



3GQ0003420100219

LAKE

MENTOR

CITYOF MENTOR

3GQ00034 2010/02/19

BOGOEVSKI,
DANIEL

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State of Ohio Environmental Protection Agency

Northeast District Office

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Twinsburg, Ohio 44087

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Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director

February 19, 2010

RE: LAKE COUNTY
CITY OF MENTOR
MS4 INSPECTION FINDINGS
MCM #6 – POLLUTION PREVENTION
FOR MUNICIPAL OPERATIONS

Kenneth Filipiak
City Manager
City of Mentor
8500 Civic Center Blvd
Mentor, OH 44060

Dear Mr. Filipiak:

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) #6: Pollution Prevention and Good Housekeeping for Municipal Operations, but did also touch upon other requirements of the municipal storm water program. 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) OHQ000034*BG and Ohio Administrative Code 3745-39.

On January 14, 2010, Ohio EPA met with representatives of City of Mentor to conduct the audit. Compliance was determined based on the requirements of the NPDES permit and the measurable goals established in the Storm Water Management Plan (SWMP) submitted by the City in March 2003. In performing this audit, Ohio EPA implemented the **Municipal Storm Water Program Evaluation Guide** developed by the United States Environmental Protection Agency.

Attached is the Municipal Storm Water Program Evaluation and Field Inspection Worksheets completed for your community. Please review these documents in detail to determine specific elements where your pollution prevention and good housekeeping program needs improvement. In addition, you will find comments suggesting ways to improve your MS4 program. The following is a summary of our audit findings:

Violations

- **Failure to implement procedures for the proper disposal of waste removed from your MS4.** This is a violation of Part III.B.6.d.iii.3 of the NPDES permit and Ohio Revised Code 6111.04 and 6111.07. This violation pertains to improper management of street sweepings and catch basin cleanings at the Station Rd Waste Transfer Operations Area. Although the City does properly dispose of these materials as solid waste at a landfill, the City does not manage these materials properly while they await transport to the landfill. Any liquid that seeps from stockpiles of catch basins and street sweepings and storm water that contacts this material is leachate, a wastewater, and must be managed as such. The current set-up at Station Rd does not prevent the discharge of leachate to the MS4. Ohio EPA recommends the City establish a dewatering pad connected to the sanitary sewer or install a holding tank to collect leachate for proper off-site disposal to properly manage leachate. Once dewatered, street sweepings and catch basin cleanings must be stored in a lidded dumpster in good condition until they are taken to the landfill for ultimate disposal.
- **Failure to implement controls for reducing or eliminating the discharge of pollutants from streets, roads, highways and municipal parking lots as specified in the SWMP.** This is a violation of Part III.6.d.iii.2 of the NPDES permit and ORC 6111.04 and 6111.07. Although the City does have a street sweeping and parking lot sweeping program, it is not implemented at the frequency specified in the SWMP. Please implement these programs at the frequency specified in the SWMP or provide justification that current street sweeping frequencies are adequate to meet the goals of the SWMP and amend the SWMP accordingly.
- **Failure to implement a roadway and municipal parking lot winterization program as specified in the SWMP.** This is a violation of Part III.6.d.iii.2 of the NPDES permit and ORC 6111.04 and 6111.07. The SWMP specifies that the City of Mentor will develop a roadway and municipal parking lot winterization program in accordance to the guidance contained in the International Salt Institute's Snowfighter's Handbook. The City does have a written deicer policy but it does not appear to follow the guidance contained in the Snowfighter's Handbook. Please implement a program in accordance with the specified guidance or provide justification that the current roadway and municipal parking lot winterization program is adequate to meet the goals of the SWMP and amend the SWMP accordingly.
- **Failure to develop an operations and maintenance program for the MS4 that includes an employee training program on how to reduce the discharge of pollutants from the MS4.** This is a violation of Part III.6.a of the NPDES permit and ORC 6111.04 and 6111.07. The City did provide one training

event to Public Works employees in 2004. Management has attended a number of MS4-related workshops from 2006-2009. But, these actions do not constitute a training program if information is not shared or provided to staff that must implement the practices required to comply with the NPDES permit. Be aware that the NPDES permit requires your training program to provide at least one training event per year. Training opportunities involving Ohio EPA can be found at www.epa.ohio.gov/ocapp/storm_water.aspx. Training events provided by Ohio EPA and the materials used at those events are archived at this site and can be used by MS4s to train their staff. US EPA has an archive of MS4-related training at www.epa.gov/npdes/training. Be sure to include storm water pollution prevention training in any new employee training program, where appropriate.

- **Failure to comply with provisions of the Ohio EPA General Storm Water NPDES Permit for Construction Activities for municipal construction projects.** This is a violation of Ohio Revised Code 6111.04 and 6111.07. This violation pertains to two issues:
 - ***Failure to implement post-construction best management practices on all municipal construction projects where 1 or more acre of land is disturbed.*** This is a violation of Part III.G.2.e of NPDES permit #OHC000002 and OHC000003. In a review of the Heisley Road Widening project, no post-construction water quality BMPs were installed to treat runoff from the improvement area. Please provide me with a plan to correct this violation. Ohio EPA is open to off-site mitigation if it is more practical at this stage of the project.
 - ***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 NPDES permit #OHC000003. Our records show that the City of Mentor has 7 active projects permitted under the Ohio EPA General Storm Water NPDES Permit for Construction Activities but indicated during the interview that all projects were complete or had never been constructed. Please submit an NOT for all projects that are complete or no longer viable (see attachments for list).
- **Failure to develop a long-term maintenance program for post-construction BMPs.** This is a violation of Part III.B.5.d of the NPDES permit and ORC 6111.04 and 6111.07. The City has recently started creating an inventory of post-construction BMPs, conducting an as-built inspection to assure BMPs are constructed per approved plans and has an organized filing system for this information. However, the inventory of post-construction BMPs is not complete, the City has not yet formalized the requirement for a long-term maintenance plan in its post-construction ordinance, and does not track the implementation of long-

term maintenance plans. Please provide me with a schedule by when the required long-term maintenance program will be implemented, including passage of a requirement for long-term maintenance plans for all post-construction BMPs installed on new development or redevelopment that disturbs 1 or more acre.

Deficiencies

- A storm water pollution prevention plan (SWP3) has not yet been developed for the Mentor Municipal Maintenance Facility or the maintenance garage at the Black Brook Country Club. Part III.B.6.c of the NPDES permit, these plans must be developed and implemented by June 3, 2011.
- The City does inspect certain portions of the MS4, but this is generally done on a complaint basis only. The inspection program has not been implemented to the extent required by the MS4 permit and must be expanded. Further, maintenance is performed only on a complaint basis. Maintenance schedules have not been developed and implemented as required by Part III.B.6.d.iii.1 of the MS4 permit.
- The City does not appear to track the amount (in tons) of street sweepings and catch basin cleanings removed from the MS4. Please be sure to track this amount, if not already doing so, as it is required to be reported on the new Annual Report form.
- Please amend your list of Municipal Facilities with Potential to Discharge Storm Water Pollutants to include the Station Rd Waste Transfer Operations Area and the Recycling Drop-Off Center on Carpenter Rd. These facilities are not included on the current list, but are subject to the requirements of MCM #6.
- The City did not provide me with a copy of a pesticide, herbicide and fertilizer application plan for the Black Brook Golf Course. The development of a formal application plan is an important tool in minimizing the application of these storm water pollutants. Please provide me with an application plan.
- The City has not updated their construction or post-construction water quality ordinance to meet or exceed the requirements of the Ohio EPA General Storm Water NPDES Permit for Construction Activities #OHC00003. Per Part III.B.4.a.i and Part III.B.5.c of the NPDES permit for small MS4s, these updates must be completed by June 3, 2011. Please update these ordinances as required by the MS4 permit.

An inspection of the Mentor Lagoons Nature Preserve and Marina was also conducted as part of this municipal storm water program audit. This facility is subject to its own NPDES permit for storm water associated with industrial activity, i.e., the Ohio EPA General Storm Water NPDES Permit for Industrial Activities at Marinas #OHRM00001.

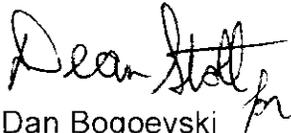
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Our inspection findings for this facility will be sent to you under separate cover at a later date.

Please review my comments and provide me with a letter of response indicating the actions you will take to address the violations and deficiencies noted above. **Your response should be received no later than March 22, 2010.** Please note that this response does not replace the requirement to submit an Annual Report. Your annual report for 2009 will be due on April 1, 2010.

