



Environmental
Protection Agency

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

Re: Storm Water
Erie County
City of Vermilion
MS4 Audit Findings

March 1, 2011

Mr. Robert Kurtz, Director of Public Service
City of Vermilion
5511 Liberty Avenue
Vermilion, Ohio 44089

Mr. Michael Bixler
Erie County & Others
2900 Columbus Avenue
Sandusky, Ohio 44870

Dear Mr. Kurtz and Mr. Bixler:

I apologize for the delay in this letter. Ohio EPA has completed an audit for a portion of the City of Vermilion's municipal storm water program. The audit covered overall Storm Water Management Program (SWMP) management, but focused on the City of Vermilion's implementation of minimum control measure (MCM) #6: Pollution Prevention and Good Housekeeping for Municipal Operations. The SWMP is a requirement of Ohio Administrative Code 3745-39 and the Ohio EPA General Storm Water National Pollutant Discharge Elimination System (NPDES) Permit for Small Municipal Separate Storm Sewers Systems (MS4s), Number OHQ000002, also known as the Small MS4 Permit.

The City is a Co-Permittee with Erie County and Others under the Small MS4 Permit, with a Facility Permit Number of 2GQ00027*BG. The comments in this report are specific to the City of Vermilion. However, since one SWMP and one Annual Report have been used by all Co-Permittees, many comments concerning these two documents are applicable to each Co-Permittee. I recommend that each of the Co-Permittees review the attached report to insure that their jurisdiction has addressed in the SWMP and in their daily implementation the outlined issues. We encourage the Co-Permittees to work together to remedy any SWMP violations and deficiencies.

On November 10, 2010, I met with Mr. Kurtz, Mayor Eileen Bulan, and Ms. Lynn Miggins, P.E., KS Associates, to determine compliance with the Small MS4 permit. In performing this audit, Ohio EPA uses the Municipal Storm Water Program Evaluation Guide developed by the United States Environmental Protection Agency. Attached are the Municipal Storm Water Program Evaluation and Field Inspection Worksheets completed for the City of Vermilion. Please review these documents in detail to determine specific elements where your SWMP needs improvement.

Mr. Robert Kurtz, Director of Public Service
Mr. Michael Bixler
March 1, 2011
Page 2

In addition, you will find comments suggesting ways to improve your MS4 program. Key points (both violations and suggestions) have been highlighted in yellow. The following is a summary of the audit findings:

Violations:

- **Failure to provide a written agreement when relying on another entity to implement a BMP.** For example, under the Public Education section of the SWMP, the Erie County Health Department, the Lorain County Solid Waste District, and the Erie County SWCD are some of the entities named as providing public education materials and activities. This is a violation of Part III.C.3. of the Small MS4 Permit. The permit allows you to rely on another entity to implement a control measure only if the other entity agrees to do so and there is written acceptance of this obligation, maintained as part of the SWMP.
- **Failure to provide a Table of Organization (TO).** This is a violation of Part II.A.1.d. of the Small MS4 Permit. The permit requires that the SWMP include a TO, including a primary point of contact, which identifies how implementation across multiple positions, agencies and departments will occur. The first TO was to be submitted with the April 1, 2010, annual report.
- **Failure to provide measurable goals for each Best Management Practice (BMP).** This is a violation of Parts III.A.1.c. and e. of the Small MS4 Permit. Some specific examples are listed in the attached Municipal Storm Water Program Evaluation Worksheets.
- **Failure to report progress on several BMPs listed in the SWMP and to include required information in the annual reports.** This is a violation of Part IV. C. of the Small MS4 Permit. For several BMPs listed in the SWMP, documentation/measurements were not provided in the annual reports to assess the program's progress and to document permit compliance. Some specific examples are listed in the attached Municipal Storm Water Program Evaluation Worksheets. Better coordination is needed between Co-Permitttees so that Vermilion's information is included in the Annual Report.
- **Failure to include a specific list of municipal operations that are impacted by the City's operation and maintenance program to prevent or reduce pollutant runoff from municipal operations.** This is a violation of Part III. d.i. of the Small MS4 Permit. This would include an inventory of facilities owned or operated by the City.
- **Failure to provide training to municipal staff on storm water pollution prevention matters is a violation of Parts III.B.6.b. and d.ii. of the permit.** The Small MS4 Permit requires you to train municipal staff whose job can affect compliance with the MS4 permit on storm water pollution prevention at least once every year. Documentation must be kept, such as agendas, attendance dates and lists, and materials used. A *summary of employee training program(s) implemented with number of employees that attended* must be included in your annual reports. Please review the attached Municipal Storm Water Program Evaluation Worksheets for further information on training.

- **Failure to describe in the SWMP procedures for all of the areas of Municipal Operations that are required to be addressed in your Pollution Prevention/Good Housekeeping Program.** The description of your storm water program must specifically address the following areas: 1) Maintenance activities, maintenance schedules, and long term inspection procedures for controls to reduce floatables and other pollutants to your MS4; 2) Controls for reducing or eliminating the discharge of pollutants from streets, roads, highways, municipal parking lots, maintenance and storage yards, fleet or maintenance shops with outdoor storage areas, salt/sand/winterization storage locations/application rates/BMPs, and snow disposal areas the entity operates; 3) Procedures for the proper disposal of waste; 4) Procedures to ensure that new flood management projects are assessed for impacts on water quality and existing projects are assessed for incorporation of additional water quality protection devices or practices.

There are procedures that the City is following to minimize pollutants, such as storing pesticides inside and using Integrated Pest Management Practices, but they are not documented in the SWMP or in a document that is referenced by the SWMP. In addition, inspections must be documented. The City should provide storm water pollution prevention guidance materials to field staff that they can take with them in the field. Several areas of municipal operations were not addressed in the SWMP. These include, but were not limited to:

- **Failure to describe in the SWMP the City's catch basin and ditch cleaning and inspection schedules, catch basin cleaning and inspection procedures, and procedures for disposal of waste.** This is a violation of Parts III.B.6.d.iii.1. and 3.
- **Failure to describe in the SWMP the City's street sweeping procedures, current schedule, and the procedures for the disposal of waste.** This is a violation of Parts III.B.6.d.iii.1., 2., and 3. Street sweepings are solid waste and must be stored and disposed of accordingly.
- **Failure to identify in the SWMP the controls or practices used for reducing or eliminating discharges of pollutants from road and parking lot winterization activities.** This is a violation of Parts III.B.6.d.iii.1. and 2. The City also failed to report the quantity and the materials used for deicing activities in the 2009 Annual Report.
- **Failure to describe evaluation procedures and criteria for considering water quality impacts from new flood management facilities and for assessing existing facilities for retro-fit opportunities.** This is a violation of Part III.B.6.d.iii.4. of the permit.
- **Failure to describe in the SWMP the City's inspection schedules, procedures, and controls for reducing or eliminating the discharge of pollutants from municipal parking lots, maintenance and storage yards, fleet or maintenance shops, and deicing material storage locations.** This is a violation of Parts III.B. 6.d.iii.1., 2., and 3. of the permit.

- **Failure to describe spill response procedures in the SWMP.** Spill response procedures are an integral part of the City's Illicit Discharge Detection and Elimination and Pollution Prevention for Municipal Operations Minimum Control Measures. The SWMP needs to include this information or refer to a readily available document that contains this information as part of their plan to eliminate non-storm water discharges. This is a violation of Part III.B.3.i.iv. of the Small MS4 Permit.
- **Failure to describe in the SWMP procedures for construction and post construction storm water management (for water quality purposes) plan review.** This is a violation of Parts III.B.4.a.iv. and b.iv. of the permit.
- **Failure to describe in the SWMP procedures for enforcement of (construction and post construction) control measures, including procedures for when you will use certain sanctions.** The SWMP needs to include an official enforcement escalation plan or procedure. This is a violation of Part III.B.4.a.vi., Part III.B.4.b.ii., and Part III.B.4.b.vi. of the permit. The SWMP should describe how enforcement actions are tracked.
- **Failure to describe in the SWMP procedures for site inspections, including how you will prioritize sites.** The SWMP must include detailed information on site inspection procedures. This is a violation of Parts III.B.4.a.vi. and b.vi. of the permit.
- **Failure to describe in the SWMP how the City will ensure long-term maintenance of post-construction BMPs.** This is a violation of Part III.B.5.e.vi. of the Small MS4 Permit.

