

## Municipal Storm Water Program Evaluation MS4 Maintenance Component Worksheet

<b>Date of Evaluation</b>	Monday, July 30, 2012
<b>Evaluator Name, Title</b>	Kelly McVay, DSW, NEDO
<b>MS4 Permittee</b>	City of Sheffield Lake 3GQ00056*BG

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

Staff Interviewed		
Name	Department/Agency	Phone Number/Email
Len Smith Service Director	City of Sheffield Lake	(440) 949-6280 Lsmith734@gmail.com

MS4 Mapping		
Interview Questions	Response	
Outfalls and receiving waters mapped?	YES	
Catch basins?	NO	
Pipes, ditches, other conduits?	NO	
Public stormwater facilities (BMPs)?	NO	
Private stormwater facilities (BMPs)?	NO	
How are maps used (i.e. tracking illicit discharges)?	The City has not had to use these maps at all at this point. They do not really use the maps for illicit discharge detection because they do not contain enough of the comprehensive pipe system enough yet.	
Applicable Documents		Reviewed
Map(s) of MS4 system		YES
		OBTAINED

Notes
<p><b><u>MS4 Mapping</u></b> The City is in efforts to obtain GIS for mapping. They have maps of some of the storm piping system, but it is not complete as only newer items are mapped as-built. To meet the mapping obligations of NPDES Permit #OHQ000002, i.e., the MS4 permit in effect from 2009-2014, the map must show <b>catch basins</b> and <b>publicly-owned storm sewers, ditches, conduits</b> and storm water management facilities (including <b>publicly-owned post-construction BMPs and underground retention</b>). In addition, the map must show <b>privately-owned storm water management facilities</b> constructed as post-construction BMPs for new development or redevelopment which has occurred since April 21, 2003.</p> <p><b><u>Identifying the Location of Discharging Home Sewage Treatment Systems (HSTSs)</u></b> A list of HSTSs was provided. Please be aware that these discharging systems are considered illicit discharges to the MS4. Permit #OHQ000002 requires the City to work with the Lorain County General Health District to determine which of these systems are not operating as designed and intended. For systems not operating as designed and intended, the City must use its illicit discharge ordinance and the Health District 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. <b>ORC 6117.51 requires tie-in</b></p>

Notes
<p>to sanitary sewers whenever the foundation of residential buildings and the common sewage collection system are within 200 feet from the nearest boundary of the right-of-way within which the public sewer is located. 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>

Catch Basin Cleaning		
Interview Question	Response	
Schedule established for inspections and cleaning?	YES	
	<p>Each basin is cleaned twice per year. The City tries to pay special attention to catch basins in known problem areas. The City plans to clean each catch basin more frequently in the future.</p>	
Is cleaning and maintenance of catch basins tracked:	NO	
	<p>The City hopes to begin tracking this material. Mr. Smith says they plan to begin keeping a log of which zones (of 4) of the have been cleaned as well.</p>	
How are spoils materials disposed of?	<p>Catch basin cleanings are stored with street sweeping spoils in a pile on the south side of the Water Department building. They are next to a storm drain and have no containment. The City calls Allied waste to pick up this pile once per year.</p>	
Are storm drain pipes inspected?	YES	
Proactive or only in response to blockage event?	<p>Blockage areas are inspected after storm events to proactively find problems before they are reported.</p>	
Applicable Documents	Reviewed	Obtained
List of active municipal construction projects	NONE	NONE
<b>CHECK DATABASE BEFORE INSPECTION:</b>		
List of municipal projects covered under the Ohio EPA general storm water NPDES permit for construction activities		
<b>3GC03402*AG - Sheffield Lake Boat Launch Facility *NOT</b>		DONE – FILE NOT
<b>3GC04288*AG - Ferndale Avenue *NOT</b>		DONE – FILE NOT
<b>3GC04510*AG - Walker Roadway &amp; Storm Sewer Phase 3 *NOT</b>		DONE – FILE NOT
<b>NOTE:</b> Permit is only required if project disturbs 1 or more acre (5 or more acres for "routine maintenance")		

Notes
<p><b><u>Municipal Construction Projects</u></b>            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 <a href="http://www.epa.ohio.gov/dsw/storm/stormform.aspx">www.epa.ohio.gov/dsw/storm/stormform.aspx</a>. 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.</p>

