiencies:**

- The City of Euclid has a system for tracking active construction projects that result in a land disturbance greater than or equal to one acre, but projects less than one acre, e.g., individual lot construction and additions to business buildings, are not tracked. Such facilities where the larger common plan of development or sale is one acre or more, should be tracked along with other construction projects and inspected on a monthly basis while active. Although the City has not had much residential or

individual lot construction recently, the City should be prepared to handle future projects that are applicable to the City's ordinances, such as redevelopment projects along the lake and other infill development projects.

- During the inspection, we noted that the City does not track the submittal of Individual Lot NOIs nor Co-Permittee NOIs, but they do track general NOI submittal for NPDES permit coverage. Individual Lot NOIs are to be submitted by the operator of construction activities on a subplot within a larger development. Co-Permittee NOIs are typically submitted by contractors that are responsible for day-to-day operations at the construction site required to ensure compliance with the SWP3. To be equivalent to the NPDES permit program for storm water associated with construction activity, the City should begin ensuring that all construction site operators have submitted the appropriate NOI to Ohio EPA and have obtained NPDES permit coverage. NOI lists are found on the Ohio EPA website at [www.epa.ohio.gov/dsw/permits/gplist.aspx](http://www.epa.ohio.gov/dsw/permits/gplist.aspx).
- The City contracts construction site inspections and plan reviews with Cuyahoga SWCD for projects with one acre of disturbed area or more. The inspectors from SWCD seemed to be very well trained, but the City should still ensure that all inspectors, including the newly trained Building Department inspectors, receive on-going education to ensure that they are aware of the latest standards and specifications for erosion and sediment control, as well as other storm water related topics. *Please review Construction Field Review Worksheets and the File Review Worksheets for an evaluation of the construction site inspector and plan reviewer for the City of Euclid.*
- The City of Euclid has not 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), but should consider doing so to minimize arguments and negotiations on what constitutes an acceptable BMP. Although Ohio EPA does require post-construction BMPs on small construction sites, the requirements are not prescriptive. Thus, reliance on Ohio EPA requirements for small construction sites may not lead to the types of BMPs the City would prefer to see.
- The City does not ensure that contract language for municipal construction projects whose design is outsourced includes a requirement to ensure the development of a sediment and erosion control plan and post-construction water quality plan. Please add language to contracts for municipal construction projects to ensure the implementation of Chapter 421-07 and 420-07 on such projects. Further, if third party inspectors are to be used, language to ensure minimum inspection, maintenance, and reporting requirements should be specified in the contract.

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- The City has reviewed their ordinances to facilitate the use of non-structural and low-impact development (LID) practices in many instances. However, to further promote use of LID practices, the City may also want to consider adding a runoff reduction requirement to their post-construction ordinance or allow a reduction in the size of storm water management structures if LID is used. Planning and zoning codes should be reviewed to encourage smart growth principles in compact neighborhoods or mixed-use development such as walkable neighborhoods, vertical development, and infill development along corridors served by public transportation, as well as allowing the use of meadow grass or low-maintenance vegetation, where appropriate. The City should also look into updating their parking codes to reduce the amount of impervious surfaces created by current parking requirements. Permeable pavement is a key tool to reducing impervious area and should be more broadly promoted.

Please review my comments and provide Dan Bogoevski with a letter of response indicating the actions you will take to address my concerns. **Your response should be received no later than September 16, 2011.** Please note that this response does not replace the requirement to submit an Annual Report. Your annual report for 2011 will be due on April 1, 2012.

If you have any questions, please contact Dan Bogoevski at (330) 963-1145 or [dan.bogoevski@epa.state.oh.us](mailto:dan.bogoevski@epa.state.oh.us).

Sincerely,



Lindsie MacPherson  
Assistant to the District Engineer  
Division of Surface Water

LM/mt

cc: Bill Cervenik, Mayor, City of Euclid w/ enclosure  
Lee Bock, Assistant Service Director, City of Euclid w/ enclosure  
Todd Houser, Storm Water Program Manager, Cuyahoga SWCD w/ enclosure

ec: Dan Bogoevski, Ohio EPA, NEDO, DSW w/ enclosure

## Municipal Storm Water Program Evaluation

### Construction and Post-Construction Component Worksheet

|   |
|---|
| <b>Date of Evaluation</b>                 |
| August 10, 2011                           |
| <b>Evaluator Name, Title</b>              |
| Linsie MacPherson, Ass. District Engineer |
| <b>MS4 Permittee</b>                      |
| City of Euclid                            |

**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.

| <b>Staff Interviewed</b>                      |   |   |
|---|---|---|
| <b>Name</b>                                   | <b>Department/Agency</b>                    | <b>Phone Number/Email</b>                         |
| Randy L. Smith<br>Service Director            | Public Service Department<br>City of Euclid | (216) 289-8345<br>rsmith@cityofeuclid.com         |
| Lee Bock<br>Assistant Service Director        | Public Service Department<br>City of Euclid | (216) 289-8108<br>lbock@cityofeuclid.com          |
| John Hall<br>Superintendent of<br>Wastewater  | Public Service Department<br>City of Euclid | (216) 289-2810 Ex. 3915<br>jhall@cityofeuclid.com |
| Todd Houser<br>Storm Water Program<br>Manager | Cuyahoga SWCD                               | (216) 524-6580 Ex. 17<br>thouser@cuyahogawcd.org  |

| <b>Ordinance/Legal Authority</b>                                  |   |
|---|---|
| <b>Interview Questions</b>  | <b>Response</b>   |
| Ordinance used to require storm water BMPs at construction sites? | <b>YES</b>  |
| Name and/or code section(s)                                       | Ordinance No. 152-2007, Chapter 421-07:<br>Controlling Construction Site Erosion, Sediment, and other wastes and storm water runoff |
| Date initially enacted: 6/18/2007<br>Effective: 7/18/2007         | NOACA Model Ordinance   |

| <b>Ordinance/Legal Authority</b>   |   |
|--|---|
| <b>Interview Questions</b>   | <b>Response</b>   |
| <p>Threshold for coverage (e.g., 1 acre, 100 cubic yards, etc.)</p> <p><i>NOTE: 1 acre is minimum requirement.</i></p>   | <p>Individual development sites larger than 8000 sf but smaller than 1 acre must submit an abbreviated SWP3.</p> <p>Development over an acre or where the larger common plan of development or sale is equal to or larger than one acre must submit a complete SWP3.</p>  |
| <p>Exclusions from coverage allowed:</p> <p><i>NOTE: To align with NPDES permit program, the only exclusions allowed are (a) if rainfall erosivity factor, R, is &lt; 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 &lt; 5 acres is disturbed, (c) silvicultural disturbances, (d) agricultural disturbances or (e) construction related to oil &amp; gas well exploration.</i></p> <p><i>Ohio EPA website has fact sheet on what constitutes "agricultural disturbance" and "routine maintenance" versus regulated construction activity.</i></p> <p><i>Some communities allow an abbreviated SWP3 for individual home construction or other small construction. That is fine as long as intent of regulation is met.</i></p> | <p>Land disturbing activities related to producing agricultural crops or silvicultural operations, as well as coal surface mining operations are exempt from coverage under this permit.</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 style="text-align: center;"><b>YES</b></p> |

| <b>Ordinance/Legal Authority</b>   |   |
|--|---|
| <b>Interview Questions</b>   | <b>Response</b>   |
| Non-silvicultural tree clearing?   | <b>YES</b>  |
| Your own municipal construction projects?  | <b>YES</b>  |
| Construction and demolition debris landfills?  | <b>YES</b>  |
| Construction by other public entities within your political jurisdiction, e.g., a county road project within a municipality?   | <b>YES</b>  |
| Earth disturbance associated with open spaces and parks (e.g., trails within a park or parking lot improvements at a park)?  | <b>YES</b>  |
| Private pond construction?   | <b>YES</b>  |
| Construction of wind or solar panel farms?   | <b>YES</b>  |
| Establishment of borrow or spoil areas that service multiple, unrelated construction projects?   | <b>YES</b>  |
| Utility construction projects (including tree clearing along utility corridors or pipeline projects that cross multiple political jurisdictions)?  | <b>YES</b>  |
| <p><i><b>NOTE:</b> Construction must be regulated if it does not meet one of the exclusions and the larger common plan of development or sale disturbs 1 or more acre of land. The intent of this line of questioning is to simply highlight the scope of regulated construction activity that the MS4 may have to contend with.</i></p> |   |
| Does ordinance regulate the discharge of pollutants other than sediments on a construction sites (e.g., construction wastes, fuel tanks, cement truck wash water, trash, chemicals, etc.)?   | <b>YES</b>  |
| Has ordinance been updated to reflect minimum requirements of Ohio EPA NPDES permit #OHC000003?  | <b>NO</b>   |
| Date of MS4 Permit Renewal: <b>6/4/2009</b>  | The City passed the NOACA model ordinance back in 2007, but no updates to the ordinance have occurred since. The MS4 permit required the City to update their ordinances within 2 years of their permit renewal. The City renewed the permit on June 4. |

