3GQ0004420110811

CUYAHOGA	NORTH ROYALTON	CITY OF NORTH ROYALTON	3GQ00044	2011/08/11	MACPHERSON, LINDSIE

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Environmental Protection Agency

Governor
Lt. Governor
Director

August 11, 2011

RE: CUYAHOGA COUNTY
CITY OF NORTH ROYALTON
PERMIT NO. 3GQ00044*BG
MUNICIPAL STORM WATER
PROGRAM INSPECTION

Mr. Mark Schmitzer
City Engineer
City of North Royalton
11545 Royalton Road
North Royalton, OH 44133

Dear Mr. Schmitzer:

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 July 7, 2011, Ohio EPA met with you and other representatives of the City of North Royalton 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:

<u>Violations</u>:

- **Failure to conduct a storm water pollution prevention plan (SWPPP) review of all projects from construction activities that result in a land disturbance of greater than or equal to one acre.** This is a violation of Part III.B.4.c of the Ohio EPA General Storm Water NPDES permit # OHQ000002. Construction has commenced at the North Royalton YMCA site without an approved SWPPP nor the submittal of a Notice of Intent (NOI) form for storm water discharges associated with construction activity under general NPDES permit #OHC000003 at least 21 days

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prior to the commencement of construction activity. Ohio EPA expects the City to hold municipal construction projects to the same standards of approval as private development is held through the City's construction ordinance. The architectural firm for the project, Brandstetter Carroll, Inc., submitted a SWPPP to the City, but Cuyahoga SWCD did not approve the SWPPP and comments were sent by the SWCD on the improvements that must be made for compliance with City code. Currently, no post-construction Best Management Practices (BMPs) are planned for this re-development project and are absent from the SWPPP. Please submit a NOI for the project as well as documentation on how the City has addressed this violation.

- **Failure to document your procedure for prioritizing construction site inspection frequency if it is less than once per month.** This is a violation of Part III.B.4.c of the NPDES permit. The Cuyahoga SWCD identifies some sites as inactive, which allows SWCD to halt inspections until construction commences once again. Please update the Storm Water Management Program (SWMP) as required by Part III.D.2.a of the NPDES permit to provide the frequency of inspection you have implemented and the rationale for choosing those frequencies.

- **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 North Royalton has four (4) active projects permitted under the Ohio EPA General Storm Water NPDES Permit for Construction Activities but indicated during the interview that three (3) of the projects were completed and have reached final stabilization. Please submit an NOT for these projects that are completed.

Deficiencies:

- The City does have a system for enforcement escalation, but at this time there is no formalized plan. The City must develop an enforcement escalation protocol consistent with the local construction site ordinance so as to provide Inspectors, the City Engineer, Service Director and others with a clear policy on when to take enforcement to the next level and how that is to be achieved. For the City of North Royalton, actively escalating enforcement as it is intended could use improvement. Currently, the City has not taken much of a stand on enforcement for post-construction compliance issues and could use improvement in this field as well. Repeated violations were noted at the DiGioia site for issues dealing with slope stabilization along the creek from October 2010 to June 15, 2011 without issuance of a Notice of Violation (NOV), a Stop Work Order or other enforcement escalation.

The inspection also revealed that within the SWCD Field Review Technical Advisory Report it is very difficult to pick out the deficiencies found during specific site inspections. There is a lot of repeated educational material that is sent in every letter, but the content of the reports are not very specific as to what needs to be improved for the site. The City should be aware that letters from the 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 North Royalton 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 during the inspection and then left with the contractor for written notification of violations or deficiencies.

- The City must ensure that it is utilizing current BMP design standards when conducting plan reviews. Our field inspections and file reviews revealed that plan review personnel did not indicate that the sediment basin for the DiGioia Suburban Excavating site was designed improperly. The Summit SWCD spreadsheet should not be used for riser calculations for sediment basins. This procedure is outdated and the calculations are incorrect for the sediment basin riser pipe. Instead, the plan reviewer may consider using the Georgia Storm Water Management Manual calculation for riser pipes located in Vol. 2 section 2.3 of the Manual. Please review the Municipal Storm Water Program Evaluation, File Review, and Field Inspection Worksheets for additional information on this matter.

- The City has not yet updated their construction and post-construction ordinance(s) 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 is to be completed within two years of when the City's coverage under the MS4 general permit was granted (September 9, 2009). At this time the ordinances are in the review process. The City discussed changes to council and council will take the City Engineer's recommendations and adopt the updates. The ordinances should be passed during the first council meeting in September (September 6, 2011). Please indicate to the Ohio EPA any changes to this schedule.

- The City has reviewed their ordinances to facilitate the use of non-structural and low-impact development (LID) practices in some instances. However, to further promote use of LID practices, the City may also want to consider adding a runoff reduction requirement to the 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.

- During an audit for the City of Parma, the Ohio EPA conducted a field inspection for the ManorCare construction site and noted a possible infringement on the riparian setback at the back of the property that resides in the City of North Royalton. Fill material was observed to be placed along the back slope of the property, dropping off towards the stream and the riparian area. If a variance to the City's riparian setback ordinance was issued for the placement of this fill material, this information should have been reported to the EPA in the City's annual report. If a variance was not issued, did the City follow up with enforcement on this issue? Please provide the Ohio EPA with documentation on the actions the City has taken to deal with this matter.

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 8, 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 me at (330) 963-1138 or lindsie.macpherson@epa.state.oh.us or Dan Bogoevski at (330) 963-1145 or dan.bogoevski@epa.state.oh.us.

Sincerely,

Lindsie MacPherson
Assistant to the District Engineer
Division of Surface Water

LM/mt

cc: Robert A. Stefanik, Mayor, City of North Royalton w/ enclosure
Todd Houser, Storm Water Program Manager, Cuyahoga SWCD w/ enclosure

ec: Dan Bogoevski, Ohio EPA, NEDO, DSW

Municipal Storm Water Program Evaluation

Construction and Post-Construction Component Worksheet

Date of Evaluation	July 7, 2011
Evaluator Name, Title	Lindsie MacPherson, Ass. District Engineer
MS4 Permittee	City of North Royalton

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

Staff Interviewed		
Name	**Department/Agency**	**Phone Number/Email**
Mark Schmitzer City Engineer	Engineering Department City of North Royalton	440-582-3001 mschmitzer@northroyalton.org
Todd Houser Storm Water Program Manager	Cuyahoga SWCD	216-524-6580 thouser@cuyahogoswcd.org

Ordinance/Legal Authority	
Interview Questions	**Response**
Ordinance used to require storm water BMPs at construction sites? Name and/or code section(s) Date initially enacted: **November 3, 2004**	**YES** Chapter 1488: Controlling Construction Site Soil Erosion, Sediment, and Other Wastes and Storm Water Runoff
Threshold for coverage (e.g., 1 acre, 100 cubic yards, etc.) *NOTE: 1 acre is minimum requirement.*	Individual development sites larger than 8,000 sq ft and smaller than 1 acre in total size of disturbed area submit an abbreviated SWP3 All developments that have a larger common plan of development or sale equal to or larger than 1 acre in size of disturbed area are subject to ordinance.
Exclusions from coverage allowed: *NOTE: To align with NPDES permit program, the only exclusions allowed are (a) if rainfall*	Land disturbing activities related to producing agricultural crops or Silviculture operations regulated by the Ohio Agricultural Sediment Pollution Abatement Rules.