If you have any questions, please contact me at (330) 963-1145 or via e-mail at dan.bogoevski@epa.state.oh.us.

Sincerely,

A handwritten signature in black ink, appearing to read "Dan Bogoevski", with a stylized flourish at the end.

Dan Bogoevski
District Engineer
Division of Surface Water

DB:bo

pc: Matt Schweikert, Public Works Director (same address as above)
Brian Ashurst, Asst City Engineer (same address as above)
Rachel Webb, Chagrin River Watershed Partners
Laura Kramer Kuns, Lake County General Health District

Municipal Storm Water Program Evaluation

MS4 Maintenance Component Worksheet

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.

Date of Evaluation	January 14, 2010
Evaluator Name, Title	Dan Bogoevski, DSW-NEDO
MS4 Permittee	City of Mentor

Staff Interviewed		
Name	Department/Agency	Phone Number/Email
Matt Schweikert Public Works Director	Public Works Department City of Mentor	(440) 974-4780 schweikert@cityofmentor.com
Lorne Vernon Public Works Supervisor	Public Works Department City of Mentor	(440) 974-5781 vernon@cityofmentor.com
Bob Martin Director of Parks, Recreation & Public Facilities	Dept. of Parks and Recreation City of Mentor	(440) 974-5722 martinr@cityofmentor.com
Brian Ashurst, P.E. Asst City Engineer/ Storm Water Program Manager	Dept of Engineering & Building City of Mentor	(440) 255-1100 ext 2612 ashurst@cityofmentor.com

MS4 Mapping	
Interview Questions	Response
Outfalls and receiving waters mapped?	YES
Catch basins?	YES
Pipes, ditches, other conduits?	Pipes YES/Ditches NO
Public stormwater facilities (BMPs)?	YES
Private stormwater facilities (BMPs)?	Partial, only includes ponds
How are maps used (i.e. tracking illicit discharges)?	<p>The MS4 maps have been used in a number of ways:</p> <ul style="list-style-type: none"> • In general, to provide information to the public when there are questions about storm drainage. • By the Service Director, to project future

MS4 Mapping			
Interview Questions	Response		
	<p>maintenance costs for storm water infrastructure.</p> <ul style="list-style-type: none"> • By maintenance crews, to respond to blockages and other drainage issues during rain events. • By the City Engineer, to plan drainage improvement projects. 		
Applicable Documents		Reviewed	Obtained
Map(s) of MS4 system		YES	YES

Notes
<p>MS4 Mapping</p> <p>The City of Mentor has a sophisticated, GIS-based mapping system (Geocortex) that is available on the City's intranet system. The mapping system provides a high level of detail, including MS4 pipes, catch basins, headwalls and outfalls. To meet the mapping obligations of NPDES Permit #OHQ000002, i.e., the MS4 permit in effect from 2009-2014, the map must show catch basins and publicly-owned storm sewers, ditches and storm water management facilities (including publicly-owned post-construction BMPs). 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.</p> <p>A review of the map indicates that ditches and non-pond post-construction BMPs must be added to the map in order to meet NPDES permit requirements. This must be completed by the expiration of your current NPDES permit coverage, i.e., June 3, 2014. Please be sure that you include all types of post-construction BMPs and not just ponds, e.g., permeable pavement at the Center Street Village project.</p> <p>Identifying the Location of Discharging Home Sewage Treatment Systems (HSTSs)</p> <p>Per information provided by the Lake County General Health District (LCGHD), there are only 9 HSTSs in the City that discharge to the MS4. The City does have the addresses where these systems are located and does have a map identifying their locations, as required by the NPDES permit. Please be aware that these discharging systems are considered illicit discharges to the MS4. Permit #OHQ000002 requires the City to work with LCGHD to determine which of these systems are not operating as designed and intended. For systems not operating as designed and intended, LCGHD must use the provisions in Ohio Revised Code 6117.51 to require connection to the sanitary sewer system where it is legal, feasible and economical to do so. For systems that cannot be eliminated through connection to sanitary sewers or the installation of a soil absorption system, the property owner must be notified to contact Ohio EPA and pursue coverage under an appropriate NPDES permit.</p> <p>The City submitted information to Ohio EPA on January 26, 2010 indicating that none of the 9 discharging HSTSs are failing and indicated that procedures are in place with the LCGHD to address these systems if and when they no longer operate as designed and intended. LCGHD performs dry weather screening of MS4 outfalls and addresses failing systems when they are discovered through this process. In addition, there are several areas of the City which are serviced by non-discharging HSTSs. Records regarding this program were not reviewed as part of this MS4 inspection, but the City was notified that this review would occur when Ohio EPA comes back to inspect Minimum Control Measure #3 of the MS4 program.</p>

Notes
<p>LCGHD provides IDDE services to the City of Mentor at a cost of \$30,000 per year. All MS4 outfalls were screened during the first NPDES permit term (2003 – 2008) and discharges were sampled where visual indicators showed possible illicit discharge. Please be aware that additional dry weather screening of outfalls is <u>not</u> required under NPDES permit #OHQ000002 if you have screened all outfalls during the first permit term. Rather, focus your efforts on eliminating the illicit discharges identified during the dry weather screening process conducted from 2003 to 2008. However, Ohio EPA does recommend that dry weather screening be a continual, on-going process as illicit discharges can occur from outfalls where none had previously been noted.</p>

Catch Basin Cleaning		
Interview Question	Response	
Schedule established for inspections and cleaning?	NO, but see Notes.	
Is cleaning and maintenance of catch basins tracked:	YES	
How are spoils materials disposed of?	NEEDS IMPROVEMENT – See Notes.	
Are storm drain pipes inspected?	PARTIAL – See Notes	
Proactive or only in response to blockage event?	BOTH	
	Proactive in known drainage hotspots, but complaint-driven elsewhere.	
Applicable Documents	Reviewed	Obtained
List of active municipal construction projects	NONE AT THIS TIME See Notes.	N/A

Notes
<p><u>Catch Basin Cleaning Schedule</u></p> <p>A formal schedule by which to perform catch basin cleaning has not been developed, but the City does clean a fair amount of catch basins each year. The City promised to clean 100 catch basins per year in its Storm Water Management Plan (SWMP). The City cleaned 189 structures in 2009 and has cleaned at least 100 catch basins in years prior, so they are in compliance with this provision of their SWMP and NPDES permit. Maintenance is largely focused in areas where there are known drainage problems. Crews record the addresses where maintenance occurs in a log book and then track their activity by highlighting areas on a map located in the Service Department Garage.</p>
<p><u>Catch Basin Cleanings; Disposal Management</u></p> <p>Catch basin cleanings and street sweepings are taken to a property at the western end of Station Road under the SR 615 bridge for decanting. Solids are placed within an area constructed of cement blocks. This area is exposed to precipitation. After decanting, solids are transported to the Lake County Landfill. In 2009, the City disposed of 732.04 tons of catch basin cleanings and street sweepings at the landfill at a cost of \$30 per ton (nearly \$22,000). Liquids decanted from the stockpiles pools within the cement block area, but can overflow toward Station St, where the MS4 would receive any overflow (see Station Street Facility Inspection Worksheet).</p> <p>The City must improve its storage and disposal area for catch basin cleanings and street sweepings.</p>

Catch basin cleanings and street sweepings are defined as solid waste in Ohio Revised Code 3734.01 (E) and Ohio Administrative Code 3745-27-01 (23) and must be disposed at a licensed municipal solid waste landfill, as is your current practice. Liquids which are decanted from catch basin cleanings and street sweepings as well as storm water which contacts stockpiles of these materials is leachate, a wastewater and must be managed accordingly. Your NPDES permit does not permit the discharge of wastewater to the MS4.

Proper management of catch basin cleanings and street sweepings would call for placement of solids within a contained area where leachate can be directed to the sanitary sewer system. If sanitary sewers are unavailable, installation of a holding tank may be an option. Once dewatered, solids should be placed in a covered dumpster to prevent the generation of additional leachate. Other options may include relocating the catch basin/street sweeping storage to the Mentor Municipal Maintenance Facility on Hopkins Road. It may be possible to convert the outdoor wash area there into an appropriate catch basin cleanings and street sweepings management area. Another option would be take catch basin cleanings and street sweepings to a neighboring community with appropriate storage and disposal facilities. A recent Ohio EPA inspection of the Willoughby-Eastlake Water Pollution Control Center indicates that an appropriate system is in place there. **NOTE:** *Installation of a holding tank or extension of a sanitary sewer line may require a Permit-to-Install (PTI) from Ohio EPA. Please contact Marie Underwood at the Ohio EPA Northeast District Office at (330) 963-1183 before taking action to determine if a PTI is required.*

Storm Drain Stenciling Program

The City's public education program includes a storm drain stenciling program. The City promised to stencil at least 50 catch basins with a "do not dump" message. In 2009, the City stenciled 69 storm drains, so they are in compliance with this provision of their SWMP and NPDES permit. The City tracks which catch basins have been stenciled by recording the address in a log book. Records are kept at the Mentor Municipal Maintenance Facility.