| <b>Ordinance/Legal Authority</b>   |   |
|--|---|
| <b>Interview Questions</b>   | <b>Response</b>   |
|  | 2009, and is therefore in violation of their permit for failure to update ordinances to comply with the technical requirements set forth in the Ohio EPA NPDES General Storm Water Permit for Construction Activities #OHC000003. |
| <b>POST-CONSTRUCTION ORDINANCES</b>  |   |
| Ordinances used to require post-construction storm water BMPs on new development or redevelopment projects:                |   |
| <b>Treatment of Water Quality Volume (WQv)</b>   | <b>YES</b>  |
| Name and code section:   | Ordinance No. 151-2007, Chapter 420-07:<br>Controlling Post-Construction Water Quality Runoff   |
| Date initially enacted: 6/18/2007  |   |
| Has this ordinance been updated to reflect the minimum requirements of Ohio EPA General Permit #OHC000003?                 | <b>NO</b>   |
| Date of update: N/A  | See note above.   |
| <b>Riparian and Wetland Setback Ordinance</b>  | <b>YES</b>  |
| Name and code section:   | Ordinance No. 150-2007, Chapter 419-07:<br>Controlling Riparian Setbacks and Wetlands Setbacks  |
| If YES, does ordinance require protection of native vegetation within riparian area or can manicured lawns be established? | <b>YES</b>  |
|  | Unless the lawn was already established prior to the passing of the ordinance.  |
| If YES, does ordinance allow the location of storm water infrastructure within the riparian setback?                       | <b>NO</b>   |
| <b>Runoff Reduction</b> (e.g., infiltration or mitigation of a recharge volume)?   | <b>YES</b>  |
| Name and code section:   | Ordinance No. 151-2007, Chapter 420-07:<br>Controlling Post-Construction Water Quality Runoff<br>Onsite infiltration of runoff is stated under permitted BMPs.  |
| <b>BMPs designed to control temperature</b> for discharges to cold water habitat streams?                                  | <b>N/A</b>  |
| Name and code section:   |   |

| <b>Ordinance/Legal Authority</b>   |  |
|--|--|
| <b>Interview Questions</b>   | <b>Response</b>  |
| <p><b>Encouraging Green Infrastructure</b> or low-impact development practices:</p> <p>Allow downspout disconnection and use of open storm water conveyance systems?<br/>Names and code sections:</p> <p>Permit the installation of rain gardens and other bioretention facilities?<br/>Names and code section:</p> <p>Allow rainwater harvesting (rain barrels and cisterns)?<br/>Name and code section:</p> <p>Allow or require the use of pervious pavement systems?<br/>Name and code section:</p> <p>Allow reduction in the size of traditional storm water management structures if LID used?<br/>Name and code section:</p> <p>Provide a credit to a storm water utility fee if LID is used?<br/>Describe:</p> <p><b>Balanced Growth Principles</b>, i.e., other non-structural ordinances or codes that promote better site design:</p> <p>Allow conservation design as a subdivision layout (retain ≥ 40% open space by maintaining existing zoned density)<br/>Standard or variance required?<br/>Name and code section:</p> | <p style="text-align: center;"><b>YES</b></p> <p>Ordinance No. 101-2010, Chapter 132a-10: Maintenance of roofs and gutters; rain barrels states that downspout disconnect is approved by the City Engineering Department on a case by case basis.</p> <p style="text-align: center;"><b>YES</b></p> <p>Ordinance No. 151-2007, Chapter 420-07: Controlling Post-Construction Water Quality Runoff States that LID practices are an acceptable post-construction BMP under the BMP section.</p> <p style="text-align: center;"><b>YES</b></p> <p>Ordinance No. 209-2008, Chapter 151-08: Maintenance of Roof and gutter; rain barrels</p> <p style="text-align: center;"><b>YES</b></p> <p>Ordinance No. 30-2010, Chapter 055-10: Minimum standards for installation of drives, parking, auto maneuvering, walks, patios, etc.</p> <p style="text-align: center;"><b>YES</b></p> <p>The SWCD would approve this reduction, but the City's ordinance does not specifically state this as an alternative option. This would be allowed under the post-construction ordinance in the alternative action section, option number 5, which states "other practices approved by the Community Engineer in keeping the intent of this section" may be approved.</p> <p>N/A- the City does not have a storm water utility fee at this time.</p> <p style="text-align: center;"><b>YES</b></p> <p>The City has several programs that look to develop more open space using conservation design including: Planned Unit development (ASF), the U-7</p> |

| <b>Ordinance/Legal Authority</b>  |   |
|---|---|
| <b>Interview Questions</b>  | <b>Response</b>   |
| <p>Encourage the use of vegetation that requires little to no maintenance in common areas (e.g., meadow vegetation vs. mowed lawn)<br/>Name and code section:</p>   | <p>District, Campus Institutional, and the Downtown Plan (Transportation and redevelopment Plan) founded by NOACA to foster compact growth, which the city adopted in 2007.</p> <p style="text-align: center;"><b>YES</b></p>   |
| <p>Reduce impervious area created by commercial parking lots (e.g., update codes so that they are context-specific, allow shared parking, land-banked parking, parking garages rather than surface lots, etc.)<br/>Name of code section</p> | <p>No ordinance limits the landscape in the City. Low-maintenance meadow grasses are permitted and encouraged.</p> <p style="text-align: center;"><b>YES</b></p>  |
| <p>Allow sidewalks on only one side of the road in residential neighborhoods<br/>Name and code section:</p>   | <p>The City's parking codes are not updated but, the City is flexible with parking variances for parking garages and shared parking. This also ties in with the NOACA project to eliminate parking and perimeter landscaping.</p> <p style="text-align: center;"><b>YES</b></p> |
| <p>Zoning that encourages smart growth in compact neighborhoods or mixed-use development:</p>   | <p style="text-align: center;"><b>YES</b></p>   |
| <p>If YES, does zoning create walkable neighborhoods with access to commercial areas and employment centers?<br/>Describe:</p>  | <p style="text-align: center;"><b>YES</b></p> <p>A major goal with the Euclid project is connectivity and City wide system walking trails.</p>  |
| <p>If YES, does this zoning provide incentives for vertical development rather than horizontal sprawl?<br/>Describe:</p>  | <p style="text-align: center;"><b>YES</b></p> <p>Housing requirements have horizontal constraints, which forces building vertical. The Downtown Plan has a zoning overlay district where they are looking to create smaller footprints.</p>                                     |
| <p>If YES, does this zoning encourage a range of housing options for people of various incomes?<br/>Describe how:</p>   | <p style="text-align: center;"><b>YES</b></p> <p>This would be included in the City's PUD code.</p>   |
| <p>If YES, do you provide incentives for infill development or development in the core?<br/>Describe incentive programs:</p>  | <p style="text-align: center;"><b>YES</b></p> <p>The City has a land bank program for infill development, and they use to offer cash reimbursements and tax abatements.</p>   |

| <b>Ordinance/Legal Authority</b>   |  |
|--|--|
| <b>Interview Questions</b>   | <b>Response</b>  |
| <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)?<br/>Describe how:</p> <p><i>NOTE: The point of this line of questioning is to emphasize to the MS4 that post-construction storm water management, land use planning and building and zoning codes must be linked to create a meaningful storm water program. A good MS4 program goes beyond the WQv requirement. The storm water program manager must work with the planning commissioner and building department to affect development patterns in their community that negatively impact storm water quality.</i></p> | <p><b>YES</b></p> <p>The City encourages connectivity throughout the community as well as in the Downtown district.</p>  |
|  |  |
| <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</p> <p>Construction &amp; Post-Construction</p> <p>Permits &amp; Type (Building, Grading, etc.)</p> <p>Construction Post-Construction</p> <p>Does your definition of "construction activities" include any grading, grubbing, filling, clearing or excavating activity?</p>  | <p><b>YES</b></p> <p>General Construction Permit, Building permit</p> <p><b>YES</b></p> <p><b>YES</b><br/>"Earth Disturbing Activity"</p>  |
| <p>Are plans for storm water controls used during construction submitted separately from plans that depict post-construction BMPs?</p> <p>Describe the submission process and the timing of plan submission:</p>   | <p><b>NO</b></p> <p>Developer will submit a site plan, which will go to the City's consulting engineer and SWCD for review and approval, usually 6-8 weeks. Once the City receives to approvals for the site plans and from building, the City will issue their permits.</p> |

| <b>Ordinance/Legal Authority</b>  |   |
|---|---|
| <b>Interview Questions</b>  | <b>Response</b>   |
| <p>Does your ordinance explicitly specify selection criteria or minimum acceptable BMP design?</p> <p>Construction</p> <p>Post-Construction</p> <p>Are they also references:</p> <p>Construction &amp; Post-Construction</p>  | <p style="text-align: center;"><b>YES</b></p> <p style="text-align: center;"><b>YES</b></p> <p>Reference to the Rainwater and Land Development Manual in both ordinances</p>  |
| <p>DO NOT ANSWER THESE QUESTIONS IF APPLICABLE</p>  |   |
| <p>Types of enforcement mechanisms available for construction site issues per your ordinance:</p>   | <p>Notices of Violations (NOV)      <b>YES</b></p> <p>Administrative fines                      <b>YES</b></p> <p>Stop-work orders                          <b>YES</b></p> <p>Civil penalties                               <b>YES</b></p> <p>Criminal penalties                         <b>YES</b></p> <p>Other (Describe):</p> <p>Misdemeanor of the first degree and fined no more than \$1,000 or imprisoned for no more than 180 days.</p> |
| <p>Which type of enforcement action have you most commonly implemented?</p>   | <p>The Notice of Violation is most commonly used by the Community.</p>  |
| <p>Describe the enforcement mechanism used when the following compliance situations are encountered on construction sites:</p> <ol style="list-style-type: none"> <li>1. Construction has commenced without a permit or plan approval</li> <li>2. A BMP indicated on the SWP3 has not been installed or requires maintenance (first incidence)</li> <li>3. A BMP is required but not shown on the SWP3</li> </ol> | <p>A stop work order would be issued.</p> <p>SWCD sends out their Technical Advisory Report, then an independent engineering consultant (KNM) would handle the follow up with a letter and a follow-up inspection to ensure compliance. (CT Consultants is also used for this purpose)</p> <p>Same as above. The consultant would require a revised SWP3 to be sent to SWCD for review and approval.</p>  |