<b>Stormwater Management Facilities Operation and Maintenance</b>			
<b>Interview Questions</b>		<b>Response</b>	
Public facilities inspected?		<b>NO</b>	
Frequency:		The City says that they do not have any public stormwater management facilities.	
Private facilities inspected?		<b>NO</b>	
Frequency:		The City says that they do not have and private stormwater management facilities.	
Checklist used for inspections?		<b>NO</b>	
Have maintenance standards and procedures been established for these facilities?		<b>NO</b>	
How is maintenance prioritized? Is data evaluated to target maintenance resources?		<b>NO</b>	
<b>Applicable Documents</b>		<b>Reviewed</b>	<b>Obtained</b>
Inspection checklist		NONE	NONE

Notes
<p><b><u>Inspections of Stormwater Management Facilities</u></b>            The City of Sheffield Lake did not believe that they had any public or private stormwater management facilities at the time of inspection. In discussing this topic with Mike Bramahall, the City Engineer of Bramhall Engineering, it seems like the City may have some private retention or detention basins from subdivisions or other recent construction. Please be aware that The City is required to ensure long-term maintenance of stormwater management facilities. Should the City truly not have any of these structures at this time, a program would still need to be in place to ensure proper maintenance if such facilities are installed in the future. 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). Your post-construction BMP program must include the following components:</p> <ol style="list-style-type: none"> <li>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</li> <li>2. Tracking the location of post-construction BMPs and the party responsible for implementing the long-term maintenance plan</li> <li>3. Performing an inspection to assure that post-construction BMPs are installed per the approved plan.</li> <li>4. Periodically inspecting or otherwise verifying that the post-construction BMP is being maintained in accordance with the long-term maintenance plan. <i>A checklist is recommended to perform inspections and should be reflective of the operation and maintenance standards established by the City.</i></li> </ol>

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, which is a violation under Part III.B.5 of NPDES Permit #OHQ000002. Information on developing an effective long-term maintenance program for post-construction BMPs can be found from the Center for Watershed Protection at

[http://www.cwp.org/Resource\\_Library/Controlling\\_Runoff\\_and\\_Discharges/sm.htm](http://www.cwp.org/Resource_Library/Controlling_Runoff_and_Discharges/sm.htm).

(\*\*Tool 6: Plan Review, BMP Construction, and Maintenance Checklists)

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. Please ensure that long-term maintenance plans are being submitted as part of the SWP3 review and approval process.

Road Maintenance	
Interview Questions	Response
Streets regularly swept?  Frequency:	<b>YES</b>  Streets with curb drains are all swept after every storm event that stirs up leaves and debris. Every street which has curb drains is swept about once a month.
Frequency based on water quality factors (e.g. proximity to streams)?	<b>NO</b>
How are spoils disposed of?	Spoils are disposed of with catch basin cleanings as described above.
Does the community collect road kill?  What do they do with the carcasses?  <b>NOTE:</b> MS4s are not obligated to collect road kill, but if they do, can be disposed in dumpsters or taken to a licensed, Class II composting facility. Cannot have pile of carcasses stacked up. This is open dumping.	<b>YES</b>  In the past, carcasses were buried at the ends of stub streets or behind the Service Department. The City recently discovered this when they got a complaint that dead animals were floating in a ditch. Because of this discovery, the City recently instated a policy and began bagging carcasses and placing them in the general trash dumpster to be picked up by Allied.
Does the community have a leaf collection program?  What do they do with the collected leaves?  <b>NOTE:</b> 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.	<b>YES</b>  Residents are required to bag their leaves and Allied Waste is contracted to pick this material up directly from residents. Also, the City has a 20 yard dumpster for yard refuse at the Service Department where residents can drop off yard waste at. This material is picked up weekly to monthly by Allied Waste depending on the amount of material accumulated.