Ordinance/Legal Authority	
Interview Questions	**Response**
erosivity factor, R, is < 5 for the project, (b)construction is "routine maintenance" to re-establish the original line, grade or hydraulic capacity of storm water infrastructure, i.e., ditch cleaning and detention basin dredging, where < 5 acres is disturbed, (c) silvicultural disturbances, (d) agricultural disturbances or (e) construction related to oil & gas well exploration. *Ohio EPA website has fact sheet on what constitutes "agricultural disturbance" and "routine maintenance" versus regulated construction activity.* *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.*	Coal surface mining operations regulated by Chapter 1513 of the ORC. Other surface mining operations regulated by Chapter 1514 of the ORC
Does your construction program include the following types of construction activity:	
Single-family residential?	**YES**
Multi-family residential?	**YES**
Commercial development?	**YES**
Institutional development (schools or government facilities)?	**YES**
Mixed-use development?	**YES**
Non-subdivided development?	**YES**
Non-exempt construction on agriculturally-zoned lands? (barn on a farm)	**YES**
Non-silvicultural tree clearing?	**YES**
Your own municipal construction projects?	**YES**
Construction and demolition debris landfills?	**YES**
Construction by other public entities within your political jurisdiction, e.g., a county road project within a municipality?	**YES** Does have an inspection involvement with ODOT projects

Ordinance/Legal Authority	
Interview Questions	**Response**
Earth disturbance associated with open spaces and parks (e.g., trails within a park or parking lot improvements at a park)?	**YES**
Private pond construction?	**YES**
Construction of wind or solar panel farms?	**YES**
Establishment of borrow or spoil areas that service multiple, unrelated construction projects?	**YES**
Utility construction projects (including tree clearing along utility corridors or pipeline projects that cross multiple political jurisdictions)?	**YES**
NOTE: *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.*	
Does ordinance regulate the discharge of pollutants other than sediments on a construction sites (e.g., construction wastes, fuel tanks, cement truck washwater, trash, chemicals, etc.)?	**YES**
Has ordinance been updated to reflect minimum requirements of Ohio EPA NPDES permit #OHC000003? Date of updates? ***NOTE: Check database for date of NPDES permit renewal prior to inspection.*** *MS4 permit #OHQ000002 required updates within 2 years of permit renewal.* Date of MS4 Permit Renewal: **Sept 9, 2009**	**NO** The ordinance is in the review process. The City discussed changes to council and council will take the City Engineer's recommendations and adopt the updates. Should be passed during the first council meeting in September (Sept. 6, 2011).

Ordinance/Legal Authority	
Interview Questions	**Response**
Ordinances used to require post-construction storm water BMPs on new development or redevelopment projects:	
Treatment of Water Quality Volume (WQv) Name and code section:	**YES** Chapter 1490: Controlling Post-Construction Water Quality Runoff
Date initially enacted: **Nov. 3, 2004**	
Has this ordinance been updated to reflect the minimum requirements of Ohio EPA General Permit #OHC000003?	**NO** In review process. Same as above.
Date of update:	
Riparian and Wetland Setback Ordinance Name and code section:	**YES** Chapter 1492: Controlling Riparian Setbacks and Wetlands Setbacks
If YES, does ordinance require protection of native vegetation within riparian area or can manicured lawns be established?	**YES** Preserved in their natural state. Protection of even disturbances within the setback.
If YES, does ordinance allow the location of storm water infrastructure within the riparian setback?	**YES** There is a variance process that allows this with a permit. Will go through a review process through engineering.
Runoff Reduction (e.g., infiltration or mitigation of a recharge volume)? Name and code section:	**NO** Page 8 of Chapter 1490 Alternative actions may be used to resolve and improvement of water quality or a reduction in storm water runoff. City does list possible BMPs allowed by the ordinance on page 3 under BMPs
BMPs designed to control temperature for discharges to cold water habitat streams? Name and code section:	N/A – The City does not have any cold water habitat streams
Encouraging Green Infrastructure or low-impact development practices: Allow downspout disconnection and use of open storm water conveyance systems? Names and code sections:	**YES** On a case-by-case basis this is allowed as reviewed by the City Engineer. Part of I&I for wastewater as well as if there are swales, etc.

Ordinance/Legal Authority	
Interview Questions	**Response**
Permit the installation of rain gardens and other bioretention facilities? Names and code section:	**YES** Bioretention on page 3 of Chapter 1490 for WQv The City just recently passed legislation on the use of rain gardens and rain barrels. Chapter 1464.08.U: Exterior Maintenance Rain Barrels and Rain Gardens
Allow rainwater harvesting (rain barrels and cisterns)? Name and code section:	**YES** Chapter 1464.08.U: Exterior Maintenance Rain Barrels and Rain Gardens
Allow or require the use of pervious pavement systems? Name and code section:	**YES** Allowed but not specifically stated in an ordinance. Some language in Setback ordinance for permeable pavers in variances in riparian setbacks.
Allow reduction in the size of traditional storm water management structures if LID used? Name and code section:	**YES** Chapter 1490 Page 8: Alternative actions #4 Allowed at the City Engineer's discretion.
Provide a credit to a storm water utility fee if LID is used? Describe:	**N/A** – no storm water utility fee
Balanced Growth Principles, i.e., other non-structural ordinances or codes that promote better site design:	
Allow conservation design as a subdivision layout (retain ≥ 40% open space by maintaining existing zoned density) Standard or variance required? Name and code section:	**YES** Depending on the zoning district the City does promote conservation design. This is an allowed design, but is very strict. Section 1270.33: Single Family Cluster Development -A cluster can be put into R-1a zoning, which requires that a minimum of 50% open space is maintained. Section 1270.32: Multi-Family Cluster Development
Encourage the use of vegetation that requires little to no maintenance in common areas (e.g., meadow vegetation vs. mowed lawn) Name and code section:	**YES** Encouraged in SWCD reviews for development sites. Open space areas that are deemed to be lawn are required to be kept mowed. But, for some conservation development sites, conservation easements areas, meadow areas may be maintained. Also, areas adjacent to riparian setbacks may maintain meadow grasses. (Timberlane Estates Ph 4A)