| <b>Ordinance/Legal Authority</b>   |   |                             |            |                      |            |                  |            |                 |            |                    |            |
|--|---|-----------------------------|------------|----------------------|------------|------------------|------------|-----------------|------------|--------------------|------------|
| <b>Interview Questions</b>   | <b>Response</b>   |                             |            |                      |            |                  |            |                 |            |                    |            |
| <p>4. A BMP has not been installed or maintained despite prior notification from the MS4 (repeated incidences)</p> <p>5. If using a third party inspection service provider, e.g., the SWCD, MS4 receives inspection report indicating repeated non-compliance issue</p>   | <p>Typically the City will send another letter requesting compliance. Only one project has escalated from this point. (East 248<sup>th</sup> Street rehabilitation where the contractor was terminated due to other issues as well as E&amp;SC issues).</p> <p>Yes the City will receive all reports from SWCD, but the City does not seem to have reports from the engineering consulting firms.</p>   |                             |            |                      |            |                  |            |                 |            |                    |            |
| <p>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.</p> <p><i>NOTE: In municipalities, letters from the SWCD are not considered NOV's unless the community's ordinance specifically gives the SWCD enforcement authority. This is not the case typically. The SWCD is simply notifying the developer and community that there are compliance issues on the site, but they have no inherent enforcement authority in a municipality.</i></p> | <p>For the Roosevelt Elementary School replacement project – the building department was out for a different inspection and observed offsite tracking of mud, as well as a problem with the construction entrance. Lee Bock sent an email to the developer with a request for compliance or the project would be shut down. The developer replied within the day describing how he complied.</p> <p>Need to improve and increase written notifications.</p>   |                             |            |                      |            |                  |            |                 |            |                    |            |
| <p>Have your enforcement protocols and procedures for construction site issues been formalized in a written enforcement escalation plan?</p>   | <p style="text-align: center;"><b>NO</b></p> <p><b>Ohio EPA Comment:</b> The existing enforcement escalation process needs improvement to provide clear indicators of what type of enforcement action should be taken and how and when enforcement should be escalated when repeated violations occur. This provides clear direction to the inspectors, service director, and others and should lead to better compliance in a quicker timeframe.</p>   |                             |            |                      |            |                  |            |                 |            |                    |            |
| <p>Types of enforcement mechanisms available for post-construction site issues per your ordinance:</p>   | <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Notices of Violations (NOV)</td> <td style="text-align: right; padding: 2px;"><b>YES</b></td> </tr> <tr> <td style="padding: 2px;">Administrative fines</td> <td style="text-align: right; padding: 2px;"><b>YES</b></td> </tr> <tr> <td style="padding: 2px;">Stop-work orders</td> <td style="text-align: right; padding: 2px;"><b>YES</b></td> </tr> <tr> <td style="padding: 2px;">Civil penalties</td> <td style="text-align: right; padding: 2px;"><b>YES</b></td> </tr> <tr> <td style="padding: 2px;">Criminal penalties</td> <td style="text-align: right; padding: 2px;"><b>YES</b></td> </tr> </table> <p>Misdemeanor of the first degree and fined no more than \$1,000 or imprisoned for no more than 180 days.</p> | Notices of Violations (NOV) | <b>YES</b> | Administrative fines | <b>YES</b> | Stop-work orders | <b>YES</b> | Civil penalties | <b>YES</b> | Criminal penalties | <b>YES</b> |
| Notices of Violations (NOV)  | <b>YES</b>  |                             |            |                      |            |                  |            |                 |            |                    |            |
| Administrative fines   | <b>YES</b>  |                             |            |                      |            |                  |            |                 |            |                    |            |
| Stop-work orders   | <b>YES</b>  |                             |            |                      |            |                  |            |                 |            |                    |            |
| Civil penalties  | <b>YES</b>  |                             |            |                      |            |                  |            |                 |            |                    |            |
| Criminal penalties   | <b>YES</b>  |                             |            |                      |            |                  |            |                 |            |                    |            |

| <b>Ordinance/Legal Authority</b>  |   |
|---|---|
| <b>Interview Questions</b>  | <b>Response</b>   |
| Which type of enforcement action have you most commonly implemented?  | Long-Term Operation and Maintenance Technical Advisory Report from SWCD is most commonly used.  |
| <p>Describe the enforcement mechanism used when the following compliance situations are encountered regarding post-construction:</p> <ol style="list-style-type: none"> <li>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, <b>or</b> the bioretention soil has been placed prior to upland areas being stabilized)</li> <li>2. The post-construction BMP has not been maintained (first incident)</li> <li>3. The post-construction BMP has not been maintained after multiple notifications</li> <li>4. A homeowner has cut down trees in the riparian setback area (if applicable)</li> <li>5. A homeowner has installed a shed in a vegetated filter strip disrupting sheet flow runoff</li> </ol> | <p>Same as above. Written notice from SWCD and then sent to the consulting engineer for further compliance.</p> <p>The owner will receive a Long-Term Operation and Maintenance Technical Advisory Report from SWCD.</p> <p>No enforcement at this level has occurred in the community, and the City does not have an enforcement escalation plan that would state the next enforcement action to be taken.</p> <p>Violator is subject to a \$1000 fine.</p> <p>The City would require the resident to remove the shed through the same process described above. Additional court actions would follow if compliance did not occur.</p> |
| <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.</p> <p><i><b>NOTE:</b> In municipalities, letters from the SWCD are not considered NOV's unless the community's ordinance specifically gives the SWCD enforcement authority. This is not the case typically. The SWCD is simply notifying the community that there are compliance issues on the site, but they have no inherent enforcement authority in a municipality.</i></p>  | No enforcement actions have occurred for post-construction operations in the City of Euclid.  |

| <b>Ordinance/Legal Authority</b>  |                 |                 |
|---|-----------------|-----------------|
| <b>Interview Questions</b>  | <b>Response</b> |                 |
| Have your enforcement protocols and procedures for post-construction issues been formalized in a written enforcement escalation plan? | NO              |                 |
| <b>Applicable Documents</b>   | <b>Reviewed</b> | <b>Obtained</b> |
| Sediment and Erosion Control Ordinance  | YES             | YES             |
| Post-Construction Storm Water BMP Ordinances(s)   | YES             | YES             |
| Enforcement escalation plan or procedures<br>Construction:<br>Post-Construction:  | NO              | NO              |

| <b>Construction Project Inventory</b>   |  |
|---|--|
| <b>Interview Question</b>   | <b>Response</b>  |
| Do you keep an inventory of construction projects that are actively occurring in your community?<br>If YES, how?  | <b>YES</b><br><br>There is a map the City has with active construction projects depicted. A list was developed from this map and received by the Ohio EPA. The City also has files for the individual projects with the SWP3 and other documentation for the site. Reports from SWCD are also submitted to the City. |
| Do you track construction projects <1 acre (e.g., individual lot within a subdivision or small addition to a business)?   | <b>NO</b><br><br>The City needs to begin tracking individual lot construction and the submittal of Individual Lot NOIs to Ohio EPA.  |
| How often is your inventory of construction projects updated?   | As plans are submitted to the City, the inventory is updated.  |
| Information tracked:  | Project status <b>YES</b><br>Inspection Findings <b>YES</b><br>Enforcement Actions <b>YES</b><br>Complaints <b>YES</b><br>-depends on how the complaint is received<br>NOI submittal <b>YES</b>  |
| Are site inspections at active construction sites conducted at a frequency of at least once per month?<br><br><i>NOTE: This is the minimum performance standard in the NPDES permit for small MS4s.</i> | Cuyahoga SWCD inspects projects over an acre once a month. The Building Department started a program recently where they will conduct in-house E&SC inspections weekly while out doing other building inspections. This program is fairly new and not fully implemented.   |