Road Maintenance			
Interview Questions	Response		
BMPs used during road maintenance activities?  Describe types of road maintenance conducted by community staff and the BMPs used	<b>YES</b>  The City installs driveway pipes, does ditch grading and cleaning, road patching, catch basin and curb drain repairs, drainage pipe installation, box culvert installation, etc. themselves in-house. BMPs used include providing curtains on storm drains, creating diversions for runoff, and sweeping up after a job.		
BMP guidance available to field staff?	<b>NO</b>		
Deicers used by MS4?	<b>YES</b>		
Type and amount of deicer and additives tracked?  What measures are being taken to minimize the application of deicers?	<b>YES</b>  Salt is the only deicer used. The City recently bought 2 newer electronic controlled trucks which allow for more even spread and less granular salt on the road. The City does salt more frequently now, but it is more efficient than before. The City uses residual salt instead on roads instead of doing heavy salting multiple times. The City spot salts back streets and does intersections and hills only. Main roads are fully salted.		
Sand/salt swept up after application?  How soon?	<b>YES</b>  Salt is pushed back into the bin at the end of the day.		
Does your community operate a snow stockpile yard to store snow that has been removed from community streets and parking lots?  If YES, location of the yards:  Has your community considered implementing best management practices to control the discharge of pollutants from snowmelt associated with snow storage yards?  If YES, what BMPs have you implemented?	<b>NO</b>     <b>N/A</b>		
	<b>Applicable Documents</b>	<b>Reviewed</b>	<b>Obtained</b>
	BMP guidance	NONE	NONE
	Street sweeping records	NONE	NONE
	Deicer application records	YES	YES

**Notes**

**Street Sweeping and Catch Basin Cleaning Disposal**

At this time, there is no containment of the pile of catch basin cleanings and sweeping spoils, which allows for an illegal discharge of leachate. This is a violation of Part III.B.6.d.iii.3 of the NPDES permit #OHQ000002 and Ohio Revised Code 6111.04 and 6111.07. The City of Sheffield Lake must find an alternative storage method for handling street sweepings and catch basin cleanings and preventing the leachate from discharging to the nearby storm drain. The City must find an alternative storage method for handling street sweepings and catch basin cleanings. See the Facility Inspection Worksheet for the Service Department for more information on this issue.

*\*Also, the City needs to track the amount of material removed from the City's streets so the total amount can be placed in the City's annual report for 2012. Please be sure to report the total per calendar year (January to December) in the annual report for 2012 as stated in Part IV.C.2 on reporting of the Ohio EPA General Storm Water NPDES Permit for small MS4s #OHQ000002.*

**Deicer Usage**

The City has records on how much salt was delivered to them which they use to determine about how much salt was used. Order records are the only records kept regarding salt and no actual *application* records are kept. Tracking road salt usage is one BMP that can help reduce the use of deicers. By tracking this information more closely, you may spot abnormalities in salt usage that can indicate when equipment maintenance is needed, when staff may not be following salt application guidelines and when inventory loss occurs. Other practices that can reduce the use of road salt include regular calibration of salt spreaders and developing a deicer application policy that identifies the level of service to be provided, 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 can be assigned based on the number of vehicles per day, traffic patterns, accident records, school zones, and commercial and industrial areas. Ohio EPA urges you to adopt the sensible salting policies recommended by the Cuyahoga County Engineer or the Salt Institute. A wealth of information is available at [www.saltinsitute.org](http://www.saltinsitute.org) on how to reduce pollution from road deicing activities.

Finally, be aware that the Annual Report requires information to be reported on a January to December calendar year basis. This may require you to adjust how you summarize salt usage data, as most communities have typically been tracking usage on a winter season basis. Please keep in mind that the City is required to track salt usage as well as the use of additives, i.e., grit.

**Flood Management**

Interview Questions	Response				
Inventory of flood management structures completed?	<b>NO</b> The City of Sheffield Lake does not have any flood management structures.				
Structures been assessed for stormwater retrofit?	<b>NO</b> No structures exist.				
New structures include water quality considerations?	<b>NO</b> The Engineer is currently talking about installing underground tanks at the new Dollar General for flood control, but Mr. Smith does not believe that water quality is being considered in this case.				
<b>Applicable Documents</b>					
Inventory	<table border="1"> <tr> <th align="center">Reviewed</th> <th align="center">Obtained</th> </tr> <tr> <td align="center">NONE</td> <td align="center">NONE</td> </tr> </table>	Reviewed	Obtained	NONE	NONE
Reviewed	Obtained				
NONE	NONE				

**Notes**

**Stormwater Retrofits**

The City's public stormwater management facilities should be looked at for possible retrofit opportunities so that they treat the Water Quality Volume (WQv). 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 MS4 permit.