Inspection of Storm Sewers

The City inspects certain storm sewers regularly where there are known drainage problems, but the rest of the MS4 is typically only inspected when a catch basin is being rebuilt or if a drainage complaint is received. A total of 7,260 linear feet (LF) of storm sewer was cleaned during 2009. The City maintains a table listing the areas with known drainage problems.

Municipal Construction Projects

The City indicates that there are no municipal construction projects occurring at this time. However, Ohio EPA records show that there are seven active NPDES permits for municipal construction projects in Mentor. The status of these projects was reviewed with the City and is summarized below:

NPDES Permit #	Project	Status
3GC03187*AG	Two Town Detention Basin Improvements	Never constructed
3GC03854*AG	Heisley Rd Widening	Complete
3GC00704*AG	Lakeshore Blvd Bikelane Improvement	Complete
3GC01026*AG	Chillicothe Rd Widening & Resurfacing Ph 2	Complete
3GC00394*AG	Hopkins Road	Complete
3GC02176*AG	Norton Parkway	Complete
3GC02252*AG	Reynolds Road Improvements	Complete

If construction is complete or the project is no longer viable, please submit Notices of Termination (NOTs) for these projects to close out NPDES permit coverage. The NOT and instructions can be obtained on the Ohio EPA Storm Water Program webpage at www.epa.ohio.gov/dsw/storm/stormform.aspx. As a reminder, coverage under the Ohio EPA General

Storm Water NPDES Permit for Construction Activities is to be terminated within 45 days of when the project reaches final stabilization. Please be sure to incorporate this requirement into your procedures on all future projects.

Ohio EPA asked about implementation of post-construction storm water BMPs on these projects. The City indicated that a wet extended detention pond was installed for the Norton Pkwy project, but could not identify the post-construction BMPs, if any, installed on the other projects. As a result, I requested that the City provide me with a description of the post-construction BMPs installed for the Heisley Road Widening project, a construction project subject to the conditions of the Ohio EPA General Storm Water NPDES Permit for Construction Activities #OHC000003. On Feb 2, 2010, Ohio EPA received a response from the City. No post-construction BMPs were provided for the Heisley Road Widening project. The City incorrectly concludes that projects that disturb less than 5 acres of land are exempt from post-construction BMP requirements. **This is a violation of Part III.G.2.e of the Ohio EPA General Storm Water NPDES Permit for Construction Activities #OHC000003.**

All projects that disturb 1 or more acre of land are subject to the post-construction requirements of the NPDES permit, except those that create no impervious area. Under the paragraph headed "Small Construction Activity" on page 26 of the NPDES permit, the permit states:

*For **all** small land disturbance activities (which disturb 1 or more acre, 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 of land), a description of measures that **will be** installed during the construction process to control pollutants in storm water discharges that occur after construction operations have been completed **must be** included in the SWP3.*

This language makes the implementation of post-construction practices compulsory even on small construction projects. The language that follows, i.e., the language cited by the City in its response, provides guidance on proper implementation of post-construction BMPs on small construction projects. In addition, language on Page 23 of the NPDES permit under the heading *Transportation Projects* allows for the use of practices found in ODOT's **Location and Design Manual, Volume 2**, as alternative BMPs on new roads and roadway improvement projects by public entities where the BMPs listed in Table 2 on Page 23 of NPDES permit #OHC000003 are not attainable.

Thus, the City has not complied with the requirements of the NPDES permit. This matter will be referred to our Central Office for formal enforcement consideration. The City must ensure that post-construction BMPs are provided for all construction projects where the larger common plan of development disturbs 1 or more acre of land and where less than 1 acre of land is disturbed, but the project is part of a larger common plan of development or sale where 1 or more acre will be disturbed. This includes the Heisley Road Widening project.

The plan review and site inspection process for municipal construction projects is expected to be equivalent to the process established for private development. The City is required to review all development plans where the larger common plan of development or sale will result in the disturbance of 1 or more acre. These sites must be inspected once per month while they are under construction and the City must document these inspections. The City is also required to take enforcement on sites that fail to comply with the local sediment and erosion control ordinance. Likewise, post-construction storm water management plans must be reviewed not just for meeting flood control requirements, but local water quality requirements. The M54 permit (NPDES permit #OHQ000002) requires the City of Mentor to implement a local post-construction BMP ordinance with requirements at least as stringent as those contained in the Ohio EPA General Storm Water NPDES Permit for Construction Activities #OHC000003. The City of Mentor must upgrade their post-construction storm water ordinance to satisfy this requirement **no later than June 4, 2011**. Mr. Ashurst indicated that an ordinance will

soon be introduced to City Council based on the model Comprehensive Storm Water Management Ordinance developed by Chagrin River Watershed Partners.

Stormwater Management Facilities Operation and Maintenance			
Interview Questions	Response		
Public facilities inspected? Frequency:	SOME A schedule has not yet been established. Inspection is currently complaint-driven or only of facilities with known drainage issues.		
Private facilities inspected? Frequency:	VERY FEW Only on a complaint basis at this time.		
Checklist used for inspections?	YES For ponds only.		
Have maintenance standards and procedures been established for these facilities?	NO See Notes.		
How is maintenance prioritized? Is data evaluated to target maintenance resources?	Based on observations from hotspot inspections. LCGHD may also provide information discovered through dry weather screening and illicit discharge investigations.		
Applicable Documents		Reviewed	Obtained
Inspection checklist		YES	YES

Notes
<p>Inspections of Stormwater Management Facilities</p> <p>The City has recently started a program to inspect public stormwater management facilities, but has not yet developed an inspection schedule. Inspections are typically driven by complaint or are in areas with known drainage problems. To date the city has inspected 15 of 68 detention/retention basins under this program. In addition, crews from the Service Department check all 68 basins during rain events to make sure there are no drainage issues.</p> <p>The City only inspects privately-owned stormwater management facilities on a complaint basis. However, maintenance of these facilities falls either on the private landowner or homeowners' association.</p> <p>Please be aware that the City is required to ensure long-term maintenance of stormwater management facilities. Ohio EPA requires that this program include privately-owned facilities constructed since April 21, 2003, and all publicly-owned stormwater management facilities. Storm water management facilities include best management practices (BMPs) designed to treat the Water Quality Volume (WQv), otherwise improve the quality of runoff or reduce the volume of runoff generated. BMPs include structures such as bioretention cells, permeable pavements, green roofs, enhanced water quality swales, sand filters, extended detention ponds, constructed wetlands and proprietary devices (including underground structures). An acceptable post-construction BMP program consists of:</p>

1. Plan review to assure that post-construction storm water quality BMPs are being provided, are designed per required standards and have a long-term maintenance plan
2. Tracking the location of post-construction BMPs and the party responsible for implementing the long-term maintenance plan
3. Performing an inspection to assure that post-construction BMPs are installed per the approved plan
4. Periodically inspecting or otherwise verifying that the post-construction BMP is being maintained in accordance with the long-term maintenance plan
5. Taking enforcement action against the responsible party if they fail to maintain the BMP as required

The City has not yet developed the robust long-term maintenance program for post-construction BMPs expected under Part III.B.5 of NPDES Permit #OHQ000002. The City has inventoried storm water management ponds, given them ID numbers, identified the type of pond and its ownership. To date, the City has identified about 370 total ponds within its corporation boundaries. The City also conducts an as-built inspection to assure that practices are being installed per approved plans and the site file includes the approved construction plans, location map and photographs of the BMP.

However, the City has not yet introduced legislation to formalize a long-term operation and maintenance (O&M) program for post-construction BMPs. The SWMP states that an O&M program was to be developed by 2007. As such, the City failed to meet this obligation. Mr. Ashurst stated that the City intends to introduce legislation to City Council in February 2010.

Other deficiencies noted include:

- The City has not included non-pond BMPs in the inventory (e.g. the permeable pavement at the Center Street Village project). Be sure that your inventory is all-inclusive of the many types of post-construction BMPs that may be installed now and in the future.
- The basin inventory may not be complete. The City provided Ohio EPA with a copy of an inspection report for the "Highland Ct or Chillicothe Park" detention basin. The inspection was conducted in 2002. The inspection conducted is detailed and would provide adequate guidance to the responsible party to correct problems. However, this basin does not appear on the City's Basin Inventory.
- The City does not track the implementation of long-term maintenance plans, particularly those for privately-owned BMPs.
- The City does not assure that operation and maintenance inspections are aligned with long-term maintenance plans.