| <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> <p><i>NOTE: Select two sites from NOI list and ask if they are active. Ask for the dates of the last two site inspections at each site.</i></p> | <p>7 active sites</p> <p>Site #1: Glenbrook Elementary School<br/>Most recent inspection date: 8/8/2011<br/>Prior inspection date: 8/3/2011-City</p> <p>Site #2: East 190<sup>th</sup>-195<sup>th</sup> Street Improvements<br/>Most recent inspection date: 8/9/2011<br/>Prior inspection date: 7/19/2011</p>   |          |          |     |     |     |     |
|---|--|----------|----------|-----|-----|-----|-----|
| <b>Applicable Documents</b>   |  |          |          |     |     |     |     |
| List of active construction projects  | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%; text-align: center;">Reviewed</th> <th style="width: 50%; text-align: center;">Obtained</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">YES</td> <td style="text-align: center;">YES</td> </tr> <tr> <td style="text-align: center;">YES</td> <td style="text-align: center;">YES</td> </tr> </tbody> </table> | Reviewed | Obtained | YES | YES | YES | YES |
| Reviewed  | Obtained   |          |          |     |     |     |     |
| YES   | YES  |          |          |     |     |     |     |
| YES   | YES  |          |          |     |     |     |     |
| List of projects covered under a state/EPA general permit   |  |          |          |     |     |     |     |
| <p><i>NOTE: Prior to inspection, query the NOI database to pull up all active permits in the community. List below. Point out discrepancies between our list and theirs.</i></p>  |  |          |          |     |     |     |     |

| <b>Notes</b>   |
|--|
| <p><b><u>Municipal Construction Projects</u></b></p> <p>Ohio EPA records show that the City of Euclid has eight (8) active projects permitted under the Ohio EPA General Storm Water NPDES Permit for Construction Activities but indicated during the interview that six (6) of the projects were completed and have reached final stabilization.. Please note that the Ohio EPA General Storm Water NPDES Permit for Construction Activities #OHC000003 requires the City to submit a Notice of Termination (NOT) to Ohio EPA within 45 days of when a project reaches final stabilization. The City is in violation of Ohio EPA General Storm Water NPDES Permit for Construction Activities for City projects that are complete but failed to submit a NOT within 45 days of reaching final stabilization.</p> |

| <b>Post-Construction BMP Inventory</b>   |  |
|--|--|
| <b>Interview Question</b>  | <b>Response</b>  |
| <p>Are post-construction BMPs tracked?<br/><i>BMPs must be shown on the MS4 map</i></p>  | <p style="text-align: center;">YES</p> <p>Through the SWCD Urban Site Program, all post-construction BMPs are tract for the community. The City is working on including all post-construction BMPs in their MS4 GIS map.</p> |
| <p>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> | <p>The SWCD inventory includes all post-construction BMPs in the City of Euclid, and the City is working to have all the BMPs mapped.</p>  |

|  |  |                 |                 |
|--|--|-----------------|-----------------|
| Information tracked:   | Location   | YES             |                 |
|  | Type   | YES             |                 |
|  | Maintenance Requirements   | YES             |                 |
|  | Inspection findings  | YES             |                 |
|  | Ownership:   | YES             |                 |
| Database used?   | YES<br>SWCD uses the Urban Site Program (USP).   |                 |                 |
| Number of private post-construction structural BMPs installed in community | 4 private BMPs<br><br>Walgreens at Euclid and Dille<br>Rite Aid No. 4071<br>CVS – Lakeshore<br>Wendy's – 250E. 222 St.<br><br>The Shores of Edgecliff has no post-construction BMPs at this time and other facilities are under construction that will be added to the list upon completion. |                 |                 |
| <b>Applicable Documents</b>  |  | <b>Reviewed</b> | <b>Obtained</b> |
| Inventory of Post-Construction BMPs  |  | YES             | YES             |

| <b>Construction and Post-Construction BMP Standards</b>  |                 |
|--|-----------------|
| <b>Interview Questions</b>   | <b>Response</b> |
|  |                 |
| Do your erosion and sediment control standards include BMP selection criteria?   | YES             |
| Do your construction site standards account for different needs for different times of the year (e.g., growing season vs. winter)? | YES             |
| Please elaborate:  |                 |
| Do your standards include operation and maintenance requirements?  | YES             |
|  |                 |
| Do your post-construction standards include BMP selection criteria?  | YES             |

| <b>Construction and Post-Construction BMP Standards</b>  |  |                 |
|--|--|-----------------|
| <b>Interview Questions</b>   | <b>Response</b>  |                 |
| 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)?<br><br>If so, what are your standards? | <b>NO</b><br><br>The minimum standards are mentioned, but not required. The ordinance lists the appropriate BMPs to be used for smaller projects but does not provide standards on how the BMPs must be designed or selection criteria for which BMP must be used. |                 |
| Do your standards include operation and maintenance requirements?  | <b>YES</b>   |                 |
| <b>Applicable Documents</b>  | <b>Reviewed</b>  | <b>Obtained</b> |
| BMP guidance or technical document   | NO   | NO              |

| <b>Notes</b> |
|--------------|
|              |

| <b>Plan Review Procedures</b>   |  |
|---|--|
| <b>Interview Questions</b>  | <b>Response</b>  |
| Who is responsible for erosion and sediment control plan review?                  | Cuyahoga SWCD  |
| If third party, is there an MOU or other agreement in place?                      | <b>YES</b>   |
| Is it current?  | <b>YES</b>   |
| Who is responsible for post-construction plan review?                             | Cuyahoga SWCD  |
| If third party, is there an MOU or other agreement in place?                      | <b>YES</b>   |
| Is it current?  | <b>YES</b>   |
| What training or professional certifications have plan review personnel received? | SWCD employees, CPESC, workshop coordinators, OCAPP series |
| Construction & Post-Construction  |  |

| <b>Plan Review Procedures</b>  |   |
|--|---|
| <b>Interview Questions</b>   | <b>Response</b>   |
| <p>How many years of experience does plan review personnel have inspecting storm water BMPs?</p> <p>Construction<br/>Post-Construction</p>   | <p>Todd – 10 years<br/>Todd – 8 years</p>   |
| <p>How often do plan review personnel receive training?</p> <p>Construction<br/>Post-Construction</p> <p><i>NOTE: Make MS4 operator aware of training opportunities provided by Ohio EPA and archived at <a href="http://www.epa.ohio.gov/ocapp/storm_water.aspx">www.epa.ohio.gov/ocapp/storm_water.aspx</a>.</i></p> | <p>At least once a month</p>  |
| <p>Do you use a checklist to conduct plan review?</p> <p>Construction<br/>Post-Construction</p>  | <p>Uses the Ohio EPA checklist</p> <p style="text-align: center;"><b>YES</b></p> <p style="text-align: center;"><b>YES</b></p>                              |
| <p>Size threshold for plan review (i.e. 1 acre, 10,000 square feet)?</p> <p>Construction<br/>Post-Construction</p>   | <p>1 acre or more for a complete SWP3<br/>8000 sf for an abbreviated SWP3</p> <p>1 acre or more for a complete SWP3<br/>8000 sf for an abbreviated SWP3</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>   | <b>YES</b>  |
| <p>Do you require a pre-construction meeting with developers and/or contractors?</p> <p><i>NOTE: This is a required performance standard for both construction and post-construction.</i></p>  | <b>YES</b>  |
| <p>Is the sequence of implementation of sediment and erosion controls discussed during these meetings?</p>   | <b>YES</b>  |
| <p>Is the timing of installation of post-construction BMPs discussed during these meetings?</p>  | <b>YES</b>  |

| <b>Plan Review Procedures</b>  |   |                 |
|--|---|-----------------|
| <b>Interview Questions</b>   | <b>Response</b>   |                 |
| Does your community have standard conditions of plan approval?   | <b>YES</b>  |                 |
| Do they include erosion and sediment control and/or post-construction water quality requirements?  | There is no direct listing of the requirement to have approval from the SWCD. This should be added to the "Chain of custody Form" to ensure the form is up to date. |                 |
| 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? | <b>YES</b>  |                 |
| Does your community require a long-term maintenance plan for post-construction BMPs?   | <b>YES</b>  |                 |
| If YES, is the plan required to include the following:   | The City requires maintenance plans in the SWP3, but not a separate plan on record.   |                 |
| Identify the party responsible for long-term maintenance?  | <b>YES</b>  |                 |
| A list of routine and non-routine maintenance tasks and the frequency for their performance?   | Sometimes   |                 |
| 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?                      | NO  |                 |
| Is this plan kept on file or input into a database for future reference to ensure the required tasks are being completed?                                      | Not really  |                 |
| <b>Applicable Documents</b>  | <b>Reviewed</b>   | <b>Obtained</b> |
| Copy of standard conditions of approval  | YES   | YES             |
| Example of standard conditions applied to an approved project  | YES   | NO              |
| Checklist used by plan reviewers   | Ohio EPA checklist  | NO              |

| <b>Project Inspections</b>   |  |
|--|--|
| <b>Interview Questions</b>   | <b>Response</b>  |
| Who is responsible for erosion and sediment control site inspection?   | The City has started to send out their own building inspectors to follow-up on construction related issues in addition to the Cuyahoga SWCD monthly inspections. This is an interim process that the City is working on since the passing of Kersi Mehta.  |
| If third party, is there an MOU or other agreement in place?   | <b>YES</b>   |
| Is it current?   | <b>YES</b>   |
| Who is responsible for post-construction site inspection?  | SWCD conducts annual inspections for post-construction BMPs in the community.  |
| If third party, is there an MOU or other agreement in place?   | <b>YES</b>   |
| Is it current?   | <b>YES</b>   |
| Is an "as-built" inspection conducted at the time a post-construction BMP is installed to ensure compliance with the approved BMP construction plan? | <b>YES</b><br><br>SWCD will complete a SWP3 completion report and submit the report to the City.   |
| Does the MS4 conduct inspections for long-term maintenance of privately-owned post-construction BMPs?  | <b>YES</b>   |
| If YES, at what frequency?   | The City has a Memorandum of Understanding with the SWCD to conduct post-construction BMP inspections annually. Unfortunately, there does not seem to be any follow up on maintenance compliance issues until the SWCD's next report the following year.<br><br>The City is required to ensure the long-term operation and maintenance of post-construction BMPs in the community through their MS4 Permit. If there is no follow-up with the owner on required maintenance problems, the City is not adhering to their permit. The City's post-construction ordinance should identify such issues to ensure that post-construction BMPs are maintained and may include a time frame for compliance. |