While Ordinance 1048.07 requires that a detailed maintenance plan be included as part of the Storm Water Management (SWM) plan submittal to the City, the SWMP does not describe how the City will ensure long-term maintenance of post-construction storm water management facilities (BMPs). The current permit specifies that Vermilion must ensure that long-term operation and maintenance (O&M) plans are developed and that agreements are in place for all applicable sites. The City has until June 17, 2011 to revise your SWMP to satisfy this performance standard.

- **Failure of the City to develop and implement a plan to detect and eliminate non-storm water discharges to its MS4.** This includes procedures for locating priority areas; procedures for tracing the source of an illicit discharge; including the specific techniques; procedures for removing the source; and procedures for program evaluation. This is a violation of Parts III.B. 3.e. and i.v. of the permit. The SWMP states that Ohio EPA has the responsibility for the implementation of the BMP. This is not acceptable. The SWMP only mentions the County's and the Health Department's enforcement abilities. It did not describe City procedures or enforcement abilities. The Illicit Discharge ordinance must include or reference an enforcement escalation policy.

Deficiencies:

- As program changes are made, it is important that these changes be included in the actual SWMP. There should be one comprehensive document to which staff can refer, as opposed to the original SWMP and then updates/changes scattered through various annual reports.

Mr. Robert Kurtz, Director of Public Service
Mr. Michael Bixler
March 1, 2011
Page 5

It is recommended that the SWMP be kept in a three ring binder, with separate (and dated) pages for each BMP to facilitate the permittee's ability to update individual sections of the SWMP. Outdated sections that have been replaced may be kept in an appendix.

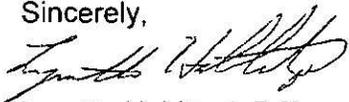
- The SWMP should more clearly lay out a strategy linking known water quality problems, to the listed pollutants of concern, to sources/behaviors, to specific BMPs and measurable goals. A more clearly delineated strategy can be used to decide program implementation priorities for resource allocation. This could be made clearer in the SWMP by adding a statement to each BMP linking it to the Pollutants Of Concern (POCs) it is intended to address.
- Please be sure that the MS4 map includes all catch basins, those HSTS that discharge to the MS4 (as opposed to those that are not served by sanitary sewer), and all public and private storm water management facilities constructed as post-construction BMPs for new development or redevelopment which has occurred since April 21, 2003. The map must be completed by June 17, 2014.
- Catch basin cleaning is reactive and appears to be based more on maintaining structures and drainage than pollutant removal. The program could be improved by establishing a schedule for catch basin cleaning and prioritizing based on tracking the location and amounts/type of material removed.
- The street sweeping program could be improved by targeting areas of water quality concern where pollution generation is the highest or water quality is most sensitive, e.g., heavily traveled streets, commercial or industrial areas. Sweeping of municipal parking lots/areas in addition to Victory Park is suggested.
- The City has not developed an efficient way to track the amount of salt used. More detailed tracking may allow the city to better identify inefficiencies in salt application.
- A Storm Water Pollution Prevention Plan (SWP3) must be developed for yard waste collection/composting areas, maintenance yards, and vehicle maintenance facilities within 2 years, i.e., by June 17, 2011. Please be aware that a documented inspection must be conducted at least once per year once a SWP3 is developed for these facilities. Ohio EPA recommends you develop a checklist for facility inspection to provide consistency. Please reference Ohio EPA General Storm Water NPDES Permit for Industrial Activities #OHR000004 for more information on the contents of a SWP3.
- The City needs to assure contract language/agreements specify that storm water BMPs must be implemented by a third party when that third party is hired to conduct a municipal operation and is relied upon to enact BMPs. Please be sure to add this language to any future requests for proposal or contracts you sign with third party service providers whose activities could generate storm water pollution.
- The City will need to review & update ordinances to be equivalent with the technical requirements of Ohio EPA's current NPDES Construction General Permit (CGP) by June 17, 2011.
- Please review the multiple existing ordinances that address illicit discharges to insure all types of sources and discharge methods are addressed.

Mr. Robert Kurtz, Director of Public Service
Mr. Michael Bixler
March 1, 2011
Page 6

- In Chapter 660.03 and .04, it is unclear where right of entry to investigate sources of illicit discharges is provided. Please clarify whether the term "public sewer" in Chapter 1042 includes storm sewers (piped), ditches and swales. The City should consider including in ordinance some of the common non-storm water discharges outlined in the permit (pool water, vehicle washing, etc.) and any related controls/conditions.
- o The SWMP needs to include information on the location of any priority dry weather outfall screening areas and why they were chosen, the frequency and extent of dry weather field screening, dry-weather field screening procedures, any checklist/reporting form used, how dry weather screening and illicit discharges are tracked, official enforcement escalation plan or procedures. For dry weather screening, consider having specific criteria, which could include numeric criteria, to determine whether the discharge is illicit as opposed to being just groundwater. The Small MS4 Permit requires that dry-weather screening occur for all storm water outfalls within the permit term.
 - o At the Devon Street Municipal Facility: The City should be aware that storm water passing through yard waste, street sweeping, and catch basin cleaning material may be considered leachate. The MS4 permit does not authorize the discharge of leachate. The spoils area must be monitored to prevent this. Leachate is a wastewater and would need to be managed as such. Also, the drainage channel on the west side (south of the Street Department's building) needs to be stabilized, as does the earthen berm created on the east side of the site (south of Water/Parks Department building).

Please review my comments and provide me with a response letter indicating the actions you will take to address the above violations. The City's **written response should be received no later than 60 days after the date on this letter**. Please note that this response does not replace the requirement to submit an Annual Report. Your annual report for the calendar year of 2010 will be due on April 1, 2011. If you have any questions, please contact me at (419) 373-3009.

Sincerely,



Lynette Hablitzel, P.E.
Storm Water Program
Division of Surface Water

//lr

Enclosure: Municipal Storm Water Program Evaluation and Field Inspection Worksheets

pc: ◀BSW-NWDO File▶

ec: Rick Zuzik, DSW-NWDO

Jason Fyffe, DSW-CO

Tim White, Erie SWCD, twhite@eriecounty.oh.gov

Eric Dodrill, Perkins Township Highway Dept Superintendent, perkinstwphwy@buckeye-express.com, Ken Fortney, Erie County Engineer's Office, KFortney@eriecounty.oh.gov

MUNICIPAL STORM WATER PROGRAM EVALUATION

Program Management Component Worksheet

Date of Evaluation November 10, 2010
Evaluator Name, Title Lynette Habitzel, Ohio EPA - NWDO
M54 Permittee & Facility Permit No. City of Vermilion 2GQ00027
Date Issued Permit Coverage 4/24/2003 (Original) 6/17/2009 (Renewed)

Staff Interviewed

Name	Department/Agency	Phone Number/Email
Eileen Bulan	Mayor, City of Vermilion	440-204-2400 Mayor@vermilion.net
Robert Kurtz	Director of Public Service, City of Vermilion	440-204-2424 BobKurtz@vermilion.net
Lynn S. Miggins, P.E.	President, KS Associates Contract Engineering Services for City of Vermilion	440-365-4730 ext. 310 migginsl@ksassociates.com
Eric Dodrill	Superintendent, Perkins Township Highway Department.	419-626-2457 perkinstwphwy@buckeye- express.com
Ken Fortney	Drainage Manager, Erie County Engineer's Office Both present for portion of the interview. Members of Erie Co. Storm Water Committee	(419) 627-7716 KFortney@eriecounty.oh.gov

Comprehensive Storm water Management Planning SWMP Planning

Interview Questions	Response
Is SWMP available? Most recent version dated:	Yes. 2003. No updates.
If multiple co-permittees, does each have a separate SWMP document?	No.
Is there an area wide SWMP, if multiple co-permittees?	Yes.

MUNICIPAL STORM WATER PROGRAM EVALUATION

Were stakeholders included in the planning process?	Some. SWMP states that the document was developed with participation from all of the elected officials of the jurisdictions and representatives of all the County agencies which deal with storm water education and management.	
Applicable Documents	Reviewed	Obtained
SWMP Plan	Yes.	On file.

Comprehensive Storm water Management Planning Intergovernmental, Agency, Departmental Coordination		
Interview Questions	Response	
If multiple co-permittees, is there an "umbrella group" to coordinate activities? Name of Group:	Yes. Erie Co. Storm Water Committee. Meets 2 nd Wednesday of each month.	
Are roles and responsibilities for multiple co-permittees established?	Yes. The City is responsible for implementation. The Erie County Committee serves an ad hoc advisory role.	
How are in-house departments coordinated?	In-house departments are coordinated by Bob Kurtz, Dir. of Public Service.	
Are outside groups used to implement the SWMP? Name of Group(s):	Yes. Erie SWCD, Erie Co. Health Department, Lorain Co. Solid Waste District.	
Are there MOUs between co-permittees and outside agencies?	No.	
Applicable Documents	Reviewed	Obtained
MOUs or other agreements	N/A	N/A
Meeting schedules for in-house or inter-agency task forces or committees	No	No

Comprehensive Storm water Management Planning Staff Inventory & Organization		
Interview Questions	Response	
Has a Table of Organization (TO) been developed?	No.	
Does it include:		
- A primary contact?	No.	
- All other persons responsible for implementing or coordinating the BMPs?	No.	
- Their title and contact information ?	No.	