Ordinance/Legal Authority	
Interview Questions	**Response**
	Ohio EPA Comment: The benefits of low-maintenance grasses should be a topic for your public education program to change perceptions about this.
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.) Name of code section	**NO** But, the City does allow variances in parking. Eight foot wide parking spaces are allowed as well as shared parking, especially along the main City line off Rt. 82.
Allow sidewalks on only one side of the road in residential neighborhoods Name and code section:	**NO** Cluster developments require only one side, but normal single-family residential sub-divisions require sidewalks on both sides of the road.
Zoning that encourages smart growth in compact neighborhoods or mixed-use development:	**YES** There is a Traditional Town Center District (TCD) code in the City ordinances. Chapter 1281.
If YES, does zoning create walkable neighborhoods with access to commercial areas and employment centers? Describe:	**YES** More of a commercial area. There are existing residential areas within the district. But, The code does encourage mixed-use neighborhoods.
If YES, does this zoning provide incentives for vertical development rather than horizontal sprawl? Describe:	**NO** Actually require horizontal sprawl more than vertical.
If YES, does this zoning encourage a range of housing options for people of various incomes? Describe how:	**NO**
If YES, do you provide incentives for infill development or development in the core? Describe incentive programs:	**YES** TCD does provide an incentive in the flexibility and diversity in code for infill development within the district.
If YES, does zoning direct growth in areas where there are a variety of transportation choices (walking, biking, public transportation vs. just the car)? Describe how:	**YES** The City is involved in the NOACA proposal for the bike path linkage throughout the City.

Ordinance/Legal Authority	
Interview Questions	**Response**
NOTE: The point of this line of questioning is to emphasize to the City 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.	
[illegible]	[illegible]
Do permit or plan approvals have to be issued before construction activities that disturb 1 or more acre can commence? Plan Approvals Construction Post-Construction Permits & Type (Building, Grading, etc.) Construction Post-Construction	 **YES** **YES** Building & Grading permits **YES** **YES**
Does your definition of "construction activities" include any grading, grubbing, filling, clearing or excavating activity?	**YES** "Earth disturbing activities"
Are plans for storm water controls used during construction submitted separately from plans that depict post-construction BMPs? Describe the submission process and the timing of plan submission:	**NO** A developer comes to the city with a proposal and will meet with the building and engineering department. A plan will then be submitted to the planning commission and the commission will act on the plan and may allow a preliminary plan approval. The developer will than submit a final set of plans to the engineering and building department. For a commercial/institution development site, the City/SWCD will than conduct plan reviews, which includes the SWP3 review and approval. Once the approved set of plans is submitted, the City will issue the proper permits. The City can approve a plan, pending SWP3 approval, which prohibits soil disturbing activity to

Ordinance/Legal Authority	
Interview Questions	**Response**
	occur until SWP3 is approved. If there is interior demolition, the City will allow this to occur prior to SWP3 approval.
Does your ordinance explicitly specify selection criteria or minimum acceptable BMP design? Construction Post-Construction	 **YES** And reference the Ohio Rainwater and Land Development Manual **YES** And reference the Ohio Rainwater and Land Development Manual
[redacted]	
Types of enforcement mechanisms available for construction site issues per your ordinance:	Notices of Violations (NOV) **YES** Administrative fines **YES** Stop-work orders **YES** Civil penalties **NO** Criminal penalties **YES** Other (Describe): Misdemeanor of the first degree and fined no more than $1,000 per day per incident or imprisoned no more than 180 days
Which type of enforcement action have you most commonly implemented?	NOV and stop work orders are used most often.
Describe the enforcement mechanism used when the following compliance situations are encountered on construction sites: 1. Construction has commenced without a permit or plan approval 2. A BMP indicated on the SWP3 has not been installed or requires maintenance (first incidence) 3. A BMP is required but not shown on the SWP3	 The City would issue a verbal stop-work order. By the next day, if work has not stopped, the City will issue an official written Stop-work order. An inspection report with technical education or a notice of deficiency will be sent to the developer requiring the item to be fixed. Same as above.

Ordinance/Legal Authority	
Interview Questions	**Response**
4. A BMP has not been installed or maintained despite prior notification from the MS4 (repeated incidences)	Issue is sent to the City, an NOV will be sent with a time constraint, then a stop work order, and from there legal enforcement will occur (citation in court, removal of licenses, police tickets).
5. If using a third party inspection service provider, e.g., the SWCD, MS4 receives inspection report indicating repeated non-compliance issue	The MS4 will issue a NOV, which will be sent with a time constraint, then a stop work order, and from there legal enforcement will occur (citation in court, removal of licenses, police tickets).
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. ***NOTE:*** *In municipalities, letters from the SWCD are not considered NOVs 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.*	At the Indian Trails subdivision, the first home constructed in the subdivision was a model home that was never stabilized and there was no maintenance to erosion controls. The City contacted the developer to discuss that this needs to be fixed. The home builder was sent 2 NOVs with an additional 13 days to comply, but still there was no contact with the City. The City has sent a misdemeanor citation form to the home builder with a set court date of July 21, 2011.
Have your enforcement protocols and procedures for construction site issues been formalized in a written enforcement escalation plan?	**NO** The City *does* have a system for enforcement escalation, but at this time there is no formalized plan.
[redacted]	
Types of enforcement mechanisms available for post-construction site issues per your ordinance:	Notices of Violations (NOV) **YES** Administrative fines **YES** Stop-work orders **YES** Civil penalties **NO** Criminal penalties **YES** Other (Describe): Misdemeanor of the first degree and fined no more than $1,000 per day per incident or imprisoned no more than 180 days
Which type of enforcement action have you most commonly implemented?	A Technical Advisory Report submitted to the owner and the City by the SWCD. This is really the only action taken at this point. The City has not taken up

Ordinance/Legal Authority	
Interview Questions	**Response**
	much of a role in the post-construction enforcement process. When the City is working on releasing bonds, they will check SWCD reports to ensure that the work has been completed.
Describe the enforcement mechanism used when the following compliance situations are encountered regarding post-construction:	
1. The post-construction BMP has been installed too early in the construction process (e.g., the permanent WQv outlet has been installed when the sediment control outlet is still required, **or** the bioretention soil has been placed prior to upland areas being stabilized)	The SWCD will send a notice of deficiency, and then the City will send an NOV requesting the problem to be fixed within a time constraint, then to Stop-work Order, etc.
2. The post-construction BMP has not been maintained (first incident)	SWCD will send a Technical Advisory Report, plus "friendly" reminders from the City.
3. The post-construction BMP has not been maintained after multiple notifications	The City has not seen repeated offences for post-construction due to the technical education from the SWCD.
4. A homeowner has cut down trees in the riparian setback area (if applicable)	The City has not issued a fine to anyone at this point when this problem occurs. The City will usually educate and warn the owner. The enforcement provided by the ordinance does allow for a misdemeanor citation with fines.
5. A homeowner has installed a shed in a vegetated filter strip disrupting sheet flow runoff	The City would send a NOV and require the homeowner to provide the same hydraulic result as before the structure existed.
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. ***NOTE:*** *In municipalities, letters from the SWCD are not considered NOVs 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 City sent a site inspection letter to the Villas of Worthington PH1 requiring them to fix issues found from the SWCD inspections. The time frame for corrective action provided in this letter, was prior to the release of the bond. The main action at this point is the Technical Advisory Report sent by the SWCD, which can be provided to the OEPA.