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 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.**

**Facilities Operation & Maintenance**

Interview Questions	Response												
Inventory of MS4 facilities complete (i.e. facilities owned and operated by the MS4)?	<b>YES</b>												
<p><b><u>Types of facilities included</u></b>  <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"> <li>• Landfills Type: _____</li> <li>• Airports</li> <li>• Shipping Ports or Marinas</li> <li>• Steam Electric Power Plants</li> <li>• Wastewater Treatment Plants ≥ 1 MGD or with a pretreatment program</li> </ul>	<table border="0"> <thead> <tr> <th align="center"><u>Response</u></th> <th align="center"><u>SWP3 Developed?</u></th> </tr> </thead> <tbody> <tr> <td align="center">NO</td> <td align="center">N/A</td> </tr> </tbody> </table> <p><b>NOTE:</b> No permit or SWP3 required if facility has no exposure. However, even if a No Exposure Certification has been submitted for the facility, inspect to verify validity.</p>	<u>Response</u>	<u>SWP3 Developed?</u>	NO	N/A	NO	N/A	NO	N/A	NO	N/A	NO	N/A
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<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"> <li>• Impound Lots</li> <li>• Leaf Collection Yards                             <ul style="list-style-type: none"> <li>✓ No discharge of leachate permitted</li> </ul> </li> <li>• Maintenance Yards                             <ul style="list-style-type: none"> <li>➢ How many do they operate? <u>  1  </u></li> <li>➢ List facility names/locations:</li> </ul> </li> </ul> <p align="center"><b>Service Department 4750 Richelieu Ave</b></p>	<table border="0"> <thead> <tr> <th align="center"><u>Response</u></th> <th align="center"><u>SWP3 Developed?</u></th> </tr> </thead> <tbody> <tr> <td align="center">NO</td> <td align="center">N/A</td> </tr> <tr> <td align="center">NO</td> <td align="center">N/A</td> </tr> <tr> <td align="center">YES</td> <td align="center">NO</td> </tr> </tbody> </table>	<u>Response</u>	<u>SWP3 Developed?</u>	NO	N/A	NO	N/A	YES	NO				
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YES	NO												
<ul style="list-style-type: none"> <li>• Composting Operations                             <ul style="list-style-type: none"> <li>✓ No discharge of leachate permitted</li> </ul> </li> </ul>	<table border="0"> <tbody> <tr> <td align="center">NO</td> <td align="center">N/A</td> </tr> </tbody> </table>	NO	N/A										
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**Facilities Operation & Maintenance**

Interview Questions	Response	
	Response	SWP3 Developed?
<ul style="list-style-type: none"> <li>• Solid Waste Transfer Stations or Operations                             <ul style="list-style-type: none"> <li>✓ Under landfill permit if community owns the transfer station and the landfill where waste will be taken</li> <li>✓ If not, then SWP3 is only needed if vehicle maintenance, equipment washing or fueling activities occur at the transfer station, or if a portion of the facility is involved with recycling or composting</li> </ul> </li> </ul>	<b>NO</b>	<b>N/A</b>
<ul style="list-style-type: none"> <li>• Parks &amp; Cemeteries                             <ul style="list-style-type: none"> <li>➤ How many in UA? <u>  10  </u></li> <li>➤ List facility names/locations:</li> </ul> </li> </ul> <p><b>Erie Shores Park</b> Lake Rd. &amp; Abbe Rd.</p> <p><b>Shell Cove Park</b> Lake Road &amp; Irving Park</p> <p><b>Westshore Park</b> Lake Rd. &amp; Westshore Blvd.</p> <p><b>Community Park</b> Lake Rd. &amp; Lake Breeze</p> <p><b>Lakewood Beach Park</b> Lake Rd. &amp; Lakewood Beach Dr.</p> <p><b>Freedom Park</b> South end of Warwick St.</p> <p><b>Ferndale Park</b> Ferndale &amp; Allen</p> <p><b>Gary Green Memorial Park</b> Richelieu Ave.</p> <p><b>Guenther Park</b> Walker Rd. &amp; Gayle Dr.</p> <p><b>Memorial Park</b> Tennyson Blvd. &amp; Howell St.</p>	<b>YES</b>	<b>N/A</b>
<ul style="list-style-type: none"> <li>• Parking Lots                             <ul style="list-style-type: none"> <li>➤ How many do they operate? <u>  1  </u></li> <li>➤ List facility name/locations:</li> </ul> </li> </ul> <p><b>Shoreway Shopping Center Lot</b> Lake Breeze &amp; Lake Rd.</p>	<b>YES</b>	<b>N/A</b>
<ul style="list-style-type: none"> <li>• Bus Terminals</li> </ul>	<b>NO</b>	<b>N/A</b>

All other lots are attached to City buildings.