MUNICIPAL STORM WATER PROGRAM EVALUATION

Have roles and responsibilities been assigned?	No.	
Does the TO identify how implementation across multiple position/agencies/departments will occur?	No.	
Applicable Documents	Reviewed	Obtained
Storm water program staff lists, responsible parties, contact names, organizational charts	N/A	N/A

Notes

In addition to the Erie County Storm Water Committee, the City has an internal committee. It is comprised of 1 resident from each ward and 2 business owners. They are used to help prioritize projects undertaken by the Storm Water Utility.

Comprehensive SWMP - As program changes are made, it is important to include these changes in the actual SWMP. There should be one comprehensive document to which staff can refer, as opposed to the original SWMP and then updates/changes scattered through various annual reports. To aid in this, it is suggested that the SWMP be kept in a three ring binder, with each BMP on a separate page(s). As changes are made to a BMP, these sections can then be easily replaced, with the previous version placed in an appendix. Please note that whenever the SWMP is updated, it must be signed in accordance with Part V.G. of the permit. When using an umbrella SWMP for all Co-Permittees, the SWMP must be very clear which of the Co-Permittees are committed to performing the BMP. When does "county" mean every political subdivision in the group and when does it mean only Erie County?

Written Agreements - The City must provide MOUs when they are relying on another entity to perform a BMP. For example, under the Public Education section of the SWMP, the Erie County Health Department, the Lorain County Solid Waste District, and the Erie County SWCD are some of the entities named as providing public education materials and activities. The lack of MOUs is a violation of Part III.C.3. of the Small MS4 NPDES Permit #OHQ000002. The permit allows you to rely on another entity to implement a control measure only if the other entity agrees to do so and there is written acceptance of this obligation, maintained as part of the SWMP. The MOU should stipulate the activities being performed, a timeframe for notifying the City should the entity decide not to implement the program/BMP. Please keep in mind that the City is obligated to implement the BMP in the event the other entity does not.

Table of Organization - There is no TO. Roles and responsibilities have informally been assigned to staff. The Small MS4 NPDES General Permit was renewed in January 2009. It requires that the SWMP include a Table of Organization, including a primary point of contact, which identifies how implementation across multiple positions, agencies and departments will occur. The first TO was to be submitted with the April 1, 2010 annual report. This is a violation of Part II.A.1.d. of the Small MS4 NPDES Permit #OHQ000002.

Comprehensive Storm water Management Planning Performance Standards or Goals		
Interview Questions	Response	
Have measurable goals or standards been developed for each SWMP program component?	Not each. See Notes below.	
Do the goals address water quality impact or effectiveness? How?	Not always. See Notes below.	
Applicable Documents	Reviewed	Obtained

MUNICIPAL STORM WATER PROGRAM EVALUATION

Performance standards, measurable goals, schedule	SWMP and Annual Reports	On file.
---------------------------------------------------	-------------------------	----------

Comprehensive Storm water Management Planning Prioritization of Resources	
Interview Questions	Response
Have pollutants of concern (POC) been established? If yes, based on what? <ul style="list-style-type: none"> • 303(d) list? • TMDLs? • Predominant land uses? • Existing watershed planning efforts? 	Yes. SWMP was unclear on the basis for the decisions.
Have POC-specific strategies been developed in the SWMP?	Yes, but this could be made clearer in the SWMP by adding a statement to each BMP linking it to the POCs it is intended to address.
How does the permittee decide program implementation priorities for resource allocation?	Due to recent change in City's Administration, this has not been determined.

Assessment and Evaluation	
Interview Questions	Response
Is the SWMP regularly measured against goals or standards?	No. See Notes below.
Have load reduction goals been established or assessed?	No. See Notes below.
Have other types of improvements been assessed? <ul style="list-style-type: none"> • Riparian habitat? • Stream corridor? • Aquatic habitat? • Groundwater 	No. What types?

Notes

Measurable Goals - The permit requires that the Storm Water Management Program include a measurable goal for each Best Management Practice. Some of the listed measurable goals (completion dates) in the SWMP are documentation of completing a task, not measurements to evaluate effectiveness. In some cases, especially when initially creating a program, these types of goals may be appropriate interim milestones. The City needs to provide quantitative goals for each BMP, describe how and why measurable goals were selected for each BMP, and look for ways to assess BMP effectiveness. Goals are to be linked to how the City will evaluate the success of the program. For example, under the Construction Program, the SWMP states that success will be measured by lowering soil movement, managing siltation onsite, raising water quality of adjacent streams. While these are program elements that can be measured, quantifiable targets are not given in the SWMP, and the SWMP did not discuss how these are to be measured and evaluated to improve the program. Another example would be under the Post Construction Storm Water Management Program. The SWMP states that the Measurable Goal is to improve water quality in the receiving stream. However, the SWMP did not include details on how

MUNICIPAL STORM WATER PROGRAM EVALUATION

that would be measured or what was the quantifiable target. Failure to provide measurable goals for each BMP is a violation of Parts III.A.1.c. and e. of the Small MS4 NPDES Permit #OHQ000002.

Please review the SWMP to insure there are measurable goals for each BMP and revise the SWMP accordingly. Keep in mind that final measurable goals should demonstrate results that relate to an environmental benefit. They are BMP design objectives or goals that quantify the progress of program implementation and the performance of BMPs. Examples of results that relate to an environmental benefit include the number and types of illicit connections identified and corrected; survey results showing a percent increase in public awareness of storm water issues, a measured level of public participation; the volume or weight of materials collected at recycling facilities; the mass or volume of solids removed during street sweeping and catch basin cleaning operations, or measured improvements in water quality.

Prioritization based on Pollutants of Concern – The SWMP should more clearly lay out a strategy linking known water quality problems to the listed pollutants of concern, to sources/behaviors, to specific BMPS and to measurable goals.

Data Collection and Reporting		
Interview Questions	Response	
How are data or information from outside groups obtained?	Annual Reports are coordinated by Erie SWCD. The SWCD solicits information.	
Have internal reporting deadlines been established?	Not formally. New administration took office in 2010.	
Applicable Documents	Reviewed	Obtained
Reporting or assessment procedures	None written.	None written.

Notes
Since very little information specific to Vermilion has been included in the Annual Report, the coordination of reporting needs improvement. For example there is no mention of the status of mapping Vermilion's MS4, the city's Illicit Discharge ordinances, the number of site plans reviewed or construction sites inspected in the 2009 Annual Report. Failure to report progress in the annual reports is a violation of Part IV. C. of the Small MS4 NPDES Permit #OHQ000002.

MUNICIPAL STORM WATER PROGRAM EVALUATION

MS4 Maintenance Component Worksheet

Date of Evaluation 11/10/2010
Evaluator Name, Title Lynette Hablitzel, Ohio EPA - NWDO
MS4 Permittee & Facility Permit No. City of Vermilion 2GQ00027

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
Eileen Bulan	Mayor, City of Vermilion	440-204-2400 Mayor@vermilion.net
Robert Kurtz	Director of Public Service, City of Vermilion	440-204-2424 BobKurtz@vermilion.net
Lynn S. Miggins, P.E.	President, KS Associates Contract Engineering Services for City of Vermilion	440-365-4730 ext. 310 migginsl@ksassociates.com
Eric Dodrill Ken Fortney	Superintendent, Perkins Twp. Highway Department. Drainage Manager, Erie County Engineer's Office . -Present for portion of the interview. Members of Erie County Storm Water Committee.	419-609-1433 419-627-7716 KFortney@eriecounty.oh.gov

MS4 Mapping		
Interview Questions	Response	
Outfalls and receiving waters mapped (including names)?	Yes.	
Catch basins?	No.	
Pipes, ditches, other conduits?	Yes.	
Home Sewage Treatment Systems (HSTS) Note: only those that discharge to MS4	No.	
Flood Control Facilities?	There are none.	
Public storm water facilities (BMPs)?	There are none.	
Private storm water facilities (BMPs)?	No.	
Applicable Documents	Reviewed	Obtained
Map(s) of MS4 system	Yes.	No.