| <b>Project Inspections</b>  |   |                 |
|---|---|-----------------|
| <b>Interview Questions</b>  | <b>Response</b>   |                 |
|   |   |                 |
| Findings from construction and post-construction inspections tracked in a database?   | <b>YES</b>  |                 |
|   | Urban Site Program  |                 |
| What training or professional certifications have site inspection personnel received?   | For SWCD same as above.   |                 |
| Construction & Post-Construction  | All training records for Randy Smith and Lee Bock were received by the Ohio EPA. Both building inspectors are studying for the CESWH exam and have been sent to SWCD trainings. |                 |
| How many years of experience does site inspection personnel have inspecting storm water BMPs?   | Same as above for Todd.   |                 |
| Construction & Post-Construction  | Building inspectors – about a month   |                 |
| How often do site inspection personnel receive training?  | Same as above for Todd.   |                 |
| Construction & Post-Construction  |   |                 |
| <i>NOTE: Make MS4 operator aware of training opportunities provided by Ohio EPA and archived at <a href="http://www.epa.ohio.gov/ocapp/storm_water.aspx">www.epa.ohio.gov/ocapp/storm_water.aspx</a>.</i> |   |                 |
| Do you use a checklist or the approved plan to conduct site inspections?  | <b>YES</b>  |                 |
| Construction  | SWCD uses the approved plans  |                 |
|   | Building inspectors use the Ohio EPA checklist  |                 |
| Post-Construction   | <b>YES</b>  |                 |
| <b>Applicable Documents</b>   | <b>Reviewed</b>   | <b>Obtained</b> |
| 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 BMPs   | YES   | YES             |
| Records from inspection tracking database or filing system  | YES   | YES             |
| Checklist for inspecting long-term maintenance of post-construction BMPs  | N/A   | N/A             |
| <b>Notes</b>  |   |                 |
|   |   |                 |

| <b>MS4-Owned Construction Projects</b>   |  |
|--|--|
| <b>Interview Questions</b>   | <b>Response</b>  |
| Projects designed in-house or contracted?  | All projects are contracted  |
| Designers trained in storm water BMP implementation?   | <b>YES</b>   |
| Checklist used during the design and/or review of public construction projects?  | <b>YES</b><br><br>The SWP3 component of the plans is sent to the SWCD, same as private construction.   |
| Are projects greater than one acre covered under the general construction permit (has an NOI been submitted)?  | <b>YES</b>   |
| 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? | <b>NO</b><br><br><b>Ohio EPA Comment:</b> If the responsibility of developing the SWP3 will be placed on a contractor or contract engineer, please ensure that contract language specifically requires the development of a sediment and erosion control plan and a post-construction storm water quality plan. No such language was found in the contract issued to CT Consultants and KNM Consultants that was reviewed during this audit. |
| Are municipal construction projects inspected for compliance with the SWP3?  | <b>YES</b>   |
| Are they inspected with the same frequency for BMP compliance as a private construction project?   | <b>YES</b>   |
| Who inspects municipal construction projects for compliance?<br><br><i>NOTE: To avoid a conflict of interest, the firm or department that designed the SWP3 should not also inspect the site for compliance.</i>                 | SWCD conducts inspections once a month<br>KNM did daily inspections that touch base on highlights that involve E&SC at times.  |
| Project inspectors trained?<br><br>Frequency:  | <b>YES</b>   |

| <b>MS4-Owned Construction Projects</b>   |  |  |                 |
|--|--|--|-----------------|
| <b>Interview Questions</b>   |  | <b>Response</b>  |                 |
| If contracted inspectors are utilized, are minimum inspection, maintenance and reporting requirements specified in the contract? |  | YES for SWCD<br>NO for KNM   |                 |
| For municipally-owned post-construction BMPs, how often are they inspected to ensure long-term maintenance?                      |  | The City does not have any municipally owned post-construction BMPs. |                 |
| Which department is responsible for conducting these inspections?  |  | N/A  |                 |
| <b>Applicable Documents</b>  |  | <b>Reviewed</b>  | <b>Obtained</b> |
| MS4-owned project storm water design standards and/or checklist  |  | YES  | NO              |
| Contract language for active public project not developed or inspected in-house  |  | NO   | NO              |

| <b>Outreach and Education</b>  |   |
|--|---|
| <b>Interview Questions</b>   | <b>Response</b>   |
| Type of training provided to construction operators:<br><br>Designers and Engineers: | The Cuyahoga SWCD sends their technical advisory reports to the contractor. Also, SWCD holds annual trainings that target various groups, including the development community.<br><br><b>Ohio EPA Comment:</b> One message from your public education program during the current NPDES permit term must target the construction and development industry. This performance standard must be met by the end of this current permit term, i.e., 2014. |
| Attendance required?   | NO  |
| Training frequency?  | Annually  |
| Number of operators trained:   | Unknown   |
| Training topics:   | SWCD training topics<br>Rediscovering the Rhizosphere   |

|  |  |                 |                 |
|--|--|-----------------|-----------------|
| Presentations given by MS4 staff to professional groups? | NO   |                 |                 |
| Brochures or outreach materials targeted at operators:   | There are materials in the library and City Hall that can be obtained at any time. Contractors are referred to SWCD for questions related to SWP3 design and implementation. |                 |                 |
| How/when is the information distributed?                 | No particular time is set for information distribution to contractors and developers.  |                 |                 |
| Website used to educate operators?                       | <a href="http://www.cityofeuclid.com">www.cityofeuclid.com</a><br>Under the Public Service Department link, there is a link to the Cuyahoga SWCD's website.                  |                 |                 |
| <b>Applicable Documents</b>                              |  | <b>Reviewed</b> | <b>Obtained</b> |
| Training materials                                       |  | YES             | NO              |
| Brochures, outreach materials                            |  | NO              | NO              |

| <b>Notes</b> |
|--------------|
|              |

## 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.

| <b>Construction Project #1 Name: East 190th, 191<sup>st</sup>, 193<sup>rd</sup>, 194<sup>th</sup>, 195<sup>th</sup> Street Improvements</b> |   |
|---|---|
| BMPs adequately incorporated into the plan to address erosion control, sediment control, and housekeeping?                                  | <b>YES</b>  |
| Design specifications and details for all BMPs included on the plans?   | <b>YES</b><br><br>All details and notes are on plans except the location of the cement wash out pit location. |
| Maintenance requirements specified?   | <b>YES</b>  |
| Have any NOVs or other enforcement actions issued for this site. <i>Obtain copies of NOVs. If none, why not?</i>                            | No NOVs for this project at this time. There was a record of reports from the SWCD.                           |

**Notes:**

Disturbed Area 2.9 acres

No additional impervious surfaces created for the site; therefore, no post-construction BMPs were designed for the project.

**Construction Project #2 Name: Roosevelt Elementary School**

BMPs adequately incorporated into the plan to address erosion control, sediment control, and housekeeping?

**YES**

Inlet protection  
Construction entrance  
Silt fence  
Concrete washout pit  
Temporary stabilization

Design specifications and details for all BMPs included on the plans?

**YES**

There is a schedule for construction activities and a grading and stabilization activities log.

Maintenance requirements specified?

**YES**

Have any NOV's or other enforcement actions been issued against this site?

*Obtain copies of NOV's. If none, why not?*

No official NOV's have gone out to the site. There was e-mail conversation on off-site tracking that was addressed. A record of SWCD inspection reports was found.