Ordinance/Legal Authority	
Interview Questions	**Response**
the site, but they have no inherent enforcement authority in a municipality.	
Have your enforcement protocols and procedures for post-construction issues been formalized in a written enforcement escalation plan?	**NO**

Applicable Documents	Reviewed	Obtained
Sediment and Erosion Control Ordinance	YES	YES
Post-Construction Storm Water BMP Ordinances(s)	YES	YES
Enforcement escalation plan or procedures Construction: Post-Construction:	Does Not Exist	

Notes

Construction Project Inventory	
Interview Question	**Response**
Do you keep an inventory of construction projects that are actively occurring in your community? If YES, how?	**YES** The list is generated by the Urban Site Program used by the SWCD. The City can retrieve the list from the SWCD at any time.
Do you track construction projects <1 acre (e.g., individual lot within a subdivision or small addition to a business)?	**YES** Every project with a permit has a file in the City files.
How often is your inventory of construction projects updated?	The SWCD list is updated daily. A hardcopy is printed out quarterly. Database used is the Urban Site Program.
Information tracked:	Project status **YES** Inspection Findings **YES** Enforcement Actions **YES** Complaints **YES**- formal NOI submittal **YES** Enforcement actions filed by City.
Are site inspections at active construction sites conducted at a frequency of at least once per month? ***NOTE:*** *This is the minimum performance standard in*	Yes. At minimum, sites are inspected once per month. More often if specific issues/ violations exist on sites that call for follow-up inspections.

the NPDES permit for small MS4s.	The SWCD will identify some sites as inactive, which allows SWCD to halt inspections until construction commences once again.
Is this inspection criteria and frequency explicitly stated in your SWMP?	**NO** The City should update their SWMP to reflect the site inspection procedures followed by the Cuyahoga SWCD.
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): ***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.*	14 active sites Site #1:DiGioia-Suburban Excavating Most recent inspection date: 6/15/2011 Prior inspection date: 5/10/2011 Site #2:Pinestream, PH. 6 Most recent inspection date: 3/30/2011 Prior inspection date: 3/9/2011 Inactive at this point.

Applicable Documents	Reviewed	Obtained
List of active construction projects	YES	YES
List of projects covered under a state/EPA general permit	YES	YES

Notes

Construction Site Inventory

There were four municipal construction projects on the Ohio EPA NPDES permit list but work on three projects has been completed. 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.

North Royalton YMCA demolition has commenced inside and outside and an E&SC inspection was completed, but no NOI was submitted for coverage under the Ohio EPA NPDES general permit for discharges associated with construction activities. The work for this site is over an acre, and a sheet for E&SC was submitted, but SWCD did not approve the SWP3. The SWCD did complete an inspection and sent a Technical Advisory Report as a first offence. The City is in violation of their own ordinance Chapter 1488 "Controlling Construction Site Soil Erosion, Sediment, and Other Wastes and Storm Water Runoff," for commencing a project without an approved SWP3 or coverage under the Ohio EPA NPDES permit for discharges associated with construction activities. Ohio EPA expects the City to hold municipal construction projects to the same standards of approval and inspections as private development is held through the City's ordinance.

Post-Construction BMP Inventory	
Interview Question	**Response**
Are post-construction BMPs tracked? *BMPs must be shown on MS4 map.*	**YES**
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?	**YES** Also conservation easements.
Information tracked:	Location **YES** Type **YES** Maintenance Requirements **YES** Inspection findings **YES** Other (e.g., Ownership): **YES**
Database used?	**YES** Urban Site Program through SWCD
Number of private post-construction structural BMPs installed in community	Through the Water Quality Operation & Maintenance Report for the City of North Royalton prepared by the SWCD the number of post-construction BMPs can be determined. Also, this can be determined through the City's MS4 map, where all public and private facilities are mapped.

Applicable Documents	Reviewed	Obtained
Inventory of Post-Construction BMPs	YES	YES

Construction and Post-Construction BMP Standards	
Interview Questions	**Response**
[illegible]	
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**
Do your standards include operation and maintenance requirements?	**YES**

Construction and Post-Construction BMP Standards	
Interview Questions	**Response**
[redacted]	
Do your post-construction standards include BMP selection criteria?	YES
Has your community established standards for post-construction BMP selection and design for small construction activities (i.e., where the larger common plan of development or sale disturbs < 5 acres)? If so, what are your standards?	YES Development site that will disturb 1 or more acres but less than 5 acres of land and is not part of a larger common plan of development or sale which will disturb 5 or more acres is subject to Section 11.A under the Post-Construction Water Quality Control Plan.
Do your standards include operation and maintenance requirements?	YES

Applicable Documents	Reviewed	Obtained
BMP guidance or technical document	YES	YES

Notes

Plan Review Procedures	
Interview Questions	**Response**
Who is responsible for erosion and sediment control plan review?	City Engineer and SWCD SWCD will conduct plan reviews for projects >1 acre
If third party, is there an MOU or other agreement in place?	YES
Is it current?	YES
Who is responsible for post-construction plan review?	City Engineer and SWCD SWCD will conduct plan reviews for projects >1 acre
If third party, is there an MOU or other agreement in place?	YES
Is it current?	YES

Plan Review Procedures	
Interview Questions	**Response**
What training or professional certifications have plan review personnel received?	
Construction	Mark and Dan- P.E. and storm water seminars Todd – CEPESC, SWCD workshops
Post-Construction	Same as above.
How many years of experience does plan review personnel have reviewing storm water BMPs?	
Construction	Mark- 13 years Dan – 17 years Todd- 10 years
Post-Construction	Mark- 11 years Todd- 8 years
How often do plan review personnel receive training?	
Construction & Post-Construction	City – 1 to 2 times a month SWCD – 10/12 workshops a year
NOTE: *Make MS4 operator aware of training opportunities provided by Ohio EPA and archived at www.epa.ohio.gov/ocapp/storm_water.aspx.*	
Do you use a checklist to conduct plan review?	
Construction Post-Construction	**YES** **YES**
	SWCD uses the updated Ohio EPA SWP3 checklist in addition to the local code.
Size threshold for plan review (i.e. 1 acre, 10,000 square feet)?	
Construction & Post-Construction	8,000 acres
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?	YES SWCD does not really check that Individual Lot NOIs are submitted.