Notes
MS4 Mapping - The Small MS4 NPDES General Permit was renewed in January 2009. It requires that all catch basins and publicly-owned storm sewers, ditches and storm water management facilities be

MUNICIPAL STORM WATER PROGRAM EVALUATION

Notes
<p>mapped. In addition, the map must show privately-owned storm water management facilities constructed as post-construction BMPs for new development or redevelopment which has occurred since April 21, 2003. The map must be completed by June 17, 2014. The mapping is important – not only to have an awareness of the location of the MS4 system, but also because the outfalls must be observed as part of the City’s dry weather screening program.</p> <p>HSTS- Are located more on the southeast side of town. City operates under the Erie County Health Department. The City needs to map only those HSTS discharging to the MS4.</p> <p>There are no public detention basins.</p>

Catch Basin Cleaning			
Interview Question	Response		
Schedule established for inspections and cleaning?	On an as-needed or in response to problems basis.		
Is cleaning and maintenance of catch basin tracked:	Yes. Records kept at Service Center (Devon Street).		
How are spoils materials disposed of?	Vac truck takes material to WWTP drying beds. Material then disposed at landfill.		
Are storm drain pipes inspected? Proactive or only in response to blockage event?	On an as-needed or in response to problems basis.		
Applicable Documents		Reviewed	Obtained
Tracking logs		Yes.	No.
BMP guidance		N/A	N/A

Notes
<p>Catch Basin Cleaning – The City does have a vacuum truck. The activity conducted appears to be more about maintaining drainage than performing maintenance to address the amount of pollutants discharged. This program could be improved by establishing a schedule for catch basin cleaning and prioritizing based on tracking the location and amounts/type of material removed. Catch basin cleaning and inspection schedules, catch basin cleaning and inspection procedures, and procedures for disposal of waste must be described in the SWMP, including information on material storage methods, testing protocols, and disposal locations. This is a violation of Parts III.B.6.d.iii.1 and 3.</p>

Storm Water Management Facilities Operation and Maintenance	
Interview Questions	Response
Public facilities inspected? Frequency:	There are no public storm water facilities, such as extended detention basins or bio-retention cells.
Private facilities inspected? Frequency:	No.
Checklist used for inspections?	No.

MUNICIPAL STORM WATER PROGRAM EVALUATION

Storm Water Management Facilities Operation and Maintenance			
Interview Questions		Response	
Maintenance standards and procedures established?		No.	
Data evaluated to target maintenance resources?		No.	
Applicable Documents		Reviewed	Obtained
Inspection checklist		N/A	N/A

Notes
<p>Private major projects (e.g. Rite Aid, subdivisions) are field inspected at completion.</p> <p>While Ordinance 1048.07 requires that a detailed maintenance plan be included as part of the Storm Water Management (SWM) plan submittal to the City, the SWMP does not describe how the City will ensure long-term maintenance of post-construction storm water management facilities (BMPs). This is a violation of Part III.B.5.e.vi. of the permit. The SWMP also needs to include an official enforcement escalation plan or procedure. Such a policy should clearly describe the action to be taken for common violations, define the roles of various departments and describe which staff are authorized to enforce the applicable ordinances. The SWMP should describe how enforcement actions are tracked.</p> <p>The permit requires Vermilion to ensure that long-term operation and maintenance (O&M) plans are developed and that agreements are in place for all applicable sites. You have until June 17, 2011 to revise your SWMP to satisfy this performance standard. Plans should stipulate the frequency of inspection and the schedule for routine and non-routine maintenance tasks. Additionally, the City should develop or adopt standardized maintenance checklists to be included in the plans and used by owners with private facilities.</p> <p>Chagrin River Watershed Partners, Inc. (CRWP) has developed a model agreement that a municipality may use to ensure the long-term operation and maintenance of post-construction best management practices (BMPs). This language may need to be modified to reflect local requirements and should be reviewed by the municipality's legal council. A copy may be found at: http://crwp.org/pdf_files/model_im_agree_sw_bmp_10_29_2008.pdf.</p>

Road Maintenance	
Interview Questions	Response
Streets regularly swept?	Yes.
Frequency:	Weekly in the fall. Summer – every couple of weeks. Curbed areas are done more frequently than the uncurbed areas. See Notes below. 38-40 miles
How many road miles does the MS4 have?	
Frequency based on water quality factors (e.g. proximity to streams)?	No.
How are spoils disposed of?	Sweepings are taken to the Streets (Dept.) yard on Devon Street. See Notes below.

MUNICIPAL STORM WATER PROGRAM EVALUATION

Road Maintenance		
Interview Questions	Response	
<p>Does the community have a leaf collection program?</p> <p>What do they do with the collected leaves?</p> <p>NOTE: Landfills have been banned from accepting yard waste, so MS4 cannot place leaves and yard waste in dumpster. Must be composted at a licensed Class IV composting facility. Communities may temporarily store leaves awaiting transport to a composting facility but leachate must be prevented from discharging.</p>	<p>The City mixes their material with soil at the Service Center. Parks uses this material in its operations. It is not generally open to citizens. Allied Waste picks up bagged leaves from citizens.</p>	
<p>BMPs used during road maintenance activities?</p> <p>Describe types of road maintenance conducted by community staff and the BMPs used:</p>	<p>No written guidances. Employees receive ODOT training.</p>	
<p>BMP guidance available to field staff?</p>	<p>No written guidances. Employees receive ODOT training.</p>	
<p>Deicers used by MS4?</p>	<p>Yes. Salt only.</p>	
<p>Type and amount of deicer tracked?</p> <p>What measures are being taken to minimize the application of deicers?</p>	<p>Yes. Initial and end of season estimates.</p> <p>A management plan may be needed. Excess material not swept up during the winter. Not until street sweeping is done in the spring.</p>	
<p>Does your community operate a snow stockpile yard to store snow that has been removed from community streets and parking lots?</p> <p>If YES, location of the yards:</p> <p>Has your community considered implementing best management practices to control the discharge of pollutants from snowmelt associated with snow storage yards?</p> <p>If YES, what BMPs have you implemented?</p>	<p>No.</p> <p>N/A</p>	
Applicable Documents	Reviewed	Obtained
BMP guidance	N/A	N/A
Street sweeping records	Yes.	No.
Deicer application records	None	None

Notes
Court, police, fire parking lots are salted. Parks are just plowed.

MUNICIPAL STORM WATER PROGRAM EVALUATION

Notes

Street Sweeping- The sweeping program could be improved by targeting areas of water quality concern where pollution generation is the highest or water quality is most sensitive, e.g., heavily traveled streets, commercial or industrial areas. In addition, more frequent sweeping along with electronic documentation could improve your program. You will need to adequately track the total amount of material that you have swept for each subsequent annual report. The reported sweeping frequency is less than what was stated in the SWMP (daily in the summer and fall). Street sweeping procedures and schedules and the procedures for disposal of waste **must** be described in the SWMP, including information on material storage methods, testing protocols, and disposal locations. This is a violation of Parts III.B.6.d.iii.1., 2., and 3. The current practice of managing street sweepings is unacceptable. Street sweepings are solid waste and must be managed as such.

Road Deicing- Although the City has an idea of how much deicing material is used over the season, more detailed tracking of salt applications may allow you to identify inefficiencies in the system that lead to over-application. Tracking the amount of salt used per storm event and truck route is suggested. Other than mentioning the enclosed salt pile, the SWMP does not currently identify controls or practices used for reducing or eliminating discharges of pollutants from road and parking lot winterization activities. This is a violation of Parts III.B.6.d.iii.1. and 2. The SWMP should describe controls such as equipment calibration frequency and snow fighting procedures. The city must quantify the amount and type of deicer used for the calendar year to include in the Annual Report. No quantities were provided in the 2009 Annual Report, which was required.

Flood Management

Interview Questions	Response	
Inventory of flood management structures completed?	There are none.	
Structures been assessed for storm water retrofit?	N/A	
New structures include water quality considerations?	N/A	
Applicable Documents	Reviewed	Obtained
Inventory	N/A	N/A

Notes

Flood Management Projects - The SWMP does not currently describe evaluation procedures and criteria for assessing the water quality impacts of new flood management facilities or for assessing existing facilities for incorporation of water quality devices or practices. This opportunity most often arises when basins are rebuilt or repaired. This is a violation of Part III.B.6.d.iii.4. of the permit.