**Notes:**

Total area to be disturbed for the redevelopment project is 8.48 acres

Burt, Hill - prepared plans

**Construction Project #3 Name: Mt. St. Joseph Nursing Home**

|   |   |
|---|---|
| BMPs adequately incorporated into the plan to address erosion control, sediment control, and housekeeping?                    | <p style="text-align: center;"><b>YES</b></p> <p>Basin A and Basin B for sediment control<br/>Silt fence<br/>Inlet protection<br/>Temporary stabilization</p>   |
| Design specifications and details for all BMPs included on the plans?   | <p style="text-align: center;"><b>YES</b></p> <p>Sediment Basin A – DA = 5.45 acres<br/>TA = 10.81 acres<br/>Sed. Storage = 5450 cf<br/>Det. Vol = 19458 cf<br/>1.375 inch orifice<br/>53.78 hour drawdown</p> <p>Sediment Basin B (FIRST VISITED BASIN) –<br/>DA = 4.06 acres<br/>TA = 4.75 acres<br/>Sed. Storage = 4060 cf<br/>Det. Vol = 8550 cf<br/>1 inch orifice<br/>55.62 hour drawdown</p> |
| Maintenance requirements specified?   | <p style="text-align: center;"><b>NO</b></p>  |
| Have any NOV's or other enforcement actions been issued against the site?<br><i>Obtain copies of NOV's. If none, why not?</i> | <p>No NOV's for this site, but a trail of SWCD inspection reports was found. Inspection reports completed by the building department were found also.</p> <p>Seems project commenced without SWP3 approval from the Cuyahoga SWCD.</p>  |
| <p><b>Notes:</b></p> <p>Mannik &amp; Smith prepared plans.</p>  |   |

## Post-Construction Plan File Reviews

| <b>Post-Construction Project #1 Name: Wendy's</b>  |  |
|--|--|
| Date that project was accepted by community or otherwise deemed "completed"  | July 28, 2010 – SWCD submitted a SWP3 completion report.                                   |
| Were post-construction BMPs provided for all drainage areas associated with the developed site?  | <b>YES</b>   |
| List the post-construction BMPs provided?  | DA #1: Bioretention Cell   |
| Design specifications and details for all BMPs included on the plans?  | <b>YES</b>   |
| Were post-construction BMPs selected appropriate for their drainage areas, site and soil conditions?   | <b>YES</b><br><br>Redevelopment project where the bioretention cell treats 20% of the WQv. |
| Did the community verify the installation of post-construction BMPs per the approved plan at the time the project was completed?   | <b>YES</b><br><br>A SWP3 completion report was submitted but the Cuyahoga SWCD.            |
| Does MS4 have a copy of the long-term maintenance plan?  | <b>YES</b>   |
| Who does the plan say is responsible for long-term maintenance?  | Owner  |
| Has the MS4 conducted any long-term maintenance inspections or collected any long-term maintenance inspection reports from the responsible party?<br><i>Obtain copy of latest inspection report.</i> | Cuyahoga SWCD has completed an annual inspection of the bioretention cell.                 |
| <b>Notes:</b>  |  |
|  |  |

| <b>Post-Construction Project #2 Name: Roosevelt Elementary School</b>   |  |
|---|--|
| Date that project was accepted by community or otherwise deemed "completed"   | Project not complete   |
| <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><b>YES</b></p> <p>DA #1: 3 Bioretention Cells – treat at least 12.6% of the WQv for the redevelopment project.</p> <p>#1 – DA=0.14 acres<br/> #2 – DA=0.17 acres<br/> #3 – DA=0.58 acres</p> <p>There is also a 7.4% reduction in impervious area</p> |
| Design specifications and details for all BMPs included on the plans?   | <b>YES</b>   |
| Were post-construction BMPs selected appropriate for their drainage areas, site and soil conditions?  | <b>YES</b>   |
| Did the community verify the installation of post-construction BMPs per the approved plan at the time the project was completed?  | Project not complete   |
| <p>Does MS4 have a copy of the long-term maintenance plan?</p> <p>Who does the plan say is responsible for long-term maintenance?</p> <p>Has the MS4 conducted any long-term maintenance inspections or collected any long-term maintenance inspection reports from the responsible party?<br/> <i>Obtain copy of latest inspection report.</i></p> | <p><b>YES</b> – but the LTMP is merely a note in the SWP3 for the site. There is no stand along document</p> <p>Owner</p> <p>N/A</p>   |
| <b>Notes:</b>   |  |

| <b>Post-Construction Project #3 Name: Mount Saint Joseph Nursing Home</b>  |   |
|--|---|
| Date that project was accepted by community or otherwise deemed "completed"  | Project not complete.   |
| Were post-construction BMPs provided for all drainage areas associated with the developed site?<br><br>List the post-construction BMPs provided?   | <b>NO</b><br><br>DA #1: Dry Ex-Detention Basin A<br><br>DA #2: Dry Ex- Detention Basin B<br><br><b>Ohio EPA Comment:</b> The SWPPP seems to show calculations for a combined 10% additional treatment of the WQv for the forebay and micropool storage instead of the required 20% additional storage volume. |
| Design specifications and details for all BMPs included on the plans?  | <b>YES</b><br><br>Included but are not correct due to calculation error mentioned above.  |
| Were post-construction BMPs selected appropriate for their drainage areas, site and soil conditions?   | <b>YES</b>  |
| Did the community verify the installation of post-construction BMPs per the approved plan at the time the project was completed?   | Project not complete.   |
| Does MS4 have a copy of the long-term maintenance plan?<br><br>Who does the plan say is responsible for long-term maintenance?<br><br>Has the MS4 conducted any long-term maintenance inspections or collected any long-term maintenance inspection reports from the responsible party?<br><i>Obtain copy of latest inspection report.</i> | <b>YES</b> – but the LTMP is merely a note in the SWP3 for the site. There is no stand along document<br><br>Owner<br><br>N/A   |
| <b>Notes:</b><br><br>Project commenced without SWP3 approval from the Cuyahoga SWCD.   |   |

## CONSTRUCTION FIELD REVIEW WORKSHEET

**Name of MS4:** City of Euclid  
**MS4 Permit No:** 3GQ00018\*BG

|   |                                      |
|---|--------------------------------------|
| <b>Name of Site:</b> East 190 <sup>th</sup> , 191 <sup>st</sup> , 193 <sup>st</sup> , 194 <sup>th</sup> , 195 <sup>th</sup> Street Improvements           |                                      |
| <b>Location:</b> East 222 <sup>nd</sup> Street  | <b>NPDES Permit #</b> 3GC05035*AG    |
| <b>Date of Inspection:</b> 8/10/2011  | <b>Time of Inspection:</b> 1:40 p.m. |
| <b>Name of Inspector:</b> Todd Houser, CSWCD  |                                      |
| <b>Others Present During Inspection:</b>  |                                      |
| Lindsie MacPherson and Kelly McVay, Ohio EPA, NEDO, DSW<br>Randy Smith, Lee Bock, John Hall, Bobby Crenshaw, Brandon Hughes<br>Sam Fabrizi<br>John Thomas |                                      |

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

Yes. The inspector identified himself and discussed his purpose on site.

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

Yes. The inspector reviewed the approved SWP3 kept in Sam Fabrizi's truck.

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?

The inspector informed the site operator that the reports were required to be filled out and kept on site. He stated that a copy should be sent to the Cuyahoga SWCD.

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

Yes. The inspector referenced the approved SWP3, and mentioned the SWP3 several times throughout the inspection.

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

The SWCD completed a site inspection for this site on August 5, 2011, five days prior to this inspection, but the typical inspector for the site was not present to follow up on previous compliance matters. The inspector did have a file of all previous technical reports that he frequently referred to as a reference.

6. Compliance issues identified by inspector during this inspection:

The inspector informed the operator that their current practice of pumping sediment laden water built up from the inlet protection or trenches directly into the storm sewer is an improper method and considered an illicit discharge. Dewatering practices for sediment laden water should include pumping the water to a sediment settling pond or through an equally efficient sediment control device such as a dewatering bag.

The inspector informed the operator that cement washout is prohibited from discharging offsite and into surface waters of the state. He noted workers rinsing out a cement wheel barrel directly uphill from a street inlet. The cement washout was observed draining towards the street catch basin. The worker was informed that this practice is not acceptable and that he should be utilizing the designated cement washout pit for this purpose. Several other cement washout areas were also noted around the site that was not a part of the designated washout pit.

The inspector informed the operator that the bare soil behind the curbs should be temporary stabilized or permanently stabilized if the soil has reached final grade.

The inspector recommended the operator install silt sacs in the curb inlets on streets outside the zone of construction due to offsite runoff and sediment tracking.

Also, the inspector noted that the catch basin adjacent to the cement washout pit was equipped with improper inlet protection.

7. Deficiencies or NPDES violations not noted by the MS4 inspector during this inspection:

The inspector conducted a very thorough inspection of the construction site for the proper installation and maintenance of construction site BMPs.

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

Yes. The inspector insisted that the site foreman accompany him as he pointed out areas of concern.

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

Yes. The inspector recapped the discussions of the inspection with the site foreman.

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 City did not indicate that enforcement action would proceed from this inspection. A Technical Advisory Report from SWCD will be submitted to the operator and the City.

**Euclid Inspection Photos**  
**East 190<sup>th</sup>, 191<sup>st</sup>, 193<sup>st</sup>, 194<sup>th</sup>, 195<sup>th</sup> Street Improvements**  
**Taken by Kelly McVay, 8/10/2011**

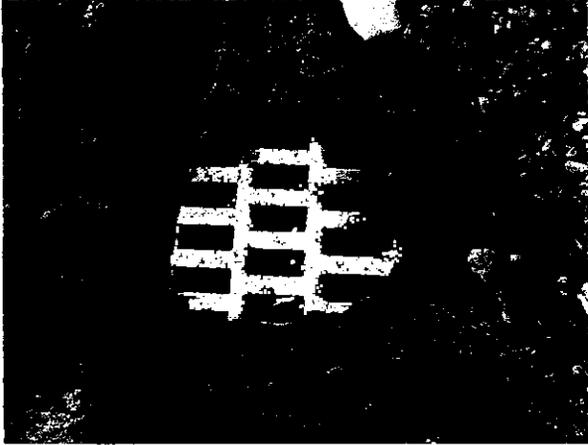


**Fig 1 (LT):** Bare soil behind the curbs should be stabilized if it is to remain idle for more than 21 days or if the soil has reached final grade.