Plan Review Procedures	
Interview Questions	**Response**
Do you require a pre-construction meeting with developers and/or contractors? ***NOTE:*** *This is a required performance standard for both construction and post-construction.*	**YES**
Is the sequence of implementation of sediment and erosion controls discussed during these meetings?	**YES**
Is the timing of installation of post-construction BMPs discussed during these meetings?	**YES**
Does your community have standard conditions of plan approval?	**NO**
Do they include erosion and sediment control and/or post-construction water quality requirements?	N/A
Does your community require a performance bond that can be used to pay for BMPs (site stabilization) in the event the developer does not complete the project?	**YES** To bond the associates with the approved plans which include the SWP3
Does your community require a long-term maintenance plan for post-construction BMPs?	**YES**
If YES, is the plan required to include the following:	
Identify the party responsible for long-term maintenance?	**YES**
A list of routine and non-routine maintenance tasks and the frequency for their performance?	**YES**
A map that identifies the types and locations of post-construction BMPs and their maintenance or access easements?	**YES**
A list of deed restrictions. conservation easements or environmental covenants required to maintain post-construction BMPs in perpetuity?	**YES**
Is this plan kept on file or input into a database for future reference to ensure the required tasks are being completed?	**YES**

Plan Review Procedures		
Interview Questions	**Response**	
Applicable Documents	**Reviewed**	**Obtained**
Copy of standard conditions of approval	N/A	N/A
Example of standard conditions applied to an approved project	N/A	N/A
Checklist used by plan reviewers	OEPA SWP3 checklist (Updated)	

Project Inspections	
Interview Questions	**Response**
CONSTRUCTION SITE INSPECTIONS	
Who is responsible for erosion and sediment control site inspection?	City Engineer and SWCD
If third party, is there an MOU or other agreement in place?	**YES**
Is it current?	**YES**
POST-CONSTRUCTION INSPECTIONS	
Who is responsible for post-construction site inspection?	Cuyahoga SWCD
If third party, is there an MOU or other agreement in place?	**YES**
Is it current?	**YES**
Is an "as-built" inspection conducted at the time a post-construction BMP is installed to ensure compliance with the approved BMP construction plan?	**YES** The site requires as-built plans to be submitted and performs a site inspection when construction completed.
Does the MS4 conduct inspections for long-term maintenance of privately-owned post-construction BMPs?	**YES**
If YES, at what frequency?	Once a year at minimum
CONSTRUCTION & POST-CONSTRUCTION INSPECTION QUESTIONS	
Findings from construction and post-construction inspections tracked in a database?	YES USP from SWCD as well as hardcopies in a file.

Project Inspections	
Interview Questions	**Response**
What training or professional certifications have site inspection personnel received? Construction Post-Construction How many years of experience does site inspection personnel have inspecting storm water BMPs? Construction Post-Construction How often do site inspection personnel receive training? Construction Post-Construction ***NOTE:*** *Make MS4 operator aware of training opportunities provided by Ohio EPA and archived at www.epa.ohio.gov/ocapp/storm_water.aspx.*	Same as above.
Do you use a checklist or the approved plan to conduct site inspections?	
Construction	YES – approved plans
Post-Construction	YES – approved plans

Applicable Documents	Reviewed	Obtained
Most recent inspection staff training records	YES	YES
Example of active construction project inspection checklist	N/A	N/A
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

Notes

MS4-Owned Construction Projects	
Interview Questions	**Response**
Projects designed in-house or contracted?	In-house at this time, but also use consultants when needed. City Engineers are consultants and work for Richard L. Bowen and Associates.
Designers trained in storm water BMP implementation?	**YES**
Checklist used during the design and/or review of public construction projects?	**YES** Same as private projects. Uses the code.
Are projects greater than one acre covered a general construction permit (has an NOI been submitted)?	**YES**
If contracted planners and engineers are used for the design of MS4-owned projects, does the contract language specify that sediment and erosion control and post-construction storm water BMPs be incorporated into the design?	**YES**
Are municipal construction projects inspected for compliance with the SWP3? Are they inspected with the same frequency for BMP compliance as a private construction project? Who inspects municipal construction projects for compliance? ***NOTE:*** *To avoid a conflict of interest, the firm or department that designed the SWP3 should not also inspect the site for compliance.*	**YES** **YES** Cuyahoga SWCD
Project inspectors trained? Frequency:	**YES**
If contracted inspectors are utilized, are minimum inspection, maintenance and reporting requirements specified in the contract?	**YES**
For municipally-owned post-construction BMPs, how often are they inspected to ensure long-term maintenance?	Once a year at minimum by the SWCD.
Which department is responsible for conducting these inspections?	Cuyahoga SWCD

MS4-Owned Construction Projects		
Interview Questions	**Response**	
Applicable Documents	**Reviewed**	**Obtained**
MS4-owned project storm water design standards and/or checklist	N/A	N/A
Contract language for active public project not developed or inspected in-house	YES	YES

Outreach and Education	
Interview Questions	**Response**
Type of training provided to construction operators: Designers and Engineers:	Through the SWCD, NEOSW Training Council, CSU workshops. District sponsored workshops.
Attendance required?	NO.
Training frequency?	Not determined
Number of operators trained:	Unknown
Training topics:	CPESC training, contractors are encouraged to become certified during site inspections with the SWCD
Presentations given by MS4 staff to professional groups?	NO
Brochures or outreach materials targeted at operators:	When contracts come into get permits, there is a table with SWCD information and other brochures pertaining to E&SC and other storm water related issues.
How/when is the information distributed?	When contractors apply for permits.
Website used to educate operators? Web address:	Link to Cuyahoga SWCD website where there are sample SWP3s, etc. www.northroyalton.org

Applicable Documents	Reviewed	Obtained
Training materials	YES	YES
Brochures, outreach materials	YES	YES

Notes

CONSTRUCTION & POST-CONSTRUCTION FILE RECORDS REVIEW

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

Construction Project #1 Name: North Royalton YMCA	
BMPs adequately incorporated into the plan to address erosion control, sediment control, and housekeeping?	**NO** The SWP3 was never approved before construction commenced. There should be a sediment trap on this site. The silt fence is not installed along a constant grade.
Design specifications and details for all BMPs included on the plans?	**NO** There are no specifications for silt fence, dandy bags, and construction entrances.
Maintenance requirements specified?	**YES**
Have any NOVs or other enforcement actions issued for this site. ***Obtain copies of NOVs. If none, why not?***	No NOVs for the site at this time. Cuyahoga SWCD has conducted 1 inspection so far since construction has commenced. The Owner (City of North Royalton) has not applied for coverage under the Construction General NPDES permit (CGP), and construction has commenced before an NOI was submitted and before the SWP3 was approved.

Notes:

Brandstetter Carroll, Inc. has not submitted an approved SWP3. The Cuyahoga SWCD has made comments on the SWP3 and these will be addressed. The City is working with the contractor to get these issues resolved and the plan approved. Currently, no post-construction is in the plans for this re-development project. City Engineer suggests modifying the existing basin or adding bioswales to accommodate for the 20% reduction in impervious area.

Also, contractors and sub-contractors should be notified that they must submit Co-Permittee NOIs for the NPDES CGP.