As a reminder, Ohio EPA has required a long-term maintenance plan for all post-construction BMPs since April 21, 2003. Although it must be a stand-alone document, it is part and parcel of the Storm Water Pollution Prevention Plan (SWP3) required by the Ohio EPA General Storm Water NPDES Permit for Construction Activities. The goal of the MS4 program is to develop a local review and approval program for the SWP3. This includes post-construction BMPs and their long-term maintenance plans. These plans are required to provide a schedule for routine and non-routine maintenance tasks to be undertaken. The City must establish standards for these maintenance tasks.

NOTE: Most communities reference standards contained in *Rainwater and Land Development* (ODNR, 2006) or the United States Environmental Protection Agency's Menu of BMPs rather than establish their own.

BMP Inspection Checklists

The City has developed an inspection checklist for stormwater management basins, but has not yet developed or adopted checklists for other types of stormwater management BMPs. As the installation of low-impact development (LID) BMPs and non-structural BMPs propagates, be sure that checklists are developed for use with these practices. The checklist used to perform inspections should be reflective of the operation and maintenance standards established by the City (see preceding paragraph).

Road Maintenance	
Interview Questions	Response
Streets regularly swept?	YES
Frequency:	Not at frequency specified in SWMP.
Frequency based on water quality factors (e.g. proximity to streams)?	NOT DIRECTLY Roads with higher traffic counts are swept more frequently. Pollutant loading from roads with higher traffic counts is generally higher than that from less-traveled roadways.
How are spoils disposed of?	NEEDS IMPROVEMENT See Notes under Catch Basin Cleaning section of this worksheet. Street sweepings and catch basin cleanings are to be managed in a similar manner.
Does the community collect road kill? What do they do with the carcasses?	YES Carcasses are stored in a dumpster located off Station Street under the SR 615 bridge. The dumpster is picked up three times per week by contract and taken to a landfill.
Does the community have a leaf collection program? What do they do with the collected leaves?	YES This is a contracted service through Republic Waste. The City does not operate a temporary leaf collection yard. Residents place leaves in bags that are collected and taken directly to the Heisley Road Landfill, a licensed Class IV composting facility located in the City.
BMPs used during road maintenance activities? Describe types of road maintenance conducted by community staff and the BMPs used	YES The City conducts pothole patching, asphalt resurfacing (milling is contracted) and some full-depth concrete repair. Crews are trained to implement sediment socks and storm drain inlet protection to keep sediment and other debris out of storm sewers. Trench water is sucked up in a vacuum truck and taken back to Station Street for disposal. See Notes.

Road Maintenance		
Interview Questions	Response	
BMP guidance available to field staff?	NO	
	Erosion and sediment control training was provided to field staff once in 2004, but a refresher is needed. Ohio EPA recommends that refresher training be provided on an annual basis and that implementation of storm water BMPs be discussed with field staff before a job is started.	
Deicers used by MS4?	YES	
Type and amount of deicer and additives tracked?	YES	
What measures are being taken to minimize the application of deicers?	The City began to use "smart salting" policies the winter of 2008-2009. Only hills, curves and intersections are salted if there is a storm event of 2 inches or more. Other areas are only plowed. This reduced salt usage to only 4400 tons in 2009 from an average of 10,000 tons per year prior to adopting this policy.	
Sand/salt swept up after application?	YES	
How soon?	Spills are swept as soon as they occur either at the dome or on roadways. Drivers have shovels in the vehicles to respond to spills on roadways.	
Applicable Documents	Reviewed	Obtained
BMP guidance	Does not exist	
Street sweeping records	YES	YES
Deicer application records	YES	YES

Notes
<p>Street Sweeping Program</p> <p>The number of lane miles swept has varied from year to year. Over the last 6 years of the MS4 program, the lane miles have ranged from 1700 to 4000 per year. The City has 2 street sweepers out on a regular basis. During our interview, the City indicated that side streets get swept twice a year and mains are done 20-30 times per year.</p> <p>A review of street sweeping records shows a total of 2006 lane miles were swept in 2009. The City keeps track of sweeping by road name. Longer roadways are broken down further into segments. This provides a total of 702 segments. Reynolds Road (SR 306) from Bellflower to Tyler was swept more than any other street segment in the City (18 times). Records show that only 10 of 702 street segments (1.4%) were swept 12 or more times (a rate of at least once per month) during 2009. Only 84 of 702 segments (12%) are swept at least 6 times per year or more (rate of at least once every other month).</p> <p>Please be aware that this does not correspond with the frequency stated in the SWMP. The SWMP states that all streets will be swept monthly, weather permitting, starting in 2003. The City was to develop a</p>

Notes

schedule by which to conduct street sweeping, but the City does not have a schedule yet to date. Please review the commitments you have made in your SWMP and either increase street sweeping to the frequency stated in the plan or revise the SWMP and provide justification for the revision. Revisions to the SWMP can be made with the submittal of your Annual Report. Further, develop a schedule for street sweeping, keeping in mind that streets in industrial and commercial areas of the City are likely to produce more debris than residential streets.

Also, please note that the new Annual Report form asks communities to report the amount of catch basin cleanings and street sweepings collected. The City does not appear to currently track this amount. If not, this information can also be determined from the manifests obtained from landfills where this material is ultimately disposed.

BMPs Used During Road Maintenance

Station Street is not equipped with a BMP to treat wastewater or sediment-laden trench water. Sediment-laden water from trench excavations can be treated at the construction site by pumping it through a sediment filter bag or by pumping from a sump pit (see enclosures). Water containing cement slurry or hydrocarbons must be collected and disposed of as wastewater. Please consult with the operator of the local sanitary sewer system to determine if this water can be disposed via sanitary sewer or if any pretreatment is required before such disposal can occur.

Deicer Usage

The primary deicer used is road salt (NaCl). This makes up for 99% of all deicer used. City will use CaCl for low temperatures (below 18F). Grit is used on brand new concrete streets instead of salt to prevent damage to the roadway, but for only for a certain timeframe (45 days). Grit and CaCl are used sparingly. They only accounted for 164 tons out of 4600 total tons of deicer applied in 2009. The City spends a significant sum on deicer materials and fuel and maintenance of its deicer application vehicles. In 2009, the City spent over \$574,000 on this activity.

The City has developed a deicer application policy that sets the level of service based on cost, where “bare pavement” is desired, how quickly streets are to be cleared, what percentage of streets are to get priority and in what areas snow may be hauled away. Priority is assigned based on the number of vehicles per day, traffic patterns, accident records, school zones, and commercial and industrial areas. This policy was first implemented for the winter of 2008-2009. This is an acceptable policy, but be aware that the SWMP indicates that you will use guidance from the International Salt Institute’s Snowfighter’s Handbook to develop a deicer policy. If you do not intend to use this guidance, please amend the SWMP accordingly in your next Annual Report.

Flood Management	
Interview Questions	Response
Inventory of flood management structures completed?	PARTIAL, not complete Only includes detention and retention ponds.
Structures been assessed for stormwater retrofit?	NO
New structures include water quality considerations?	YES But, be sure to apply requirements to municipal construction projects as well as private development. See previous notes regarding

Flood Management		
Interview Questions	Response	
	Norton Pkwy.	
Applicable Documents	Reviewed	Obtained
Inventory	YES	YES

Notes
<p><u>Stormwater Retrofits</u></p> <p>The City has not done any stormwater retrofit projects, but has assessed an existing detention basin in the area of SR 615 and SR 2 for such purpose. The basin has the capacity to be retrofitted for treatment of the Water Quality Volume (WQv), but there are currently no plans to do so.</p> <p>The current MS4 permit (OHQ000002) does not require the City to implement retrofit projects, but they are an important piece of the storm water management puzzle for older, developed parts of the community. Current post-construction requirements only affect areas where new development or redevelopment disturbs 1 or more acre of land. This program will not create BMPs in previously-developed areas unless they are being redeveloped and the 1-acre threshold is met. As such, US EPA is evaluating whether retrofits should be required in future generations of the NPDES permit. As the City of Mentor is largely built-out, this limits the opportunities to implement post-construction BMPs as part of the development/redevelopment process.</p> <p>For this reason, it is important to look for retrofit opportunities by making a list of potential water quality enhancement projects and focusing on the implementation of green infrastructure. Typically, retrofitting the outlet structures of existing detention and retention basins to provide extended detention of the Water Quality Volume (WQv) is the easiest and most feasible type of retrofit project. However, preferred retrofit projects include installing bioretention cells in existing parking lots or along residential streets, resurfacing with permeable pavement and establishing incentive programs for rain gardens, rain barrels and other forms of downspout disconnection in residential neighborhoods.</p>