Facilities Operation & Maintenance

Interview Questions	Response
Inventory of MS4 facilities complete (i.e. facilities owned and operated by the MS4)?	No. The SWMP must include a list of the municipal operations that are impacted by the operation and maintenance program. This is a violation of Part III. d.i. of the permit.
Types of facilities included <i>These need their own NPDES storm water permit for</i>	

MUNICIPAL STORM WATER PROGRAM EVALUATION

Facilities Operation & Maintenance																																							
Interview Questions	Response																																						
<p><i>industrial activities or must submit a No Exposure Certification if there is a discharge of runoff from these operations:</i></p> <ul style="list-style-type: none"> • Landfills Type: <u>None</u> • Solid Waste Transfer Stations • Airports • Shipping Ports • Steam Electric Power Plants • Wastewater Treatment Plants \geq 1 MGD or with a pretreatment program <p><i>These do not need their own NPDES permit, but do need SWP3, if community operates:</i></p> <ul style="list-style-type: none"> • Impound Lots • Composting Operations <ul style="list-style-type: none"> ✓ No discharge of leachate permitted • Leaf Collection Yards <ul style="list-style-type: none"> ✓ No discharge of leachate permitted • Maintenance Yards <ul style="list-style-type: none"> ➤ How many do they operate? <u>1</u> ➤ List facility names/locations: • Bus Terminals • Vehicle Maintenance Garages <ul style="list-style-type: none"> ➤ How many do they operate? <u>1</u> ➤ List facility name/locations: <p><i>These are municipal operations for which the MS4 must adopt best management practices, but do not require a formal SWP3:</i></p> <ul style="list-style-type: none"> • Parks and Open Space (include Cemeteries) <ul style="list-style-type: none"> ➤ How many in UA? <u>13</u> 	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%; text-align: center; border-bottom: 1px solid black; padding: 5px;"><u>Response</u></th> <th style="width: 50%; text-align: center; border-bottom: 1px solid black; padding: 5px;"><u>SWP3 Developed?</u></th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">None.</td> <td style="padding: 5px;">N/A since do not operate.</td> </tr> <tr> <td style="padding: 5px;">None.</td> <td style="padding: 5px;">N/A since do not operate.</td> </tr> <tr> <td style="padding: 5px;">None.</td> <td style="padding: 5px;">N/A since do not operate.</td> </tr> <tr> <td style="padding: 5px;">None.</td> <td style="padding: 5px;">N/A since do not operate.</td> </tr> <tr> <td style="padding: 5px;">None.</td> <td style="padding: 5px;">N/A since do not operate.</td> </tr> <tr> <td style="padding: 5px;">None.</td> <td style="padding: 5px;">N/A since do not operate.</td> </tr> <tr> <td style="padding: 5px;">Yes. 1.2 MGD. NPDES permit NO. 2PD000032.</td> <td style="padding: 5px;">Contains Parts IV, V, and VI (stormwater language). SWP3 is required and would be evaluated during individual permit inspection.</td> </tr> <tr> <th style="text-align: center; border-top: 1px solid black; border-bottom: 1px solid black; padding: 5px;"><u>Response</u></th> <th style="text-align: center; border-top: 1px solid black; border-bottom: 1px solid black; padding: 5px;"><u>SWP3 Developed?</u></th> </tr> <tr> <td style="padding: 5px;">Don't typically use an impound lot. No SWP3 required.</td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;">Leaves mixed with soil. Need SWP3 – see Notes below.</td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;">Allied Waste picks up bagged leaves and small branches. The City chips larger material and stockpiles at the Service Center. Parks uses this material in its operations. It is not generally open to citizens. Need SWP3 – see Notes below.</td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;">Impound area/composting operations/leaf collection/ maintenance yards/ vehicle maintenance garages are all at Devon Drive. Need SWP3 – see Notes below.</td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;">None. No SWP3 required.</td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;">Service Center on Devon Drive. Need SWP3 – see Notes below.</td> <td style="padding: 5px;"></td> </tr> <tr> <th style="text-align: center; border-top: 1px solid black; border-bottom: 1px solid black; padding: 5px;"><u>Response</u></th> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;">- 2 Cemeteries are City owned & operated: Brownhelm & Maple Grove</td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;">- Exchange Park, northeast corner of Liberty Avenue & Main St.</td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;">- Victory Park, northeast corner of Main</td> <td style="padding: 5px;"></td> </tr> </tbody> </table>	<u>Response</u>	<u>SWP3 Developed?</u>	None.	N/A since do not operate.	Yes. 1.2 MGD. NPDES permit NO. 2PD000032.	Contains Parts IV, V, and VI (stormwater language). SWP3 is required and would be evaluated during individual permit inspection.	<u>Response</u>	<u>SWP3 Developed?</u>	Don't typically use an impound lot. No SWP3 required.		Leaves mixed with soil. Need SWP3 – see Notes below.		Allied Waste picks up bagged leaves and small branches. The City chips larger material and stockpiles at the Service Center. Parks uses this material in its operations. It is not generally open to citizens. Need SWP3 – see Notes below.		Impound area/composting operations/leaf collection/ maintenance yards/ vehicle maintenance garages are all at Devon Drive. Need SWP3 – see Notes below.		None. No SWP3 required.		Service Center on Devon Drive. Need SWP3 – see Notes below.		<u>Response</u>		- 2 Cemeteries are City owned & operated: Brownhelm & Maple Grove		- Exchange Park, northeast corner of Liberty Avenue & Main St.		- Victory Park, northeast corner of Main											
<u>Response</u>	<u>SWP3 Developed?</u>																																						
None.	N/A since do not operate.																																						
None.	N/A since do not operate.																																						
None.	N/A since do not operate.																																						
None.	N/A since do not operate.																																						
None.	N/A since do not operate.																																						
None.	N/A since do not operate.																																						
Yes. 1.2 MGD. NPDES permit NO. 2PD000032.	Contains Parts IV, V, and VI (stormwater language). SWP3 is required and would be evaluated during individual permit inspection.																																						
<u>Response</u>	<u>SWP3 Developed?</u>																																						
Don't typically use an impound lot. No SWP3 required.																																							
Leaves mixed with soil. Need SWP3 – see Notes below.																																							
Allied Waste picks up bagged leaves and small branches. The City chips larger material and stockpiles at the Service Center. Parks uses this material in its operations. It is not generally open to citizens. Need SWP3 – see Notes below.																																							
Impound area/composting operations/leaf collection/ maintenance yards/ vehicle maintenance garages are all at Devon Drive. Need SWP3 – see Notes below.																																							
None. No SWP3 required.																																							
Service Center on Devon Drive. Need SWP3 – see Notes below.																																							
<u>Response</u>																																							
- 2 Cemeteries are City owned & operated: Brownhelm & Maple Grove																																							
- Exchange Park, northeast corner of Liberty Avenue & Main St.																																							
- Victory Park, northeast corner of Main																																							

MUNICIPAL STORM WATER PROGRAM EVALUATION

Facilities Operation & Maintenance		
Interview Questions	Response	
Staff which perform the inspections (department or agency):	Truman Ellis (Street Superintendent) is onsite and monitors site.	
Is there a designated storm water contact person for each facility?	No.	
Describe enforcement procedures used to address noncompliance on a MS4-owner facility i.e., what disciplinary measures are taken against those that do not implement standard operating procedures:	Disciplinary action spelled out in union contract.	
Parking lots owned/operated by the permittee swept? Frequency?	Only Victory Park. Around festival time.	
Do you have any combined sewer systems? If yes, do you have any combined sewer overflows? <ul style="list-style-type: none"> ➤ How many? <u> 0 </u> ➤ Do you track frequency and volume? Are you aware of any illicit cross connections between your sanitary sewer and MS4? If so, what is your plan to eliminate this illicit discharge?	No CSOs. Not aware of cross connections. But do have SSOs. Compliance schedule for elimination in WWTP NPDES permit. Draft FFOs sent to City.	
Sanitary sewer systems/building drains at municipal facilities evaluated to determine storm sewer cross-connections or overflow locations? How (video camera, dye test, etc.)?	Evaluated by reviewing drawings. No testing performed.	
Spill and cleanup procedures in place?	No fueling done onsite, just oil changes. Spill procedure is to contact EMA.	
Applicable Documents	Reviewed	Obtained
Facility inventory	N/A	N/A
Facility SWPPP	N/A	N/A

Notes
Marinas for recreational boating (such as McGarvey's Landing) are operated by the Vermilion Port Authority. Lorain County Metroparks operates Vermilion River Reservation (Mill Hollow & Bacon Woods). Have a WTP, which discharges to the sanitary sewer.
SWP3 - The Ohio EPA General Storm Water NPDES Permit for Small MS4s #OHQ000002 requires the