Construction Project #2 Name: Villas of Worthington Ph2B	
BMPs adequately incorporated into the plan to address erosion control, sediment control, and housekeeping?	**YES** A temporary diversion was added to the SWP3 to divert runoff to the sediment basin. This diversion requires maintenance. The sediment basin 1 is designed for runoff from Phase 2A and 2B.
Design specifications and details for all BMPs included on the plans?	**YES** All specifications are included in SWP3
Maintenance requirements specified?	**YES**
Have any NOVs or other enforcement actions been issued against this site? ***Obtain copies of NOVs. If none, why not?***	No NOVs have been sent to the contractor for Phase 2B. A dedication was sent to the contractor for work that needed to be done on the site when weather permitted. This dedication was received and reviewed by the EPA. An inspection trail was found.

Notes:

The inspection revealed that within the SWCD Field Review Technical Advisory Report it is very difficult to pick out the deficiencies found during specific site inspections. There is a lot of repeated educational material that is sent in every letter, but the content of the reports are not very specific as to what needs to be improved for the site.

Construction Project #3 Name: DiGioia Suburban Excavating	
BMPs adequately incorporated into the plan to address erosion control, sediment control, and housekeeping?	**NO** See Below.
Design specifications and details for all BMPs included on the plans?	**YES** All specifications and notes are provided. The specifications for the outlet structure are outdated and do not provide the minimum 48 hour drawdown time of the dewatering volume. The City has not updated their ordinances to reflect the newest NPDES CGP by the EPA.
Maintenance requirements specified?	**YES**
Have any NOVs or other enforcement actions been issued against the site? ***Obtain copies of NOVs. If none, why not?***	No NOVs have been sent to the site from the City. The EPA has issued NOVs to DiGioia. An inspection report trail was found. Repeated deficiencies in slope stabilization along creek in records from Oct 2010 to Jun 15, 2011, but no NOVs or other enforcement actions were carried out.

Notes:

The SWP3 says that there should be stabilization on the south side of the slope across the stream. The City is informing DiGioia that they must adhere to the approved SWP3 and install slope erosion protection.

Also, the plan review personnel did not indicate that the sediment basin for this site was designed improperly. The Summit SWCD spreadsheet should not be used for riser calculations for sediment basins. This procedure is outdated and the calculations are incorrect for the sediment basin riser pipe. Instead, the plan reviewer may consider using the Georgia Storm Water Management Manual calculation for riser pipes located in Vol. 2 section 2.3 of the Manual.

Post-Construction Project #1 Name: Villas of Worthington	
Date that project was accepted by community or otherwise deemed "completed"	May 16, 2007
Were post-construction BMPs provided for all drainage areas associated with the developed site? List the post-construction BMPs provided?	**YES** DA #1: Wet-Extended Detention basin – 24 hour drawdown time – 6.52 acres DA #2: Dry-Extended Detention basin – 48 hour -10.03 acres
Design specifications and details for all BMPs included on the plans?	**YES**
Were post-construction BMPs selected appropriate for their drainage areas, site and soil conditions?	**NO** See Below
Did the community verify the installation of post-construction BMPs per the approved plan at the time the project was completed?	**YES**
Does MS4 have a copy of the long-term maintenance plan? Who does the plan say is responsible for long-term maintenance? Has the MS4 conducted any long-term maintenance inspections or collected any long-term maintenance inspection reports from the responsible party? ***Obtain copy of latest inspection report.***	In declaration of Covenants, Conditions, Restrictions and Reservation of Easements for Villas at Worthington homeowners association, Inc. Article V Section 5.5 Retention Basin Maintenance Home Owners Association YES - SWCD

Notes:

The plan reviewer for this SWP3 has failed to verify the sizing calculations of the Water Quality volume orifices. Based on the Ohio EPA's review of the information provided in the SWP3, the WQv orifices appear to be designed too large. This is a deficiency in the plan review process.

CONSTRUCTION FIELD REVIEW WORKSHEET

Name of MS4: City of North Royalton
MS4 Permit No: 3GQ00044*BG

Name of Site: North Royalton YMCA	
Location: 11409 State Road	**NPDES Permit #** NO PERMIT
Date of Inspection: 7/7/2011	**Time of Inspection:** 1:45 p.m.
Name of Inspector: Todd Houser. CSWCD	
Others Present During Inspection Lindsie MacPherson. OEPA, NEDO. DSW David Rischar Mark Schmitzer Ron from Panzica Construction	

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 SWP3 and noted that the SWP3 was not approved and that the site had no coverage under the NPDES construction general permit (CGP).

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

   Yes. The inspector reviewed the reports and commented on their clarity and thoroughness. The Inspector also suggested that a worker with a CPESC certification or other training should fill out the reports.

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

   The SWP3 for the site has not been approved at this time, and construction has been on-going for over a month.

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

   The inspector asked what work has been done towards submitting an NOI for coverage under the CGP. and reviewed the last inspection letter sent to the site.

6. Compliance issues identified by inspector during this inspection:

   The inspector noted that the silt fence provided around the perimeter of the disturbed area is not the best system for a sediment control, but there was a catch basin down slope of the area that was protected with a dandy bag.

   The inspector noted that the bag was doing its job, but the area and the bag required maintenance.

   Inspector commented that a sediment trap provided as sediment control for the disturbed area would have been a better control than the silt fence, but due to the small drainage area, the inlet protection is sufficient for a sediment control. Inspector noted that the disturbed areas would require stabilization if they are to remain dormant for over 21 days.

   The inspector noted that saw cutting was occurring next to a catch basin without inlet protection.

   Inspector commented that improvements should be made to the SWP3 before it is approved, even though the work should not have started if the SWP3 was not approved in the first place.

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

   The inspector was very thorough with his inspection, but did not spend much time walking the entire site. This may be due to time constraints and the lack of an approved SWP3.

   The inspector did not mention that the SWP3 was lacking a post-construction plan for redevelopment.

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 stated that the NOI will be submitted for the project within the next day of this inspection, and that the City Engineer will work with the Developer and SWCD to get the SWP3 approved. There was no indication that work on the site was going to stop.

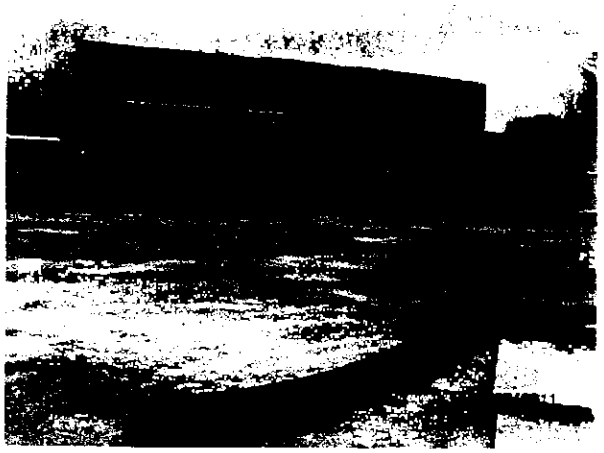

Fig 1&2: Disturbed area for this project is 1.33 acres. The disturbed area above is the southwest building addition for the swimming pool.