Facilities Operation & Maintenance		
Interview Questions	Response	
Inventory of MS4 facilities complete (i.e. facilities owned and operated by the MS4)?	YES	
<p><u>Types of facilities included</u></p> <p><i>These need their own NPDES storm water permit for industrial activities, if there is a discharge of runoff from these operations:</i></p> <ul style="list-style-type: none"> • Landfills Type: _____ • Airports • Shipping Port/Marinas <i>Mentor Lagoons Nature Preserve and Marina 8365 Harbor Drive Mentor, OH 44060</i> • Steam Electric Power Plants • Wastewater Treatment Plants ≥1 MGD or with a pretreatment program 	<p>But, need to add Solid Waste Transfer Operations area on Station Rd. if it will continue to be used for materials stockpiling, road kill and catch basin/ street sweeping storage, and the Recycling Drop-Off Center on Carpenter Dr.</p>	
	<u>Operate?</u>	<u>SWP3 Developed?</u>
	NO	N/A, since do not operate
	NO	N/A, since do not operate
	YES	YES
	NO	N/A, since do not operate
	NO	N/A, since do not operate

Facilities Operation & Maintenance

Interview Questions	Response	
<p><i>These do not need their own permit, but do have to develop an SWP3 unless noted as N/A:</i></p> <ul style="list-style-type: none"> • Impound Lots <i>These operations occur at the Mentor Municipal Maintenance Facility on Hopkins Rd.</i> • Leaf Collection Yards ✓ No discharge of leafate permitted • Maintenance Yards <ul style="list-style-type: none"> ➢ How many do they operate? <u> 1 </u> ➢ List facility names/locations: <i>Mentor Municipal Maintenance Facility 6645 Hopkins Rd. Mentor, OH 44060</i> • Composting Operations ✓ No discharge of leachate permitted • Solid Waste Transfer Stations/Operations • Parks and Cemeteries <ul style="list-style-type: none"> ➢ How many in UA? <u> 13 </u> ➢ List facility names/locations: See list in file. Includes: <i>Black Brook Country Club 8900 Lake Shore Blvd Mentor, OH 44060</i> • Parking Lots <ul style="list-style-type: none"> ➢ How many do they operate? <u> 19 </u> ➢ List facility name/locations: See list in file. • Bus Terminals <i>These operations occur at the Mentor Municipal Maintenance Facility on Hopkins Rd.</i> • Vehicle Maintenance Garages <ul style="list-style-type: none"> ➢ How many do they operate? <u> 2 </u> ➢ List facility name/locations: <i>Mentor Municipal Maintenance Facility on Hopkins Rd.</i> 	<p>YES</p> <p><i>Include BMPs for impound lot operations in the SWP3 for Hopkins Rd facility.</i></p> <hr/> <p>Operate?</p> <p>NO</p>	<p>NO</p> <p>SWP3 Developed?</p> <p>N/A, since do not operate</p> <p>NO</p> <p>NO</p> <p>N/A, since do not operate</p> <p>NOT REQUIRED See Notes.</p> <p>N/A</p> <p>N/A</p> <p>NO</p> <p><i>Include BMPs for bus terminal operations in the SWP3 for Hopkins Rd facility.</i></p> <p>NO</p> <p><i>Include BMPs for vehicle maintenance operations in the SWP3 for Hopkins Rd facility.</i></p>

Facilities Operation & Maintenance	
Interview Questions	Response
<p><i>Black Brook Golf Course Maintenance Garage 8900 Lake Shore Blvd. Mentor, OH 44060</i></p>	<p>This facility will require its own SWP3.</p>
<p>Facilities inspected? Frequency?</p>	<p style="text-align: center;">YES</p> <p><u>Mentor Municipal Maintenance Facility</u> The site is inspected daily for oil spills, equipment leaks, etc. The City does not currently use a checklist do conduct these inspections, but is developing one to be included in the SWP3.</p> <p><u>Station Road Waste Transfer Operations Area</u> Station Road Facility is inspected by crews to some degree when it is used, but not a regular, routine type of inspection with checklist.</p> <p><u>Mentor Lagoons Nature Preserve and Marina</u> The marina is inspected at the frequency required by the Ohio EPA General Storm Water NPDES Permit for Industrial Activities for Marinas #OHRM00001. Runoff is monitored per the requirements of the permit as well. However, the runoff sampled is not representative of areas where industrial activity occurs and the facility has still not conducted the analytical sampling required. See Facility Inspection Worksheet for this facility.</p>
<p>Checklist used?</p>	<p style="text-align: center;">NO</p> <p>Checklists are not used for any facility.</p> <p>Checklists should be developed to guide inspections of all Facilities with Potential for Storm Water Pollutant Runoff. This will help assure that each facility is inspected thoroughly and that there is consistency between inspectors. Mr. Ashurst indicated that the City is developing a checklist to inspect the Mentor Municipal Maintenance Facility.</p>
<p>Staff which perform the inspections (department or agency):</p>	<p><u>Mentor Municipal Maintenance Facility</u> Mr. Vernon inspects the Mentor Municipal Maintenance Facility. Mr. Vernon is a Public Works Supervisor in the Public Works Dept.</p> <p><u>Station Rd Waste Transfer Operations Area</u> The public works department staff conducts inspections of this facility, but Mr. Vernon intends</p>

Facilities Operation & Maintenance	
Interview Questions	Response
	<p>to take on this responsibility in the future.</p> <p><u>Mentor Lagoons Nature Preserve and Marina</u> Dave George, Marina Manager does inspections at this facility per requirements of the marina's NPDES permit.</p>
<p>Is there a designated stormwater contact person for each facility?</p>	<p style="text-align: center;">PARTIAL</p> <p>There is a designated storm water contact person for the marina, but no one has yet been officially designated at the other facilities. Please be aware that facilities requiring an SWP3 are required to have a Pollution Prevention Team with specific responsibilities regarding implementation of the SWP3. For other facilities, Ohio EPA recommends that a person be designated to inspect facilities periodically to assure that storm water BMPs are implemented in accordance with the SWMP. This will develop a certain level of accountability for BMP implementation at these facilities.</p>
<p>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?:</p>	<p>City employees are generally represented by a union. The City must follow disciplinary procedures established in the union contract. It is a progressive disciplinary system consisting of verbal warnings, written warnings, time off without pay and eventually termination.</p> <p>The City has not had to take disciplinary action against an employee for failure to comply with MS4 program policies. Please be sure that appropriate disciplinary action is taken when employees fail to follow MS4 program policies and procedures.</p>
<p>Parking lots owned/operated by the permittee swept?</p> <p>Frequency?</p>	<p style="text-align: center;">YES</p> <p>The City does sweep the City Hall parking lot as well as the Garfield municipal lot. However, the City does not track parking lot sweeping. Ohio EPA recommends that municipal parking lots be added to the list of street segments tracked under the street sweeping program. This will allow the City to begin tracking parking lot sweeping using the existing system that seems to be working well.</p> <p>Parking lots are typically swept prior to a civic event, e.g., the Better Mentor Parade. City Hall is done 2 to 3 times per year, typically prior to summer.</p>
<p>Do you have any combined sewer systems?</p>	<p>NO</p>

Notes

Black Brook Golf Course Maintenance Garage
 8900 Lake Shore Blvd.
 Mentor, OH 44060

The Ohio EPA General Storm Water NPDES Permit for Small MS4s #OHQ000002 requires you to develop and begin implementing the SWP3 for the Mentor Municipal Maintenance Facility and the Black Brook Golf Course Maintenance Garage within 2 years of permit renewal, i.e., by June 3, 2011. The City indicates that the SWP3 is 95% complete and will be ready by the deadline in the permit. Please be sure that the SWP3 for this facility includes BMPs for impound, bus terminal and vehicle maintenance areas of this facility. The Mentor Municipal Maintenance Facility 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. SWP3s must contain a checklist by which to conduct the facility inspection.

An SWP3 has already been completed for the Mentor Lagoons Nature Park and Marina as required by the Ohio EPA General Storm Water NPDES Permit for Industrial Activities from Marinas #OHRM00001. See Facility Inspection Checklist for this facility for compliance concerns related to the marina.