**Fig 2 (RT):** Cement washout was observed along curbs and draining directly to curb inlets



**Fig 3 & 4:** Workers were caught rinsing the cement wheel barrel away from the designated area for cement washout, and the water was observed discharging offsite to a curb inlet.



**Fig 5 (LT):** Improper installation of inlet protection. When the BMP must be maintained and the grate lifted, the fabric will drop into to basin along with the built up sediment. Approved methods of inlet protection such as those in the Rainwater and Land Development manual and other approved commercially sold products should be used in place of this practice.

**Fig 6 (RT):** Another instance of cement washout outside the designated washout pit. The water is left behind the curb to evaporate.



**Fig 7:** Additional cement washout was observed behind the curbs along the new roadways.

## CONSTRUCTION FIELD REVIEW WORKSHEET

**Name of MS4:** City of Euclid  
**MS4 Permit No:** 3GQ00018\*BG

|  |                                      |
|--|--------------------------------------|
| <b>Name of Site:</b> Roosevelt Elementary School   |                                      |
| <b>Location:</b> 551 East 200 <sup>th</sup> Street   | <b>NPDES Permit #</b> 3GC05216*AG    |
| <b>Date of Inspection:</b> 8/10/2011   | <b>Time of Inspection:</b> 2:30 p.m. |
| <b>Name of Inspector:</b> Todd Houser, CSWCD   |                                      |
| <b>Others Present During Inspection</b>  |                                      |
| Lindsie MacPherson and Kelly McVay, Ohio EPA, NEDO, DSW<br>Randy Smith, Lee Bock, John Hall, Bobby Crenshaw, Brandon Hughes<br>Chuck Nagle<br>Howard Spradling |                                      |

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

Yes. The inspector identified himself and discussed his purpose on site.

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

The inspector asked to see an approved copy of the SWP3, and he was informed that the signed and approved copy was at the Thomas Jefferson Elementary School in Euclid. The project foreman informed the SWCD that the copy would be brought on site.

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?

The inspector asked to view the reports and confirmed that the reports are kept in a binder in the trailer and are also submitted to Shannon from Cuyahoga SWCD.

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

Yes. The inspector referenced the approved SWP3, and mentioned the SWP3 several times throughout the inspection.

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

The SWCD completed a site inspection for this site on August 5, 2011, five days prior to this inspection, but the typical inspector for the site was not present to follow up on previous compliance matters. The inspector did have a file of all previous technical reports for a reference.

6. Compliance issues identified by inspector during this inspection:

The inspector did note that maintenance was required on several of the inlet protection BMPs located throughout the site.

The inspector discussed temporary and winter stabilization with the site foreman in regards to the delays in construction and how this affects the grading and stabilization plan for the site.

The inspector commented on the offsite tracking caused from the project and was informed that the streets are swept every two days. He noted that the inlet protection provided to the catch basins on these streets should be inspected and maintained on a regular basis.

The inspector also noted that the stabilization provided on the site could use some maintenance. He noted several rills forming throughout the site and discussed these areas with the contractor as areas of concern.

7. Deficiencies or NPDES violations not noted by the MS4 inspector during this inspection:

The inspector *did* note necessary maintenance requirements with the inlet protection, but he *did not* reinforce that approved forms of inlet protection as in the Rainwater and Land Development Manual and other accepted commercial products for inlet protection should be utilized over simply wrapping the inlet grate with geotextile fabric.

The inspector questioned the site foreman on a storm inlet grate that was popped open, and he was informed that they were working on the basin. The inspector did not note that the water inside the basin was sediment laden and that the contractor should improve his sediment controls on site to prevent the discharge of such water from his site.

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

Yes. The inspector insisted that the site foreman accompany him as he pointed out areas of concern.

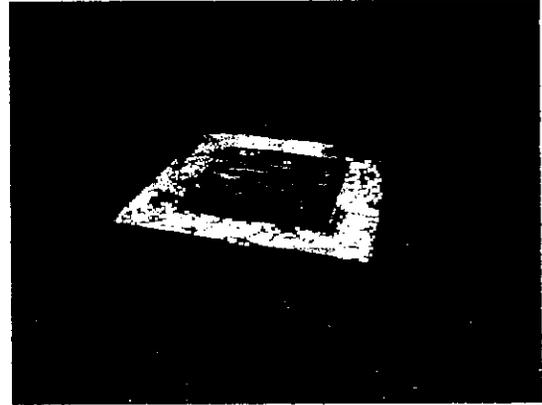
11. Did the MS4 inspector recap his findings upon completion of his or her inspection?

Yes. The inspector recapped the discussions of the inspection with the site foreman.

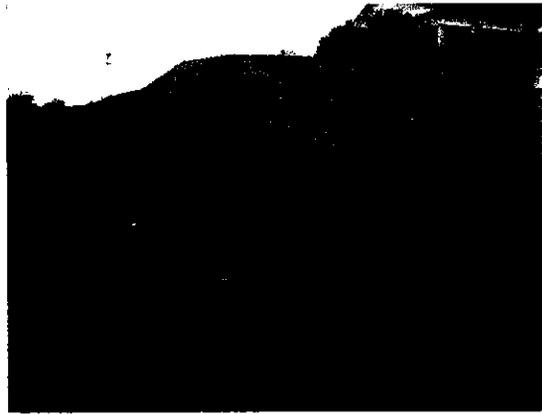
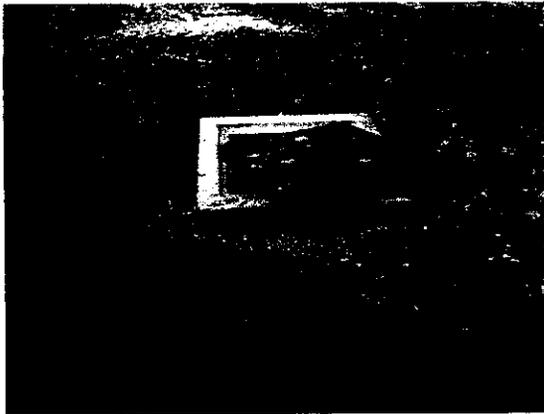
12. Is the community planning on taking any enforcement actions based on the results of today's inspection? If so, what are those actions? (*NOTE: Ask community to send you a copy of the enforcement action.*) Did the inspector provide a deadline for corrective action? If so, provide details.

The City did not indicate that enforcement action would proceed from this inspection. A Technical Advisory Report from SWCD will be submitted to the operator and the City.

Euclid Inspection Photos  
Roosevelt Elementary School  
Taken by Kelly McVay, 8/10/2011



**Fig 1 & 2:** Inlet protection should be installed per specifications outlined in the Rainwater and Land Development Manual or other approved commercial products for inlet protection, such as dandy bags.



**Fig 3 (LT):** The sediment laden water observed in the catch basin shown above indicates that the site needs to improve on sediment control BMPs via proper inlet protection and stabilization.

**Fig 4 (RT):** Erosion rills on the stockpile shown above as well as other areas throughout the site indicate the need for temporary stabilization.



**Fig 5:** The stockpile has been seeded for stabilization but should continue to be inspected to ensure the seed takes.



**Fig 6 (LT):** Inlet protection BMPs provided to the basins on the side of the existing building are ponding water as intended, but the BMPs should be maintained as necessary. The Ohio EPA recommends the use of products such as dandy bags for areas such as this, where the bags can be cleaned more easily.

**Fig 7 (RT):** Streets are swept every two days to prevent offsite tracking of sediment, but if immediate cleanup is necessary, the foreman should have the resources available to have the streets maintained.

## CONSTRUCTION FIELD REVIEW WORKSHEET

**Name of MS4:** City of Euclid  
**MS4 Permit No:** 3GQ00018\*BG

|  |                                   |
|--|-----------------------------------|
| <b>Name of Site:</b> Mount Saint Joseph Nursing Home   |                                   |
| <b>Location:</b> 21800 Chardon Road  | <b>NPDES Permit #</b> 3GC04974*AG |
| <b>Date of Inspection:</b> 8/10/2011   | <b>Time of Inspection:</b>        |
| <b>Name of Inspector:</b> Todd Houser, CSWCD   |                                   |
| <b>Others Present During Inspection</b>  |                                   |
| Lindsie MacPherson and Kelly McVay, Ohio EPA, NEDO, DSW<br>Randy Smith, Lee Bock, John Hall, Bobby Crenshaw, Brandon Hughes<br>Chris Shaffer – Panzica<br>Gene – King Excavating |                                   |

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

Yes. The inspector identified himself and discussed his purpose on site.

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

No amendments have been made to the SWP3, but the SWP3 for the site was never approved by the Cuyahoga SWCD.

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?

The inspector asked to view the reports and confirmed that the reports are kept in a binder in the trailer.

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

Yes. The inspector referenced the SWP3, but the following day the Ohio EPA and SWCD discovered that the SWP3 for the project was never approved by the Cuyahoga SWCD.

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

The SWCD completed a site inspection for this site on August 5, 2011, five days prior to this inspection. but the typical inspector for the site was not present to follow up on previous compliance matters. The inspector did have a file of all previous technical reports for a reference. Before leaving the trailer, the inspector noted previous areas of concern that he would follow-up on such as the inlet

protection maintenance, sediment settling pond outlet structure problems, and the addition of aggregate to the construction entrance.