Facilities Operation & Maintenance		
Interview Questions	Response	
<p>Parking lots owned/operated by the permittee swept?</p> <p>Frequency?</p> <p>Do you operate any asphalt parking lots?</p> <p>Do you use any coal tar-based sealants on those asphalt parking lots?</p> <p><b>NOTE:</b> Some MS4s have banned the use of coal tar-based sealants in their communities. Research from the University of New Hampshire Stormwater 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><b>YES</b></p> <p>Parking lots are swept on a regular basis, about 4 times per year.</p> <p><b>YES</b></p> <p><b>MAYBE</b></p> <p>Mr. Smith is not sure if coal-tar based sealants are used by the City.</p>	
<p>Do you have any combined sewer systems?</p> <p>If yes, do you have any combined sewer overflows?</p> <ul style="list-style-type: none"> <li>- How many? _____</li> <li>- Do you track frequency and volume?</li> </ul> <p>Are you aware of any illicit cross connections between your sanitary sewer and MS4?</p> <p>If so, what is your plan to eliminate this illicit discharge?</p>	<p><b>NO</b></p> <p>N/A</p> <p><b>NO</b></p> <p>The City keeps records of each instance of illicit cross connection found and the actions which were taken to correct it. The City is not aware of any sanitary to storm illicit cross connections currently.</p>	
<p>Have you investigated the extent of infiltration and inflow into storm sewer system?</p> <p>What methods have been used to conduct this investigation?</p> <p>What are your plans to repair and eliminate this source of illicit discharge?</p>	<p><b>NO</b></p> <p>All I&amp;I investigations have been done on sanitary sewer, not storm sewer, at this time.</p> <p>N/A, no investigation done.</p>	
<p>Sewer spill and cleanup procedures in place?</p>	<p><b>NO</b></p> <p>The City does have SSOs which go into the lake. The City feels that they will be able to stop this in a few years if funding pulls through.</p>	
Applicable Documents	Reviewed	Obtained
Facility inventory	YES	YES
Facility SWPPP	NONE	NONE

**Notes**

**Storm Water Pollution Prevention Plans (SWP3s)**

A Storm Water Pollution Prevention Plan (SWP3) must be developed and implemented for the following facilities:

- Service Department
- Fire/Police Stations

The Ohio EPA General Storm Water NPDES Permit for Small MS4s #OHQ000002 requires the City of Sheffield Lake to develop and begin implementing the SWP3 for these facilities within 2 years of permit renewal, i.e., by June 2011.

The City indicated that vehicle washing occurs at the Fire and Police Stations, which would require a SWP3 to be developed for these facilities. The above facilities must be inspected at a frequency specified in the SWP3. Ohio EPA recommends that facilities be inspected monthly. A comprehensive site evaluation must be conducted at least once per year and a record of that 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 storm water contact person for the facility. For guidance on developing a **site map**, please reference Ohio EPA General Storm Water NPDES Permit for Industrial Activities #OHR000005 **Part 5.1.2s**. Also refer to the following website for information on developing SWP3s for these facilities: [http://www.epa.ohio.gov/dsw/permits/GP\\_IndustrialStormWater.aspx](http://www.epa.ohio.gov/dsw/permits/GP_IndustrialStormWater.aspx)

**Pesticides, Herbicides & Fertilizers**

Interview Questions		Response	
Certified applicators used?		YES A certified contractor was used in the past.	
Integrated Pest Management (IPM) practices used?		N/A	
Storage location of pesticides, herbicides, and fertilizers:		None stored at City facilities.	
BMPs used during application:		N/A	
Fertilizer/pesticide application plan utilized?		N/A	
Applicable Documents		Reviewed	Obtained
Fertilizer/pesticide application plan		N/A	N/A

**Notes**

**Pesticide, Herbicide and Fertilizer Application**

The City of Sheffield Lake does not apply any pesticides, herbicides, or fertilizers themselves. They have contracted out herbicide application once. The City is currently considering getting someone in-house trained and certified to apply in the future.