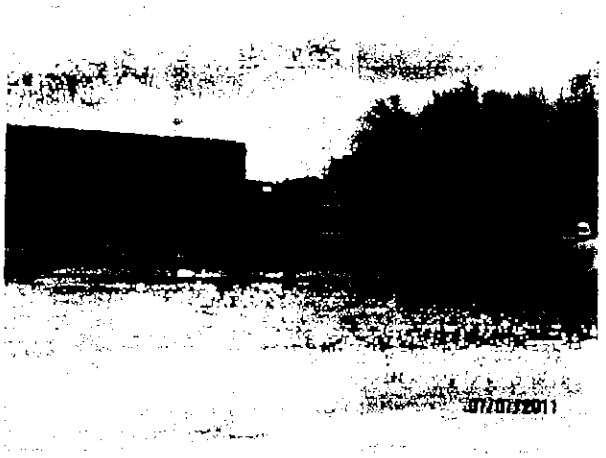

Fig 3(LF): Perimeter silt fence along the disturbed area does not provide for efficient sediment control, as noted by the sediment along the paved area. Silt fence should be installed along a level contour.

Fig 4(RT): The dandy bag and the surrounding paved area require maintenance. Sediment build up should be removed and the dandy bag cleaned out and reinstalled.

Fig 5: Saw cutting occurred adjacent to a catch basin that was not protected with inlet protection.

CONSTRUCTION FIELD REVIEW WORKSHEET

Name of MS4: City of North Royalton
MS4 Permit No: 3GQ00044*BG

Name of Site: Villas of Worthington Phase 2B	
Location: W. York Road, S. of Albion, N. of Royalton Rd	**NPDES Permit** #3GC05288*AG
Date of Inspection: 7/7/2011	**Time of Inspection:** 2:20 p.m.
Name of Inspector: Todd Houser, CSWCD	
Others Present During Inspection Lindsie MacPherson, OEPA, NEDO, DSW David Rischar Mark Schmitzer Ben Schrock – Ryan Homes	

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 in the Ryan Home trailer. The SWP3 was posted on the wall of the trailer along with another set to be reviewed. The inspector noted that updates made to the plans should be signed and dated by the party responsible.

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

   Yes. The inspector checked for the inspection reports as well as for individual lot NOIs and a duty to inform. In place of the duty to inform, Erosion and Sediment Control Certification Statements are used for Ryan Homes.

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

   During a regular site inspection the inspector stated that he would have an approved set of plans with him, but he did not have them at the time of the inspection for the audit.

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

   Yes. The City Engineer mentioned that the City is working with the contractor to finish the swale and completely divert the runoff to the basin and out of the protected wetlands.

6. Compliance issues identified by inspector during this inspection:

   The inspector noted that stabilization was required for the individual lots and the diversion.

   Inspector noted that silt fence was not installed along a level contour.

   The inspector noted that the temporary diversion or swale was not completed, and he suggested extending the swale to the sediment basin and providing a rock channel to convey water from the diversion to the basin to avoid erosion.

   The inspector commented on the concentrated flow of sediment laden runoff discharging to the wetlands.

   The inspector checked the outlet structure of the sediment basin and verified that the correct orifice was opened with the plans back at the trailer.

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

   The inspector did not inspect all curb inlet protection silt sacs to ensure that they were functioning properly. The inspector stated that because the silt sacs are secondary measures and are not required, he does not usually worry about these.

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

   Yes. The inspector was accompanied on the inspection with the home builder, and 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 representative from Ryan Homes.

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 has issued a dedication to the contractor (Pride 1 Construction, York-Royalton, LLC) for the work that is required on this site. The contractor was given until the end of July 2011 to finalize the site. No other enforcement actions were discussed at the time of the inspection.

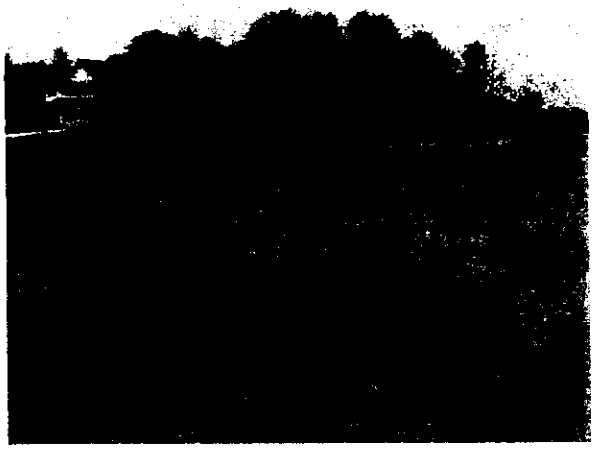

Fig 1&2: Lots require temporary stabilization if they are to remain dormant for more than 21 days and permanent stabilization if they have reached final grade.

Fig 3(LT): The diversion requires stabilization and should be extended to the basin to convey runoff directly to the sediment basin.
Fig4 (RT): The evidence of concentrated flow of runoff was observed discharging to the protected wetlands on site. The diversion should be extended to the basin to avoid this issue.

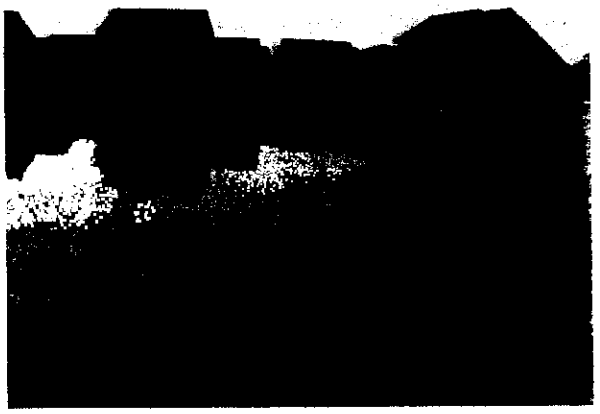

Fig 5: The embankment and slopes of the basin should be stabilized to at least 70% vegetation coverage.

CONSTRUCTION FIELD REVIEW WORKSHEET

Name of MS4: City of North Royalton
MS4 Permit No: 3GQ00044*BG

Name of Site: DiGioia-Suburban Excavating	
Location: 11293 Royalton Road	**NPDES Permit** #3GC04951*AG
Date of Inspection: 7/7/2011	**Time of Inspection**: 3:50 p.m.
Name of Inspector: Mark Schmitzer	
Others Present During Inspection Lindsie MacPherson, OEPA, NEDO, DSW David Rischar Guy Cunningham Nick DiGioia	

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 located in Mr. Cunningham's office.

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

   Yes. The inspector met with the operator of the site storm water program, Guy Cunningham, CPESC, and reviewed his past inspection reports. The inspector noted that operator was about a month behind on reports.