MUNICIPAL STORM WATER PROGRAM EVALUATION

Notes
<p>City to develop a SWP3 for the vehicle maintenance facilities and the composting facilities. The SWP3s must be developed and implemented by June 17, 2011. The above facilities must be inspected at least once per year and a record of the inspection and its findings must be kept with the SWP3. If this annual inspection reveals deficiencies in the SWP3 or BMPs that are ineffective, the SWP3 must be revised to correct the problems. The SWP3 should contain a checklist to provide consistency to facility inspections. The SWP3 should also identify who is responsible for facility inspections as well as a stormwater contact person for the facility. Please reference Ohio EPA General Storm Water NPDES Permit for Industrial Activities #OHR000004, <i>Part IV. D.2.a.1</i></p> <p>Municipal Facilities Operation and Maintenance - The SWMP does not describe the City's inspection procedures, schedules, and controls for reducing or eliminating the discharge of pollutants from municipal parking lots, maintenance and storage yards, fleet or maintenance shops, deicing material storage locations. This is a violation of Part III.B. 6.d.iii.1., 2., and 3.</p> <p>Asphalt Parking Lots: Some MS4s have banned the use of coal tar-based sealants in their communities. Research from the University of New Hampshire Storm water Center and by the City of Austin, TX, has shown these sealants contaminate soil and runoff with PAHs and benzo(a)pyrene, a known carcinogen. If a sealant must be used, asphalt-based sealants are preferred.</p> <p>Spill Response- Spill response procedures are an integral part of the City's Illicit Discharge Detection and Elimination and Pollution Prevention for Municipal Operations Minimum Control Measures. The SWMP needs to include this information or refer to a readily available document that contains this information as part of the plan to eliminate non-storm water discharges. This is a violation of Part III.B.3.i.iv. of the permit.</p>

Pesticides, Herbicides & Fertilizers			
Interview Questions	Response		
Certified applicators used?	Yes.		
Integrated Pest Management (IPM) practices used?	Yes.		
Storage location of pesticides, herbicides, and fertilizers:	Inside.		
BMPs used during application:	No written SOPs.		
Fertilizer/pesticide application plan utilized?	Yes.		
Applicable Documents		Reviewed	Obtained
Fertilizer/pesticide application plan		No.	No.

Standards, BMPs, & Outreach	
Interview Questions	Response
BMP technical guidance document available to maintenance staff?	No.

MUNICIPAL STORM WATER PROGRAM EVALUATION

Standards, BMPs, & Outreach		
Interview Questions	Response	
MS4 use contractual staff to complete MS4 maintenance activities?	Yes, sometimes.	
BMP guidance materials provided to contracted staff?	No.	
Requirement to consider storm water impacts and utilize appropriate BMPs in contracts?	City does not have a written requirement to incorporate storm water language into contracts.	
Applicable Documents	Reviewed	Obtained
BMP manual or guidance document	N/A	N/A
Contract language for MS4 operation and maintenance activities	No.	No.

Notes
<p>Pesticides, Herbicides & Fertilizers - Parks contracted fertilizer/pesticide activities out to Yard Coach, 15810 Mason Road, Vermilion. While the City follows several procedures to minimize pollutants from fertilizer and pesticide use, the SWMP must describe the City's controls for pesticides and fertilizer storage and use. This is a violation of Part III.B.6.d.ii.2. of the permit</p> <p>BMP Guidance - Currently, there is no written guide available to the municipal staff on Storm Water BMPs. The City needs to develop material that will let staff understand their contribution to storm water pollution and what methods they can use to limit the pollutants. This could include binder or flip books placed in vehicles or in a locker room for easy reference. For more ideas, please consult the <i>Rainwater and Land Development</i> manual (ODNR, 2006). We also recommend you review the <i>Municipal Pollution Prevention/Good Housekeeping Manual #9</i> (Center for Watershed Protection, September 2008). This manual is available as a free download on their website.</p> <p>Contracted Services and Guidance - The SWMP shall describe how contractual staff performing operation and maintenance activities for the permittee are required to consider storm water quality and implement appropriate BMPs. It is the city's obligation to assure contract language/agreements specify that storm water BMPs must be implemented by the third party. Please be sure to add this language to any future requests for proposal or contracts you sign with third party service providers whose activities can create storm water pollution. The contractor should be held accountable to comply with the storm water requirements of the City. Periodic inspection of their operations in your community is also suggested.</p>

Staff Education and Training		
Interview Questions	Response	
Staff trained to identify illicit discharges? Frequency:	No formal training. If they spot something out of the ordinary, they contact supervisor and he determines course of action (contact EMA, Health Dept. etc.).	
Materials used to train staff:	No formal training.	
Applicable Documents	Reviewed	Obtained
Training materials	N/A	N/A

Notes
<p>Staff Training and Education - The permit requires the City to develop and implement an operations and maintenance program for its MS4 that includes a training component. The SWMP must describe who</p>

MUNICIPAL STORM WATER PROGRAM EVALUATION

Notes

(i.e. department, section) receives what type of training. An employee training matrix may be useful to document training needs as well as to track training implementation.

Please begin documenting the training events provided and the staff being trained. Failure to provide training to municipal staff on storm water pollution prevention matters is a violation of Parts III.B.6.b. and d.ii. of the permit. NPDES permit #OHQ000002 requires you to train staff on storm water pollution prevention at least once every year. Documentation must be kept, such as agendas, attendance dates and lists, and materials used. A summary of employee training program(s) implemented with number of employees that attended must be included in your next annual report.

Ohio EPA's Office of Compliance Assistance and Pollution Prevention (OCAPP) as well as ODOT's Local Technical Assistance Program (LTAP) have provided a number of training opportunities on pollution prevention and good housekeeping for municipal operations over the past several years. Materials presented at OCAPP's session are archived on the internet at: http://epa.ohio.gov/ocapp/storm_water.aspx and can be used to provide training to your staff. The Center for Watershed Protection also has information available for training in their Manual #9: Municipal Pollution Prevention/Good Housekeeping Practices.

Pollution Prevention for Municipal Operations; -Overall

The SWMP is lacking in detail. The description of your storm water program must specifically address the following areas: 1) Maintenance activities, maintenance schedules, and long term inspections procedures for controls to reduce floatables and other pollutants to your MS4; 2) Controls for reducing or eliminating the discharge of pollutants from streets, roads, highways, municipal parking lots, maintenance and storage yards, fleet or maintenance shops with outdoor storage areas, salt/sand/winterization storage locations/application rates/BMPs, 3) Procedures for the proper disposal of waste, including dredge spoil, accumulated sediments, floatables, and other debris ; 4) Procedures to ensure that new flood management projects are assessed for impacts on water quality and existing projects are assessed for incorporation of additional water quality protection devices or practices. Many of these activities are not described in the SWMP. Including in the SWMP the appropriate procedures, controls, maintenance schedules and record keeping which addresses all of the areas listed under Part III.B.6.d.iii is required.

MUNICIPAL STORM WATER PROGRAM EVALUATION

Construction Projects		
Interview Questions	Response	
Construction Ordinance (or similar mechanism) in place? Section of Code/Mechanism: Date passed:	Yes. 1048 3/3/2008	
Does ordinance address all earth disturbing activities? Address all projects affecting 1 acre or more? Address non sediment pollutants? Equivalent with technical requirements in CGP (OHC000003)?	Yes. Yes. Yes. No.	
Are all plans reviewed?	Yes. City contracts out engineering services.	
Are all construction sites initially inspected? Follow-up inspections conducted monthly? If not, are there written inspection prioritization procedures?	Yes Depends on project. No.	
MS4-Owned Projects designed in-house or contracted?	City contracts out engineering services.	
Designers/reviewers trained in storm water BMP implementation?	Consulting firm has CPESC and CESSWI on staff. They are familiar with ODNR's Rainwater and Land Development Manual and the NPDES Construction General Permit.	
Checklist used during the design and/or review of public/private construction projects?	No.	
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 storm water BMPs be incorporated into the design?	No.	
In-house inspection staff inspect projects? If so, which department?	New Administration not familiar with previous administration's activities. Few construction activities have occurred since changeover due to economy.	
Project inspectors trained? Frequency:	Not documented.	
If contracted inspectors are utilized, are minimum inspection, maintenance and reporting requirements specified in the contract?	No.	
Applicable Documents	Reviewed	Obtained
MS4-owned project storm water design standards and/or checklist	N/A	N/A
Contract language for projects that are not developed or inspected in-house	No.	No.