Standards, BMPs, & Outreach			
Interview Questions	Response		
BMP technical guidance document available to maintenance staff?	NO		
MS4 use contractual staff to complete MS4 maintenance activities?	YES Herbicide application is contracted out to WeedPro. Paving and larger road projects are contracted out as well.		
BMP guidance materials provided to contracted staff?	NO		
Requirement to consider stormwater impacts and utilize appropriate BMPs in contracts?	NO		
Materials used to educate the public regarding stormwater impacts on MS4 property (if applicable, i.e. public spaces):	<p>Pet waste: The City is in the process of purchasing pet waste pick up supplies. There are signs posted to keep pets off of the beach and swimming areas according to an existing City ordinance. It was suggested that the City add signage to relate this issue to storm water pollution.</p> <p>Litter reduction: "No Littering" signs are posted around parks. It was suggested that signage be added to trash bins to tie the problem into water quality.</p>		
Applicable Documents		Reviewed	Obtained
BMP manual or guidance document		NONE	NONE
Contract language for MS4 operation and maintenance activities		NONE	NONE

Notes
<p><b><u>Technical Guidance and Specifications for Maintenance Staff</u></b> The City needs to improve the dissemination of technical guidance to its maintenance staff on storm water pollution prevention matters. The City should 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 prepared, the City will need to train staff on the SWP3 for the Service Facility and Police/Fire Stations and should look to adopt standards and specifications for storm water pollution prevention implementation in all its municipal operations with the potential to ease pollutants in storm water runoff (e.g., <i>prohibiting the Fire Department from washing vehicles outside and providing inlet protection at parks with baseball diamonds etc.</i>). Existing guidance manuals you may find useful to meet this goal include the <i>Rainwater and Land Development</i> manual (ODNR, 2006) and 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 at <a href="http://www.cwp.org/formmaker/Download-Form_RedirectFormPage.html">http://www.cwp.org/formmaker/Download-Form_RedirectFormPage.html</a>.</p> <p><b><u>Contracted Staff</u></b> Contracted staff includes those who apply herbicides and conduct road maintenance activities. 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. The operations of third party service providers should be reviewed periodically by the City to ensure that the required pollution controls are being implemented.</p>

**Notes**

**Public Education and Outreach**

Please be aware that the performance standards established in NPDES permit #OHQ000002 require the City to use more than 1 mechanism and target at least 5 different storm water themes or messages over the permit term. In addition, you must provide at least 5 public involvement opportunities over the permit term. Certain activities, such as stream clean-ups or storm drain stenciling projects with local boy scout troops, can count toward both requirements because they involve the public as well as educate them on storm water pollution issues.

Further, please be aware that NPDES permit #OHQ000002 requires at least one of your public education themes or messages to be targeted to the development community, i.e., contractors and developers. You may wish to work with the Lorain Soil & Water Conservation District (SWCD) or neighboring communities to sponsor a regional event to satisfy this requirement. Other possibilities to meet this requirement: (a) include a brochure on sediment and erosion control practices with building permits when they are issued, (b) provide posters with storm water do's and don'ts that can be hung on trailers at construction sites, (c) give a presentation about your erosion and sediment control requirements at a local homebuilders association meeting or (d) provide training on erosion and sediment control as part of a contractor licensing program and require attendance to maintain the license.

**Staff Education and Training**

Interview Questions		Response	
Staff trained to identify potential storm water pollution sources which would result in an illicit discharge?		NO	
Frequency:			
Materials used to train staff:		NONE	
Applicable Documents		Reviewed	Obtained
Training materials		NONE	NONE

**Notes**

**MS4 Staff Training**

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.

*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. 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.*

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.

The following materials may help with developing a training program:

Ohio EPA's Office of Compliance Assistance and Pollution Prevention (OCAPP) has provided a number