Solid Waste Transfer Operations:

The City dewater and temporarily stores catch basin cleanings and street sweepings in an easement area under the SR 615 bridge at the western terminus of Station Street. This is also the location where the City keeps a dumpster to store road kill and stockpiles of building materials such as ODOT 304 and other aggregate. This facility needs to be added to the inventory of municipal operations, i.e., Facilities with Potential for Storm Water Pollutant Runoff. BMPs must be provided to minimize or eliminate the discharge of storm water pollutants to the MS4 and waters of the State; however the City is not required to develop a formal SWP3 for this facility. A SWP3 would only be required if the City conducted equipment cleaning, fueling or vehicle maintenance activities at this site. These activities do not occur at this site at this time.

As noted previously, the area used to dewater and store street sweepings and catch basin cleanings is not adequate. See Notes under Catch Basin Cleaning section of this worksheet. The location of stockpiles with erodible materials such as ODOT Spec 304 material needs to be evaluated to prevent discharges from bridge skippers from coming into contact with stockpiles. For complete observations related to the operations at this site, please see the Facility Inspection Worksheet for the Station Road Waste Transfer Operations Area included in this audit packet.

Also, please note that the Recycling Drop-Off Center on Carpenter Road is considered a solid waste transfer operation and needs to be included on the list of Facilities with Potential for Storm Water Pollutant Runoff. BMPs need to be implemented, but no formal SWP3 is required for this facility.

Pesticides, Herbicides & Fertilizers

Interview Questions	Response
Certified applicators used?	YES Mark Floyd is a certified commercial pesticide applicator. The City provided me with a copy of his license from the Ohio Dept. of Agriculture.
Integrated Pest Management (IPM) practices used?	NO

Storage location of pesticides, herbicides, and fertilizers:	The City stores these materials at the Black Brook Country Club golf course. Small amounts are kept at the Mentor Municipal Maintenance Facility.	
BMPs used during application:	Mr. Floyd was not available to interview. See Notes.	
Fertilizer/pesticide application plan utilized?	YES The City provided me with pesticide application records for the Black Brook golf course, but not a fertilizer/pesticide application plan. If one exists, please provide me with a copy with your response to this MS4 inspection. Applications on athletic fields (soccer and baseball) are usually contracted out and may be reduced this year due to budget considerations.	
Applicable Documents		
Fertilizer/pesticide application plan	Reviewed Application records, but not plan.	Obtained NO

Notes
<p><u>Certified Applicator Requirements:</u> Communities are considered to be commercial pesticide applicators and are subject to the rules and requirements of the Ohio Department of Agriculture. As such, the City must have at least one licensed applicator on staff, and currently does. The licensed applicator may train others on the staff to apply pesticides as long as he conducts certain training and maintains records. However, a licensed applicator can be no more than 2 hours away when pesticides are applied. So, if your community only has one licensed applicator and he's on vacation more than 2 hours away, the community cannot apply pesticides.</p> <p><u>Pesticide, Herbicide and Fertilizer Storage Requirements:</u> Pesticides cannot be stored above or against medicines, foods, feeds or toys. They cannot be stored in a room where a spill would result in a release to the environment (such as a room with a floor drain connected to the storm sewer...if you run across this, the floor drain should be capped or the pesticide should be in secondary containment). Containers must be labeled to identify the material they contain. Products with a skull and cross bones on the label cannot be stored in an area that can be accessed by children. The Department of Agriculture recommends these products be stored in a locked cabinet. Pesticides must be stored in a room (or cabinet) that is capable of being locked when not attended. The Dept of Agriculture also recommends that a spill kit and fire extinguisher be kept nearby and that personal protective equipment is available for use if necessary.</p> <p><u>BMPs for Pesticide, Herbicide and Fertilizer Application</u> Pesticides, herbicides and fertilizers should not be applied when the forecast calls for rain. The label of most products will provide guidance on when and how much of these materials should be applied. Do not exceed manufacturers' recommendations. In addition, crews must be trained to avoid overspray and to implement dry clean-up methods should spills occur. Under no circumstance should crews hose spilled materials into storm drains. Storm drains near application areas can be temporarily covered to</p>

Notes

prevent overspray or spills from entering the MS4. The usage of fertilizers can also be reduced by replacing typical lawn-type grasses with natural, slow-growing grass species that require less or no fertilizers to be sustained. The City of Cleveland is using this method to revegetate neighborhoods where blighted homes have been razed. This will reduce costs to the City to maintain this new greenspace.

Integrated Pest Management (IPM) is an effective and environmentally sensitive approach to pest management that relies on a combination of common-sense practices. IPM programs use current, comprehensive information on the life cycles of pests and their interaction with the environment. This information, in combination with available pest control methods, is used to manage pest damage by the most economical means, and with the least possible hazard to people, property, and the environment. For further information, please refer to <http://www.epa.gov/pesticides/factsheets/ipm.htm>.

The City does not appear to have a pesticide, herbicide and fertilizer application plan. However, they were able to provide me with 2009 pesticide application records for the golf course. In reviewing this information, the City appears to apply most herbicides and fertilizers in late April-early June where several treatments are applied in the same week. After that, treatments typically slow down to once every 2 weeks. The application records keep track of the name of the substance being applied and the type of chemical, amount used and time the material is being applied.

Please provide me with a copy of the City's pesticide, herbicide and fertilizer application plan.

Standards, BMPs, & Outreach

Interview Questions	Response	
BMP technical guidance document available to maintenance staff?	NEEDS IMPROVEMENT	
MS4 use contractual staff to complete MS4 maintenance activities?	NO	
BMP guidance materials provided to contracted staff?	N/A	
Requirement to consider stormwater impacts and utilize appropriate BMPs in contracts?	N/A	
Materials used to educate the public regarding stormwater impacts on MS4 property (if applicable, i.e. public spaces):	<p><u>Pet waste:</u> The City uses Mutt Mitts and signs about picking up after pets and disposing of it properly in containers.</p> <p><u>Litter reduction:</u> Garbage cans are provided but no message on cans. No recycling bins provided.</p>	
Applicable Documents	Reviewed	Obtained
BMP manual or guidance document	DOES NOT EXIST	
Contract language for MS4 operation and maintenance activities	N/A	

Notes

Notes

Technical Guidance and Specifications for Maintenance Staff

The City needs to improve the dissemination of technical guidance to its maintenance staff on storm water pollution prevention matters. Although we did note that a guidance manual on storm water pollution prevention from the American Public Works Association was hung on the Health, Safety and Learning bulletin board at the Mentor Municipal Maintenance Facility, the City should also look for posters that can be hung in work areas or lunchrooms, or guidebooks that can be taken out into the field with maintenance crews. This will help reinforce employee training. Once it is prepared, the City will need to train staff on the SWP3 for the Mentor Municipal Maintenance Facility and should look to adopt standards and specifications for storm water pollution prevention implementation in all its municipal operations with the potential to release pollutants in storm water runoff. Existing guidance manuals you may find useful to meet this goal include the **Rainwater and Land Development** manual (ODNR, 2006) and the **Municipal Pollution Prevention/Good Housekeeping Manual #9** (Center for Watershed Protection, September 2008). This manual is available as a free download on their website at http://www.cwp.org/formmaker/Download-Form_RedirectFormPage.html.

Although the City indicated that they do not use contracted staff to complete MS4 maintenance, please be sure to include language requiring pollution controls in all contracts and requests for proposal (RFPs) where the activities are a potential source of storm water pollution, should contracted staff be used in the future. The operations of third party service providers should be reviewed periodically by the City to ensure that the required pollution controls are being implemented.