MUNICIPAL STORM WATER PROGRAM EVALUATION

Project Name: Improvements for Edson Street (2006)	
BMPs adequately incorporated into the plan to address erosion control, sediment control, housekeeping?	Yes.
Design specifications and details for BMPs included on the plans?	Yes. However, the General Notes referred to the 1996 edition of the Rainwater and Land Development Manual. The most recent edition of the manual (required to be used by the NPDES Construction General Permit) is 2006.
Standards conditions include erosion and sediment control or storm water provisions?	Yes. However, the General Notes stated that stabilization is to be applied if the area sites idle for 45 days. The correct timeframe is 21 days.
Notes: This project was over one acre. Construction started before the current administration took office in April 2010. The City had inspection logs for the project for April & May 2010.	

Post Construction Storm Water Management	
Interview Questions	Response
Post Construction Ordinance (or similar mechanism) in place? Section of Code/Mechanism: Date passed:	Yes. 1048 (majority of language in 1048.07) 3/3/2008
Does ordinance address all projects affecting 1 acre or more? Equivalent with technical requirements in CGP (OHC000003)?	Yes. No.
Are all plans reviewed?	Yes.
Designers/reviewers trained in storm water BMP implementation?	Yes.
Checklist used during the design and/or review of public/private post-construction BMPs? Does review include insuring that long term O&M plans are developed and agreements are in place?	No. Ordinance and review includes O&M Plans. Inspection and maintenance agreement requirements are outlined under 1048.07. See Notes below.
If contracted planners and engineers are used for the design of MS4-owned projects, does the contract language specify that post-construction storm water BMPs be incorporated into the design?	Not necessarily. Consulting firm has CPESC and CESSWI on staff. They are familiar with ODNR's Rainwater and Land Development Manual and the NPDES Construction General Permit.
In-house inspection staff inspect post-construction BMPs? If so, which department?	Not documented. New Administration not familiar with previous administration's

MUNICIPAL STORM WATER PROGRAM EVALUATION

Post Construction Storm Water Management		
Interview Questions	Response	
Are all Post Construction BMPs inspected to insure BMPs are installed per requirements?	activities. Few construction activities have occurred since changeover due to economy.	
If contracted inspectors are utilized, are minimum inspection, maintenance and reporting requirements specified in the contract?	Not in great detail. New Administration not familiar with previous administration's activities.	
Applicable Documents	Reviewed	Obtained
Storm water design standards and/or checklist	No.	No.
Contract language for projects not developed/reviewed/ inspected in-house	No.	No.

Notes
<p>Construction and Post Construction Ordinances: The City will need to review & update ordinances to be equivalent with the technical requirements of Ohio EPA's current NPDES Construction General Permit (CGP) by June 17, 2011. This includes but is not limited to Section 1048.05 (m)(1), Construction access routes. The ordinance states that measures shall be taken to prevent soil transport where runoff is not checked by sediment controls. Please note that under the CGP, the use of sediment controls does not negate the requirement for a stable construction entrance. Section 1048(m)(2) allows street washing after shoveling or sweeping. This practice is not an acceptable Best Management Practice for sediment removal unless the water is collected or sent through a sediment control. Under the sections about temporary and permanent soil stabilization, the City will likely need to replace the word "stream" to "surface water". Also, the post construction storm water management language does not include the release rate criteria contained in the CGP which states that no more than half the extended detention volume shall be released in the first 1/3 of the target drawdown time.</p> <p>Construction and Post Construction Plan Review: More detailed information on procedures for construction and post construction storm water management (for water quality purposes) plan review must be included in the SWMP. This is a violation of Parts III.B.4.a.iv. and b.iv. of the permit. When describing the plan review process, please include information on: plan reviewer training (frequency and type), plan review criteria - including any checklist used or technical guidance provided to developers/contractors, if NOI submittal is verified during review, what standard conditions of approval include erosion and sediment control and/or general storm water requirements, what standard conditions of approval include post construction storm water management requirements. When plan development for municipal projects is contracted out, describe what procedures are in place to insure that the City's regulations and specifications are included in the plans. The current permit requires that all plans be reviewed prior to construction. This requirement has been met.</p> <p>Construction and Post Construction Enforcement: SWMP needs to include an official enforcement escalation plan or procedure. This is a violation of Part III.B.4.a.vi. Part III.B.4.b.ii., and Part III.B.4.b.vi. of the permit. Such a policy should clearly describe the action to be taken for common violations, define the roles of various departments (for instance, Ordinance 1048.08 (e) just states the City's authorized agent can inspect construction sites), and describe which staff are authorized to enforce the applicable ordinances. The SWMP should describe how enforcement actions are tracked. Tracking the most common compliance issues on construction projects may be used to direct public education/participation activities.</p> <p>Construction and Post Construction Inspection: The SWMP must include detailed information on site inspection procedures. This is a violation of Parts III.B.4.a.vi. and b.vi. of the permit. Relevant</p>

MUNICIPAL STORM WATER PROGRAM EVALUATION

Notes

information includes: how many sites are inspected, how often they are inspected or describe during what stages of construction they are inspected, the priority system for inspections, how construction sites and compliance inspections are tracked, how projects are prioritized to determine inspection frequency, any inspection checklist /form, frequency and type of inspector training.

Overall: The Small MS4 NPDES General Permit includes the following performance standards to set minimum permit expectations for program implementation: 1) Preconstruction storm water pollution prevention plan review for all projects with an earth disturbance of one acre or more for erosion and sediment controls and non-sediment pollutant controls related to construction activities is required. 2) Preconstruction site plan review of 100 percent of projects from construction activities that result in a land disturbance of greater than or equal to one acre to ensure that required post construction controls are designed per requirements is a permit condition. 3) Ensuring that long-term operation and maintenance (O&M) plans are developed and that agreements are in place for all applicable sites is also a requirement. Minimum contents for this are outlined in the CGP. 4) Construction and post construction storm water management ordinances shall, at minimum, be equivalent with the technical requirements of the current NPDES Construction General Permit (CGP). 5) Site inspection of post construction BMPs to insure they are installed per requirements. You must revise your SWMP and your ordinances to meet these requirements by June 17, 2011.

O&M Plans -While Ordinance 1048.07 requires that a detailed maintenance plan be included as part of the Storm Water Management (SWM) plan submittal to the City, the SWMP does not describe how the City will ensure long-term maintenance of post-construction storm water management facilities (BMPs). This is a violation of Part III.B.5.e.vi. of the permit. Plans should stipulate the frequency of inspection and the schedule for routine and non-routine maintenance tasks. Additionally, the City should develop or adopt standardized maintenance checklists to be included in the plans and used by owners with private facilities.

Chagrin River Watershed Partners, Inc. (CRWP) has developed a model agreement that a municipality may use to ensure the long-term operation and maintenance of post-construction best management practices (BMPs). This language may need to be modified to reflect local requirements and should be reviewed by the municipality's legal council. A copy may be found at:
http://crwp.org/pdf_files/model_im_agree_sw_bmp_10_29_2008.pdf.

The Small MS4 NPDES General Permit also requires the City to include in its annual report: (1) number of applicable sites in your jurisdiction requiring construction site controls, (2) number of sites requiring post-construction controls, (3) number of pre-construction storm water pollution prevention plan reviews performed, (4) number and frequency of inspections during construction, (5) number of violation letters issued, (6) number of enforcement actions taken, (7) number of complaints received and number followed up on, (8) number of inspections performed to ensure as built per requirements, and (9) number of long-term operation and maintenance (O&M) plans developed and agreements in place.