6. Deficiencies or NPDES violations not noted by the MS4 inspector during this inspection:

The inspector noted that the permanent orifices on the sediment basin outlet structures were blocked but not sealed. He noted that the contractor should caulk or glue the wooden barriers to the outlet structure until the basin is ready to be retrofitted to the permanent WQv basin. He also noted that a gasket seal should be added between the concrete boxes that form the basin outlet structures to prevent further leaking.

The inspector noted that the erosion rills on the slopes of the sediment basin should be stabilized. He suggested using the straw from the bales placed around the basin.

The inspector suggested that the contractor install the gutters to the buildings as soon as possible to prevent excessive runoff from the roof from flooding the site and causing additional erosion problems.

The inspector noted that inlet protection all throughout the site required maintenance to ensure the intended purpose of the protection is met, i.e., that the protection ponds the runoff and slowly discharges the cleaner water to the catch basin.

The inspector noted that the bare soil on the side of the site by the woods requires stabilization. He also noted many locations throughout the site where annuals had been planted for stabilization the following year but have since died and are no longer providing proper vegetation. As a result, many rills have formed along the slopes into the property causing sediment and erosion problems. The inspector suggested that these areas be re-stabilized to ensure proper vegetative cover.

The inspector noted that geotextile fabric was required under the rip rap for the sediment basin outlet protection.

The inspector also noted that runoff from the site was diverted away from the back basin and into the wooded area causing sediment laden water to be discharged offsite. He recommended that the area be reworked to divert all runoff to the basins.

7. Deficiencies or NPDES violations not noted by the MS4 inspector during this inspection:

The inspector conducted a very thorough inspection of the construction site for the proper installation and maintenance of construction site BMPs.

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

Yes. The inspector insisted that the site foreman accompany him as he pointed out areas of concern.

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

Yes. The inspector recapped the discussions of the inspection with the site foreman.

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 City did not indicate that enforcement action would proceed from this inspection. A Technical Advisory Report from SWCD will be submitted to the operator and the City.

**Euclid Inspection Photos  
Mount Saint Joseph's Nursing Home  
Taken by Kelly McVay, 8/10/2011**



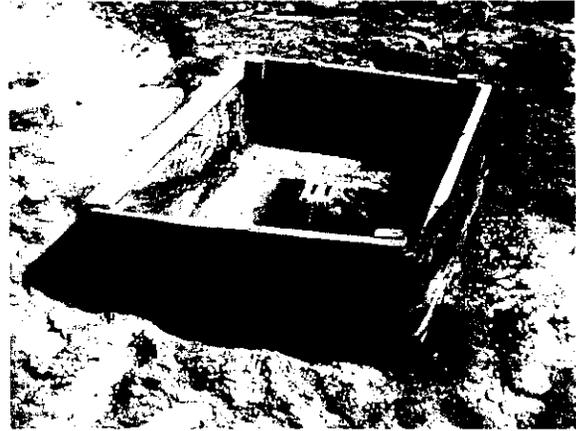
**Fig 1 (LT):** The straw bales around the basin are not servicing a purpose and would be better served as stabilization for the side slopes of the basin where erosion rills have started to form.



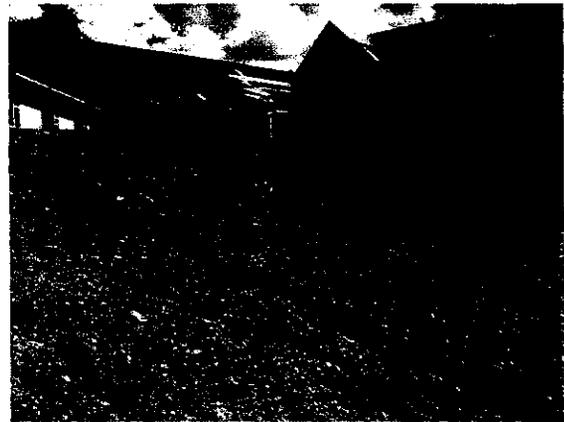
**Fig 2 (RT):** The boards used to cover the permanent orifices of the basin outlet structures should be sealed using a caulk or glue to prevent leaking.



**Fig 3:** The contractor should ensure that the proper size orifice has been installed into the riser pipe. The design specifications for the basin call for a hole with only a 1.375 inch diameter.



**Fig 4 & 5:** Inlet protection throughout the site requires maintenance. The fabric should not have holes and should be trenched into the ground. Sediment that has built up on the cement and in the basin should be cleaned out.

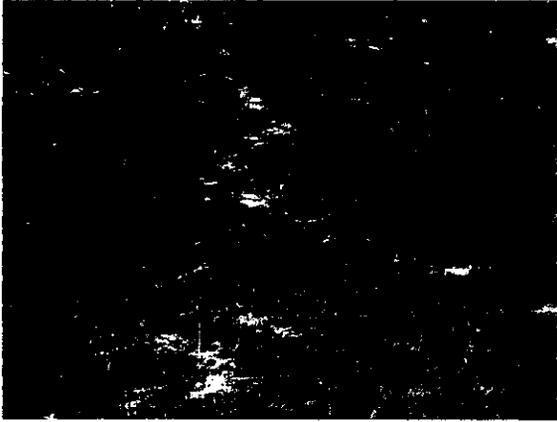


**Fig 6 (LT):** Temporary stabilization should be provided to the idle soil on the side of the property.

**Fig 7 (RT):** Gutters should be installed and connected to the downspouts to prevent the excessive overland flow that is causing the erosion rills. Temporary stabilization will also provide erosion control to this area.



**Fig 8:** Geotextile fabric should be installed under the rip rap outlet protection to prevent further erosion along the outlet.



**Fig 9 (LT):** All runoff should be diverted into the sediment basin before the water is discharged offsite. After the runoff is diverted to the basin, the silt fence should be maintained.

**Fig 10 (RT):** Excess overland flow should be controlled with erosion controls such as temporary stabilization.

## 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.

|                                       |
|---------------------------------------|
| <b>Name of MS4:</b><br>City of Euclid |
| <b>MS4 Permit No:</b><br>3GQ00018*BG  |

|  |                                      |
|--|--------------------------------------|
| <b>Name of Site:</b> Wendy's   |                                      |
| <b>Location:</b> 250 East 222 <sup>nd</sup> Street                           | <b>NPDES Permit #</b> 3GC04661*AG    |
| <b>Date of Inspection:</b> 8/10/11   | <b>Time of Inspection:</b> 4:45 p.m. |
| <b>Name of Inspector:</b> Todd Houser, CSWCD                                 |                                      |
| Post-Construction BMPs on this Site (list by drainage area)                  |                                      |
| DA #1: Bioretention cell to treat 20% of the WQv for the redevelopment site. |                                      |

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

Yes. The Cuyahoga SWCD conducted a SWP3 completion report that was submitted to the City.

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?

Yes. The inspector inspected the bioretention cell to ensure the BMP was installed per the approved plan. He checked the porosity of the soil to ensure the proper drainage was still provided in the cell.

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

No. The inspector did not use the approved long-term maintenance plan (LTMP) for his inspection. The plan was received by the Ohio EPA and is merely a small note in the facilities SWP3 that designates the responsible party as the owner and references bioretention maintenance notes on another page of the SWP3, which are the maintenance requirements spelled out in the Rainwater and Land Development Manual. The LTMP is not a stand along document from the SWP3.

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.

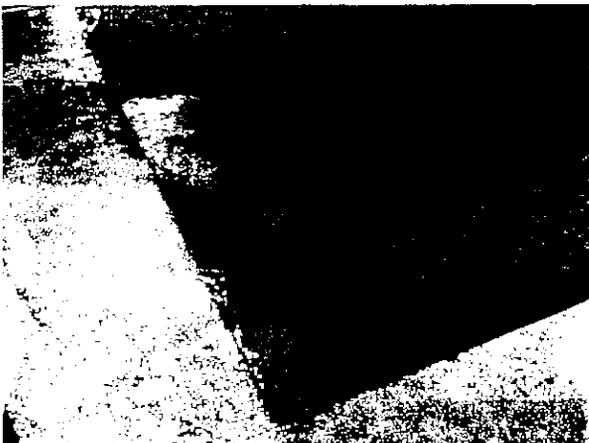
The inspector recommended that the owner decrease the mulch level in the cell by at least one inch to bring the level below the invert elevation of the curb cuts. This will prevent over mulching as well as tracking of the material onto the pavement.

Ohio EPA noted the Wendy's store dumping fryer grease out into the landscaping. If the pollutant reaches the City's storm sewers, this would be considered an illicit discharge and should be handled appropriately. The City may want to initiate a public education event or flyer that addresses illicit discharges such as this for commercial, industrial and, residential residents.

5. Did the MS4 inspector demonstrate knowledge of post-construction BMP function and essential long-term maintenance issues?

Yes the inspector demonstrated knowledge of bioretention cells and their purpose, installation, and maintenance requirements.

**Euclid Inspection Photos  
Wendy's Bioretention Cell  
Taken by Kelly McVay, 8/10/2011**



**Fig 1 (LT):** Fryer grease was dumped outside into the landscaping of the Wendy's store.

**Fig 2 (RT):** Mulch levels in the cell should be reduced to below the invert elevation of the curb cuts. Tracking can be observed in the bottom right corner of the picture above.