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

   Yes, the inspector was familiar with the SWP3 for the site and checked the updated plans in the Mr. Cunningham's office after the inspection for discrepancies.

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

   Yes. The inspector inquired about the completion of the diversion to the sediment basin, and if there were maintenance standards set for dredging out the basin.

6. Compliance issues identified by inspector during this inspection:

   The inspector mentioned that the rock construction entrance required maintenance.

   Inspector noted that the back side of the pile required stabilization along with the flat area preceding the sediment basin.

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

   The SWP3 for this site says that there should be stabilization on the south side of the slope across the stream. Originally the inspector did not mention this in previous visits, but at this inspection, the lack of stabilization was noted as a deficiency in following the site's SWP3.

   During the file review and field inspection, Ohio EPA noted that the sediment basin outlet structure was designed and installed per outdated specifications. The City engineer is not the regular site inspector for this site, and stated that he does not usually go down to the sediment basin. Based off of the most recent inspection report to DiGioia from SWCD, the District has not made any comments on the outdated outlet structure either.

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

   Yes. The inspector was accompanied on the inspection by the owner and a site engineer 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.

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 will inform DiGioia that they must adhere to the approved SWP3 and install slope erosion protection for the south side of the slope across the stream. Also, the City Engineer stated that he will inform DiGioia that the proper outlet structure most be installed in the temporary sediment basin.

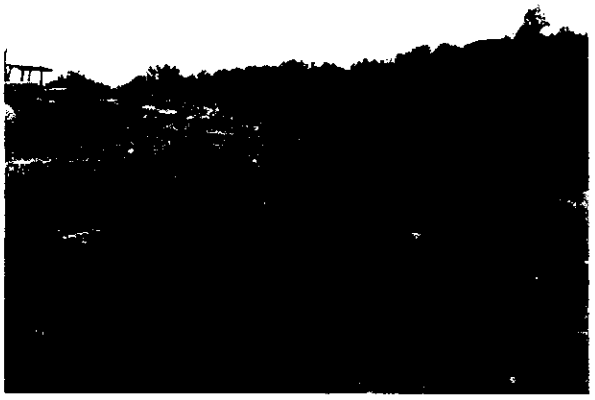

Fig 1(LT): The back side of the pile requires temporary stabilization.
Fig 2(RT): Another view of the backside of the pile as well as the stream with the rock diversion in front conveying the water to the sediment basin to the right of the picture.

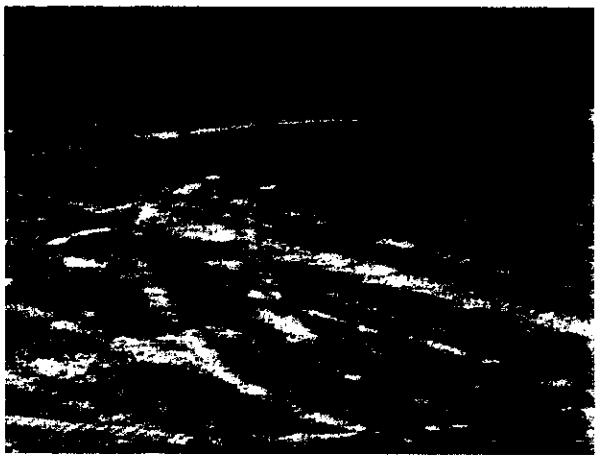

Fig 3(LT): The flat area preceding the sediment basin requires maintenance of the temporary stabilization.
Fig 4(RT): The sediment basin is retaining water, but the outlet structure was designed and installed per old specifications.

Fig 5: The south side slope beyond the stream requires stabilization as per the site's SWP3.

POST-CONSTRUCTION INSPECTION WORKSHEET

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

Name of MS4: City of North Royalton
MS4 Permit No: 3GQ00044*BG

Name of Site: Villas of Worthington	
Location:	**NPDES Permit #**
Date of Inspection: 7/7/2011	**Time of Inspection:** 3:20 p.m.
Name of Inspector: Todd Houser, CSWCD	
Post-Construction BMPs on this Site (list by drainage area) DA #1:Wet-Extended Detention Basin DA #2: Dry-Extended Detention Basin – Not inspected	

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

   Yes. An as-built inspection was completed for post-construction BMPs for this site by 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?

   All intended BMPs were installed per the approved plans.

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

   The inspector did not use the approved plans as a basis for his inspection. As a result, the inspector did not note a maintenance need. Based on observation, the basin is not dewatering properly, and the lower outlet does not seem to be operating as intended. During the inspection, the water level was observed to be all the way to the box cut orifice, indicating that the WQv orifice may be clogged or some other issue may be present.

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 noted that the yellow silt fence should be removed from the conservation easements.

Inspector noted the basin required additional stabilization along the embankment. The inspector noted missing geotextile fabric under the rip rap outfall protection.

Also, the inspector mentioned that the basin should be mowed once a year in September, but to help protect the basin from nutrification from the goose poop, the owner should not mow all the way to the water pool of the basin.

Inspector noted that the home owners seem to be mowing into the conservation easement, which they should not be doing.

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

   Yes. The inspector was very knowledgeable on the basin, the basin's general function, and the essential long-term maintenance issues that come up with the basin and other like the BMP.

Fig 1(LT): The yellow silt fence should be removed out of the conservation easement.
Fig 2(RT): View of the south side of the wet-extended detention basin, where the runoff discharges into the basin.

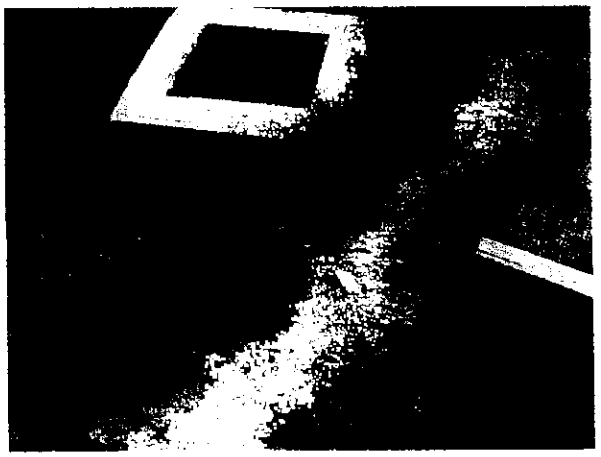

Fig 3(LT): The water level in the basin is a foot above the invert elevation of the WQv orifice. This may be an indication that the reverse flow outlet structure requires maintenance and may be clogged.
Fig 4(RT): The embankment of the basin requires additional stabilization.

Fig 5(LT): The rip rap protecting the outfall location was in good condition but a geotextile lining should be provided to all stone erosion protection.
Fig 6(RT): Home owners seem to be mowing past the conservation easement and should be told that this is against City Ordinance.

Fig 7: A home owner has mowed over a designated stream by the Army Corps of Engineers. The grass clipping are left in the lawn and in the waterway.