Staff Education and Training

Interview Questions	Response
<p>Staff trained to identify potential storm water pollution sources which would result in an illicit discharges?</p> <p>Frequency:</p>	<p align="center">NO</p> <p>The City only provided one training event to the general staff, a seminar on erosion and sediment control in 2004. This is a violation of Part 3.2.6.1.2 of the NPDES Permit #OHQ000001.</p> <p>Some Public Works Department and Engineering managers and staff have attended training provided by Ohio EPA in 2007-2009 on Pollution Prevention for Municipal Operations, Erosion and Sediment Control for Construction Activities and an Overview of the 2nd Generation MS4 Permit, but these attendees did not go back and share or present what they learned to the staff.</p> <p>In 2006, Public Works management attended two workshops on illicit discharge detection provided by LTAP and the Cuyahoga County Board of Health. In addition, the City attended a workshop on how to apply for an Ohio EPA 319 grant in 2009.</p>
<p>Materials used to train staff:</p>	<p>The City was unable to provide me with a copy of the agenda or presentation slides used at the</p>

Staff Education and Training		
Interview Questions	Response	
	various training events. However, they did have a copy of the sign-in sheet and agenda for the training on erosion and sediment control provided by Lake SWCD in 2004.	
Applicable Documents	Reviewed	Obtained
Training materials	NO	NOT AVAILABLE

Notes
<p>MS4 Staff Training</p> <p>Although key personnel tasked with implementation of the MS4 program have attended a fair number of training events, the City has not developed the required staff training program expected under the MS4 program. The first generation of the MS4 permit required the City to develop an employee training program to prevent and reduce storm water pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances and storm water system maintenance. The City was only able to document a single training event on sediment and erosion control held in 2004. This does not constitute an acceptable employee training program. Please note that NPDES permit #OHQ000002 requires the City to conduct at least one employee training event on these topics per year. If key management staff attends a storm water education event, it is expected that the information learned will be shared with the appropriate staff so that they can conduct their job duties without causing storm water pollution. In addition, please contact the Lake County Storm Water Management Department to get copies of their Toolbox Talks, a series of discussion guides that can be used at staff meetings to teach storm water pollution prevention. The City should also look to incorporate training on storm water pollution prevention in any new employee training program that may exist if that employee's job duties have the potential to create storm water pollution or include illicit discharge identification and elimination.</p> <p>For training that the City organizes for its staff, please retain: (1) the agenda for the training session, including the date that training was provided and names/organizations of the speakers, (2) an attendance list with the signatures of attendees and (3) one copy of the materials used for training. For outside training attended, include an agenda (if available) or a list of topics, the names of attendees, date attended and a copy of any attendance certificate issued by the training organization.</p>

FIELD INSPECTION WORKSHEET

MS4 SWMP Evaluation

Mentor Municipal Maintenance Facility Inspection Worksheet

Permittee: City of Mentor		Permit No. 3GQ00034*BG	
Address of facility: 6645 Hopkins Rd. Mentor, OH 44060		Size of facility: 11 acres	
Date of visit: January 14, 2010		Time of visit: 2:00 PM	
Provide the name(s) and title(s) of permittee staff present during inspection			
Name		Title	
<i>Matt Schweikert</i>		<i>Public Works Director</i>	
<i>Lorne Vernon</i>		<i>Public Works Supervisor</i>	
<i>Brian Ashurst</i>		<i>Storm Water Program Manager</i>	
Evaluator Observations:			
SWPPP or stormwater plan			
Has the maintenance facility developed a SWPPP or stormwater plan?		NO. But, plan is 95% complete. Will be ready for implementation by June 3, 2011 deadline.	
Does the plan include a site map, list of pollutant sources, BMPs, and maintenance procedures?		These are required components of the SWP3. Please be sure to include this information in the plan. A partial drainage map is posted in the building.	
Does the permittee conduct and document periodic inspections of the facility?		Mr. Vernon does a daily walk through of the facility, but does not document inspections. You must perform a comprehensive site evaluation once per year and periodic routine inspections per the schedule in the SWP3. Ohio EPA recommends that periodic inspection occur at least once per month. Inspections must be documented. The SWP3 should provide an inspection blank to use during these inspections.	
Are storm drains labeled and free of debris?		Drains are not labeled, but they are free of debris.	
Vehicle maintenance, fueling and washing			
Are vehicle maintenance activities conducted in a designated place not exposed to stormwater?		YES.	
Are fueling stations properly designed with spill kits nearby?		YES. No spill kit, but there is a trench drain by the fuel pumps. The drain is connected to an oil/water separator that connects to storm sewers. Please be sure that the oil/water separator is maintained and cleaned-out as needed.	
Are vehicles washed on-site? Is wash water discharged to the MS4 or sanitary sewer?		YES. There is an indoor wash station connected to sanitary sewers. However, the City also washes some vehicles outside on a pad. The drains on the pad are connected to storm sewers. Discontinue using the outdoor pad for vehicle washing purposes. NOTE: We discussed the possibility of re-routing the drain to the sanitary sewer and using the pad to dewater catch basin cleanings and street	

	sweepings.
Material storage	
Are all materials that are potential stormwater contaminants stored under cover or in secondary containment?	YES , but some material is not fully under cover, e.g., Clear Lane salt. Some of this material can be relocated to a larger bin. You may also install a tarp or curtain for the storage stalls.
Hazardous waste management	
Are all hazardous materials properly labeled and stored to prevent exposure to stormwater runoff?	YES . However, above-ground gasoline and diesel tanks are not stored in secondary containment. Practices to address this include: providing secondary containment around tanks, providing a spill kit nearby and blocking storm drains with a pig mat or other such practice when transferring fuel into or from these tanks.
Waste management	
Are waste bins covered with waste properly disposed in containers?	NO . All waste bins must have lids or tarps. Cover must be maintained except when materials are being added or removed from bins. Also, some waste bins have holes that would allow leaks to occur. Replace bins that are not in good condition.
How is landscape waste stored?	Stored in a dumpster, but no tarp or lid provided. Please add.
Spill response	
Does the facility have a spill response plan, and are spill kits readily available?	Spill kits are available. A spill response plan must be developed as part of the SWP3.
Employee training	
What type of stormwater training do maintenance staff receive?	We noted that a storm water guidance manual from the American Public Works Association (APWA) is posted on the health and safety bulletin board. However, be aware that training on storm water pollution prevention is required at least once per year. Be sure to train staff on the contents of the SWP3 when it is ready to implement.
Notes or additional information:	
<p><u>Indoor Wash Station</u> We noted the presence of a trench drain outside the door to the indoor vehicle wash station. Please clarify why this trench drain was installed. Note that if it collects washwater, it must be directed to the sanitary sewer.</p> <p><u>Material Storage Areas</u> We noted that storm drain inlet protection and a hydrodynamic separator were installed on storm drains near the material storage areas, however these control practices will only address suspended solids and floatable pollutants. Dissolved road salt, calcium chloride and other such pollutants will not be controlled by this practice. You must focus on source controls to properly manage salt. This would include sweeping salt that is tracked outside the dome and assuring cover over stockpiles in the storage stalls. Hydrodynamic separators must be cleaned out regularly (manufacturer's typically recommend quarterly the first year to determine an</p>	

appropriate schedule thereafter). Be sure to track when maintenance is needed and when it actually occurs.

The calcium chloride tank is not stored within secondary containment, but does have an emergency shut-off valve as well as manual valves that can be used to prevent unintended discharges.

INSPECTION PHOTOS Mentor Municipal Maintenance Facility

Photos Taken: January 14, 2010

By: Dan Bogoevski, DSW-NEDO



Fig 1 & 2. A drainage map and information about storm water pollution prevention were posted on the bulletin boards inside the maintenance facility.



Fig 3 (LEFT). The indoor wash bay inside the service garage.

Fig 4 (RIGHT). The used oil drum is properly labeled and containers of gasoline and other vehicle fluids are stored on a containment tray.

Photos Taken: January 14, 2010



Fig 5 & 6. Not all erodible materials are stored under a cover or completely under the roof. Please tarp open stockpiles of erodible and dissolvable materials as well as stockpiles of material that produce leachate, e.g., the mulch pile in Fig 5 (LEFT). Hydrodynamic separators and storm drain inlet protection will not prevent these types of pollutants from discharging into the MS4.

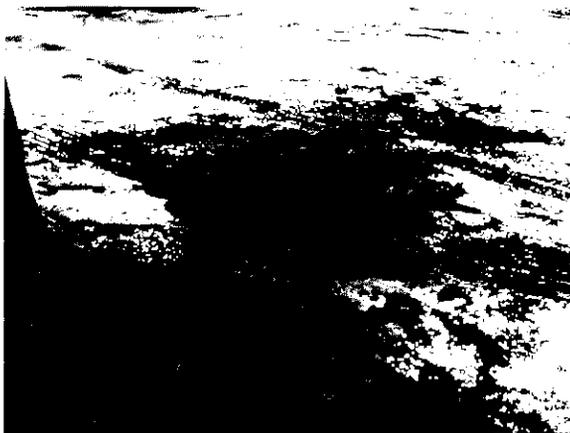


Fig 7 (LEFT). Please be sure that spills are cleaned up promptly. Although Oil-Dri was applied to this spill, it was not swept up and placed in a dumpster in a timely manner.

Fig 8 (RIGHT). The outdoor wash pad is connected to an oil/water separator and then to the storm drain. The MS4 permit does not authorize the discharge of this wastewater. Please discontinue the practice of washing vehicles here. However, it may be possible to re-route the drainage from this pad to the sanitary sewer and convert this area into the street sweeping/catch basin cleaning management area.