MUNICIPAL STORM WATER PROGRAM EVALUATION

Illicit Discharges			
Interview Questions		Response	
<p>IDDE Ordinance (or similar mechanism) in place? Section of Code/Mechanism:</p> <p>Does ordinance address illicit connections and dumping/spills?</p> <p>Does it identify allowable non-storm water discharges?</p> <p>Does it identify local controls or conditions placed on the allowable non-storm water discharges to prevent them from being significant sources of pollutants or violating water quality standards?</p>	<p>Several ordinances. 660.03 Litter Law. 660.04 No polluting watercourse. 1026.01 (b) building permit required for house sewer or drain within road or public right of way. 1042.02 No discharge to natural outlet of sewage or polluted waters. 1042.05 allows the discharge of unpolluted industrial cooling or process waters to storm.</p> <p>Not explicitly. But several different sources of illicit discharges are addressed under various ordinances.</p> <p>Yes. Building sewers that pass through a sewage treatment system, provided public sewer is not available and with Health Departments approval. Unpolluted industrial cooling water and process water with City approval.</p> <p>Yes, see above. However, the City should consider including in ordinance some of the common non-storm water discharges outlined in the permit (pool water, vehicle washing, etc.) and any related controls/conditions.</p>		
MS4 dry weather outfall screening done?	No. See Notes below.		
How often?			
Written illicit discharge tracking procedures in place?	No. See Notes below.		
Written illicit discharge elimination procedures in place?	No. See Notes below.		
Spill response and cleanup procedures in place?	Not in writing. Procedure is to contact EMA for Spill response.		
Staff trained to identify illicit discharges?	No formal training.		
Training Materials:			
Frequency:			
Applicable Documents		Reviewed	Obtained
Ordinance/Regulatory mechanism		Yes	Online
Training materials		None	None
Training records		None	None
Tracking/Elimination procedures		None	None
Spill and clean procedures		None	None

MUNICIPAL STORM WATER PROGRAM EVALUATION

Notes

Ordinance: Existing ordinances cover many aspects of illicit discharges, but they should be reviewed to insure all types of sources and discharge mechanisms are addressed. Sources that must be address by an IDDE program include: events that result from spills, dumping, and line breaks; intermittent or continuous discharges from direct connections into the MS4, such as sanitary sewers, cross connections, or infrastructure problems with a sanitary sewer system, or malfunctioning household sewage treatment systems (HSTS); direct and indirect discharges; public or private, residential, commercial, or industrial sources. Ordinance 1042.08(a) appears to allow right of entry for compliance with Chapter 1042. It is unclear where right of entry is provided for in Chapter 660.03 & .04 to investigate sources of illicit discharges. The ordinance must include or reference an enforcement escalation policy. Such a policy should describe the process for eliminating the source of an illicit discharge and for obtaining recourse or abatement if necessary, and describe which staff are authorized to enforce the applicable ordinances. Chapter 1042.04 requires a permit before connecting to a public sewer. It appears that the term public sewer in 1042 may include storm sewers. If so, does the term applies to ditches & swales which are also part of the MS4 under this permit?

Page 28 of the SWMP discusses the investigation of illicit discharge complaints with respect to industrial/business connections and their elimination. The SWMP states that Ohio EPA has the responsibility for the implementation of the BMP. This is not acceptable. The SWMP only mentions the County's and the Health Department's enforcement abilities. It did not describe procedures or mention the City's enforcement abilities. Under state law, cities can obtain the necessary legal authority to investigate and eliminate illicit discharges. Also, the SWMP must describe procedures for locating priority areas; procedures for tracing the source of an illicit discharge; including the specific techniques; procedures for removing the source; and procedures for program evaluation. Failure of the City to develop and implement a plan to detect and eliminate non-storm water discharges to its MS4 is a violation of Parts III.B. 3.e. and i.v. of the permit.

Illicit Discharge Detection and Elimination Plan: More detail is needed about illicit discharge investigation procedures, any evaluation criteria, and the illicit discharge elimination procedures. For Illicit Discharge response plans, a flow chart showing a clear set of procedures from initial response/detection to elimination is often useful.

Dry Weather Screening: The SWMP needs to include: information on the location of any priority screening areas and why they were chosen, the frequency and extent of dry weather field screening, dry-weather field screening procedures, any checklist/reporting form used, how dry weather screening and illicit discharges are tracked, official enforcement escalation plan or procedures. For dry weather screening, consider having specific criteria, which could include numeric criteria, to determine whether the discharge is illicit as opposed to being just groundwater. The Small MS4 Permit requires that dry-weather screening occur of all storm water outfalls over a 5 year permit term. The City may need to revise its SWMP to include this.

APPENDIX D: REVIEWING AN ANNUAL REPORT

MS4 SWMP Evaluation MS4 Maintenance Facility Field Inspection Worksheet

Permittee: City of Vermilion	
Address of facility: Devon Dr.	Date of visit: 11/10/2010
Provide the name(s) and title(s) of permittee staff present during inspection	
Name	Title
Truman Ellis	Street Department
Bob Kurtz	Director of Public Service
Lynn Miggins	KS Associates
Evaluator Observations:	
SWPPP or storm water plan	
Has the maintenance facility developed a SWPPP or storm water plan?	No.
Does the plan include a site map, list of pollutant sources, BMPs, and maintenance procedures?	N/A
Does the permittee conduct and document periodic inspections of the facility?	Not documented.
Are storm drains labeled and free of debris?	Not labeled. No debris observed.
Vehicle maintenance, fueling and washing	
Are vehicle maintenance activities conducted in a designated place not exposed to storm water?	Vehicle maintenance performed inside buildings.
Are fueling stations properly designed with spill kits nearby?	No fueling onsite.
Are vehicles washed on-site? Is wash water discharged to the MS4 or sanitary sewer?	Floor drains in the Streets Dept. building go to a pit, which is cleaned out with their vac and sent to landfill.
Material storage	
Are all materials that are potential storm water contaminants stored under cover or in secondary containment?	Not all. See Notes below.
Hazardous waste management	
Are all hazardous materials properly labeled and stored to prevent exposure to storm water runoff?	Yes.
Waste management	
Are waste bins covered with waste properly disposed in containers?	Yes.
Are containers sealed (no rust holes, drain holes, or gaps)?	Yes.
Spill response	
Does the facility have a spill response plan, and are spill kits readily available?	Absorbent material is available. No written response plan.
Employee training	
What type of storm water training do maintenance staff receive?	No formal training.
Notes or additional information: Overall: No staining observed on pavement around buildings. No dead vegetation observed. No discoloration in waterways passing through site.	

APPENDIX D: REVIEWING AN ANNUAL REPORT

Streets, Parks and Water Departments are all stationed at the municipal property on Devon Street.

Vehicle maintenance performed inside buildings. Used oil storage drums were labeled and inside. They do run engines prior to removal of oil filters and then put filters in tub to drain. Used oil filters must be hot drained. There are EPA guidelines on how to properly “hot drain” filters. Acceptable “hot draining” methods include:

- Puncture back valve or dome end and hot drain,
- Hot drain and crush, or
- Dismantle and hot drain.

Hot draining means that oil is removed at close to engine temperature, when oil flows freely. Filters need to drain for 12 (minimum) to 24 hrs.

The City’s used oil filters are placed in plastic bag and sent to Advanced Auto. Once hot drained, filters can be thrown in the dumpster with your other solid waste, provided they are not terne-plated filters. It’s recommended, though, that the filters are sent to a scrap metal company for recycling.

Floor drains in the Streets Dept. Building go to a pit, which is cleaned out with their vac and sent to landfill. Catch basin cleanings are taken to WWTP’s drying beds, then go to landfill. Street sweepings are composted onsite. This is a violation, since street sweepings are a solid waste and must be handled as such. Mr. Ellis keeps a written log of date and location of street sweeping. He also maintains a written log of storm sewer projects and repairs. There is no schedule or preventative maintenance. There was spill on the floor with some kitty litter. The absorbant material will be handled as solid waste. They recycle used oil. It is sent to Advance Auto. Salt is stored in 3 sided/roofed shed. Two drums were stored outside – full of drained oil. 1500 gal. tank with water based emulsion for mixing with stone & placing in DuraPatch machine was also located outside. There was some outside storage of equipment. Municipal yard had stockpiles of leaves, used asphalt, topsoil. An earthen berm recently created along the east side of the site was bare.

Parks Building – no building drains were observed inside.

Catch basins were located in front of Parks and Water Buildings. Water Building had floor drains. Reportedly these lead to an oil/water separator which discharges to the sanitary sewer. Small gas /fuel cans were stored inside. Used oil filter placed in plastic bag and sent to Advanced Auto.

The City must maintain documentation that street sweepings, catch basin cleanings, and construction debris are properly disposed. The City should be aware that storm water passing through yard waste, street sweeping, and catch basin cleaning material may be considered leachate. The MS4 permit does not authorize the discharge of leachate. The spoils area must be monitored to prevent this. Leachate is a wastewater and would need to be managed as such.

Channel on west side (south of Street’s Building) needs to be stabilized, as does the earthen berm created on the east side (south of Water/Parks Building).

11/10/2010. Erie County. City of Vermilion. Municipal Yard at
Taken by Lynette Hablitzel. VermilionMS4Audit_11102010_01.jpg



11/10/2010. Erie County. City of Vermilion. Municipal Yard at
Taken by Lynette Hablitzel. VermilionMS4Audit_11102010_02.jpg



11/10/2010. Erie County. City of Vermilion. Municipal Yard at
Taken by Lynette Hablitzel. VermilionMS4Audit_11102010_03.jpg



11/10/2010. Erie County. City of Vermilion. Municipal Yard at
Taken by Lynette Hablitzel. VermilionMS4Audit_11102010_04.jpg