Fig 9 (ABOVE). A drip pan is placed under a vehicle to catch leaking fluid.



Fig 10 (RIGHT). Please clarify the drainage area to this trench drain located immediately outside the indoor wash bay. No washwater should be discharging to this drain.



Fig 11. The fueling station is roofed and a trench drain to an oil/water separator has been provided to catch any oil and grease that may drip off vehicles or occur due to spills.

FIELD INSPECTION WORKSHEET

MS4 SWMP Evaluation

Black Brook Golf Course Maintenance Garage Inspection Worksheet

Permittee: City of Mentor		Permit No: 3GQ00034*BG	
Address of facility: Lake Shore Blvd/Mentor		Size of facility: 100+ acres	
Date of visit: Jan 14, 2010		Time of visit: 5:00 PM	
Provide the name(s) and title(s) of permittee staff present during inspection			
Name		Title	
<i>Brian Ashurst</i>		<i>Storm Water Program Manager</i>	
Evaluator Observations:			
SWPPP or stormwater plan			
Has the maintenance facility developed a SWPPP or stormwater plan?		NO. An SWP3 must be developed and implemented for the Maintenance Garage at the Black Brook Golf Course by June 3, 2011.	
Does the plan include a site map, list of pollutant sources, BMPs, and maintenance procedures?		These are required components of the SWP3. Please be sure to include this information in the plan.	
Does the permittee conduct and document periodic inspections of the facility?		A Comprehensive Site Evaluation must be conducted at this site at least once per year. The SWP3 should specify more frequent routine inspections of outdoor storage areas and other storm water pollutant sources at the maintenance garage. Ohio EPA recommends once per month during golf season and quarterly when the course is not in operation.	
Are storm drains labeled and free of debris?		Storm drains were not inspected.	
Vehicle maintenance, fueling and washing			
Are vehicle maintenance activities conducted in a designated place not exposed to stormwater?		Due to time constraints, the vehicle maintenance area was not inspected. When developing your SWP3, it is preferred that mower maintenance occurs indoors.	
Are fueling stations properly designed with spill kits nearby?		There is a portable fuel tank stored outdoors at the facility. Be sure to have a spill kit available to react to mishaps that may occur when transferring fuel to/from the tank.	
Are vehicles washed on-site? Is wash water discharged to the MS4 or sanitary sewer?		Mowers are hosed off to remove grass clippings. Please be sure to conduct this activity in a grassy area away from storm drains or use dry clean-up methods such as brooming off clippings. Do not hose off motors or other greasy parts of the mower. Unless you are able to direct washwater to a sanitary sewer or holding tank for off-site disposal, no detergents can be used to wash mowers.	
Material storage			
Are all materials that are potential stormwater		NO. There are various storage tanks stored outside.	

contaminants stored under cover or in secondary containment?	However, due to time constraints, this area was not inspected in detail. Please review when developing the SWP3.
Hazardous waste management	
Are all hazardous materials properly labeled and stored to prevent exposure to stormwater runoff?	Please be sure that the used oil tank is properly labeled. If stored outside, it is preferred that it be stored within secondary containment or on a pad with drip tray to capture any spills that may occur during material transfer.
Waste management	
Are waste bins covered with waste properly disposed in containers?	The solid waste dumpster was not inspected, but be sure that it is lidded and in good condition with no holes.
How is landscape waste stored?	NO. Yard waste is stored in an open dumpster. The dumpster must be covered with a lid or tarp. Yard waste should be taken to a licensed composting facility.
Spill response	
Does the facility have a spill response plan, and are spill kits readily available?	A spill response plan is a required component of the SWP3. This will be developed with the plan. Appropriate training must be provided to the staff.
Employee training	
What type of stormwater training do maintenance staff receive?	No storm water pollution prevention training has been provided to the staff thus far. Be aware that you must provide at least one training per year on the SWP3 and its contents.
Notes or additional information:	
The pesticide application records for this facility were received, but not a pesticide/herbicide/fertilizer application plan. Please provide me with a copy with your response to this audit.	

FIELD INSPECTION WORKSHEET

MS4 SWMP Evaluation

Station Road Waste Transfer Operations Area Inspection Worksheet

Permittee: City of Mentor		Permit No: 3GQ00034*BG	
Address of facility: western terminus of Station Rd.		Size of facility: 0.25 ac	
Date of visit: January 14, 2010		Time of visit: 1:30 pm	
Provide the name(s) and title(s) of permittee staff present during inspection			
Name		Title	
<i>Matt Schweikert</i>		<i>Public Works Director</i>	
<i>Lorne Vernon</i>		<i>Public Works Supervisor</i>	
<i>Brian Ashurst</i>		<i>Storm Water Program Manager</i>	
Evaluator Observations:			
SWPPP or stormwater plan			
Has the maintenance facility developed a SWPPP or stormwater plan?		Formal SWP3 is not required for this facility.	
Does the plan include a site map, list of pollutant sources, BMPs, and maintenance procedures?		N/A, but BMP policies must be established. Pollutants include leachate from dewatering of street sweepings and catch basin cleanings, the sweepings and cleanings themselves, a dumpster for animal carcasses and stockpiles of building erodible building materials.	
Does the permittee conduct and document periodic inspections of the facility?		Public Works Department staff are tasked with inspection, but these are not documented.	
Are storm drains labeled and free of debris?		Drains are not labeled. Street sweepings and catch basin cleanings can migrate to the storm drains on Station Rd. This would result in an illicit discharge.	
Vehicle maintenance, fueling and washing			
Are vehicle maintenance activities conducted in a designated place not exposed to stormwater?		No vehicle maintenance activities occur at this site.	
Are fueling stations properly designed with spill kits nearby?		No fueling stations exist at this site.	
Are vehicles washed on-site? Is wash water discharged to the MS4 or sanitary sewer?		No vehicle washing occurs at this site.	
Material storage			
Are all materials that are potential stormwater contaminants stored under cover or in secondary containment?		NO. Catch basin cleanings and street sweepings are exposed to precipitation. Stockpiles of aggregates with fines and spoils from construction activity are stored where runoff from the SR 615 bridge can contact them. See Notes.	
Hazardous waste management			
Are all hazardous materials properly labeled and stored to prevent exposure to stormwater runoff?		No hazardous materials are stored on this site.	
Waste management			
Are waste bins covered with waste properly		Dumpster for animal carcasses is lidded and in good	

disposed in containers?	condition.
How is landscape waste stored?	No landscape waste at this site.
Spill response	
Does the facility have a spill response plan, and are spill kits readily available?	N/A for this site.
Employee training	
What type of stormwater training do maintenance staff receive?	As noted during the interview, the City is required to provide storm water pollution prevention training to staff. This would include staff whose duties involve the Station Rd site and the activities there.

Notes or additional information:

Catch Basin and Street Sweepings Stockpile

Although the pile is barricaded off, the barricade does not provide full containment of leachate. Any water that seeps from the pile, including storm water that contacts it, is leachate, a wastewater, and is not permitted to discharge to the MS4. Ohio EPA recommends that the City establish a dewatering pad where leachate can be collected and directed to the sanitary sewer system or holding tank for off-site disposal. **NOTE:** Installation of a holding tank requires a Permit-to-Install (PTI) from Ohio EPA. If this option is chosen, please contact Marie Underwood at the Ohio EPA Northeast District Office at (330) 963-1183 for further information.

Street sweepings and catch basin cleanings are solid waste and must be managed as such. Once they are dewatered, these materials must be stored in a lidded dumpster until they can be transported to a landfill for disposal.

Building Materials Stockpiles

The City stores building materials on this site and spoils from sidewalk and driveway replacements. This material is erodible and must be protected from precipitation. Some of this material is stored under the SR 615 bridge to provide a "roof", however the bridge drains appear to direct runoff at some of the stockpiles. Relocate stockpiles away from drains and tarp them to protect them from run-on and windblown precipitation.

INSPECTION PHOTOS
Station Road Waste Transfer Operations Area
City of Mentor

Photos Taken: January 14, 2010



Fig 1 & 2. Catch basin cleanings and street sweepings are placed in this barricaded area, but this does not allow for collection of the leachate generated from the stockpiles. Runoff would flow into the MS4 on Station St. Further, no cover is provided to prevent further leachate generation from the solid waste as it awaits transportation to the landfill for disposal.



Fig 3 & 4. Stockpiles of ODOT Spec 411 material are kept under the bridge, but bridge drains direct runoff onto the stockpile area.