**FIELD INSPECTION WORKSHEET**  
**MS4 SWMP Evaluation**  
**MS4 Maintenance Facility Field Inspection Worksheet**

<b>Permittee:</b> City of Sheffield Lake -- Service Department	
<b>Address of facility:</b> 4750 Richelieu Ave	<b>Size of facility:</b> 1 acre
<b>Date of visit:</b> 7/30/2012	<b>Time of visit:</b> 11:00am
<b>Provide the name(s) and title(s) of permittee staff present during inspection</b>	
<b>Name</b>	<b>Title</b>
<b>Len Smith</b>	<b>Service Director</b>
<b>Evaluator Observations:</b>	
<b>SWPPP or stormwater plan</b>	
Has the maintenance facility developed a SWPPP or stormwater plan?	<b>NO</b>
Does the plan include a site map, list of pollutant sources, BMPs, and maintenance procedures?	No plan has been developed.
Does the permittee conduct and document periodic inspections of the facility?	<b>NO</b>
Are storm drains labeled and free of debris?	<b>NO</b> , the one storm drain in the gravel area between the yard waste dumpsters was filled with sediment and debris and not labeled.  A small storm drain outside of the Service Garage near a hose is used to wash off small items. Wash water cannot be released to this drain. It is recommended that this drain be capped and the hose moved indoors to prevent washing from occurring in this area in the future.
<b>Vehicle maintenance, fueling and washing</b>	
Are vehicle maintenance activities conducted in a designated place not exposed to stormwater?	<b>NO</b> , at the time of inspection some maintenance was being done on a piece of equipment outside of the Service Garage. It was indicated that this occurs frequently as not all equipment is able to fit inside of the garage. It is preferred that all maintenance be done indoors. If this is not possible, it should be done on a paved surface using drip pans to catch any leaks or drips so that pollutants will not be released to the MS4.
Are fueling stations properly designed with spill kits nearby?	No fuel station at this facility.
Are vehicles washed on-site? Is wash water discharged to the MS4 or sanitary sewer?	Vehicles are washed on site. Wash water was being discharged to the MS4. See Vehicle Washing in the Notes section below.
<b>Material storage</b>	
Are all materials that are potential stormwater contaminants stored under cover or in secondary containment?	The one storm drain in the gravel area between the yard waste dumpsters was filled with sediment and debris. This material could be from material storage piles in the area or from traffic on the gravel around the drain. It was recommended that inlet protection be installed to better keep sediment from being discharged to the MS4 and that the area be re-stoned to better filter out sediment and debris. Material piles in the area should be looked at so that better sediment controls could be added to help alleviate this issue as well.  A small ditch ran behind the facility which appeared to carry water off site to the east. This ditch was filled with

	<p>sediment and debris. Sediment had most likely come from runoff from the excavated material piles stored nearby, which were somewhat vegetated at the time of inspection. Drainage from the pipe storage area, general trash dumpster, and salt storage could possibly go this way as well. It was suggested that the excavated material piled on site be used to possibly create a vegetated earthen berm along the back of the site to prevent water from the material piles from accumulating here and to better contain any possible contaminants which could be released from the storage area in the back of the yard, such as salt residue and used oil.</p>
<p><b>Hazardous waste management</b></p>	
<p>Are all hazardous materials properly labeled and stored to prevent exposure to stormwater runoff?</p>	<p><b>NO</b>, used oil containers and other drums of material were not labeled. All containers must be labeled of their contents. Used oil containers must be labeled as "Used Oil".</p> <p>A used oil tank and two unlabeled used oil drums were stored outside, exposed to the elements, next to the salt storage area. Significant staining was seen around this area. These containers must be placed within secondary containment and the area remediated immediately.</p>
<p><b>Waste management</b></p>	
<p>Are waste bins covered with waste properly disposed in containers?</p>	<p><b>NO</b>, the general trash dumpster was not covered. Some staining on the concrete pad it was placed on indicated that leachate has been discharged in the past. This dumpster must be kept covered to prevent the accumulation of storm water and release of leachate.</p>
<p>How is landscape waste stored?</p>	<p>Landscape waste is stored in two dumpsters, one for larger material and one for smaller scraps, and picked up by Allied Waste about once per week. At the time of inspection some of this material had missed the dumpster and littered the ground. Please be sure this material is picked up and kept in the dumpsters. This material should not be kept on site for more than 7 days to prevent the material from composting on site. These containers should also be covered to prevent the accumulation of storm water and formation of leachate.</p>
<p><b>Spill response</b></p>	
<p>Does the facility have a spill response plan, and are spill kits readily available?</p>	<p><b>NO</b>, no spill response plan has been created and no spill kits were observed on site.</p>
<p><b>Employee training</b></p>	
<p>What type of stormwater training does maintenance staff receive?</p>	<p>Employee training on storm water pollution prevention practices and identifying pollution sources must be provided.</p>
<p><b>Notes or additional information:</b></p>	
<p><b><u>Interior Drains</u></b>  Interior drains were located in the Water Department and Service Department buildings. The City was unsure as to whether the drains on this site went to sanitary or storm sewer. Testing must be done to determine where these drains are connected. If these drains go to the storm sewer, they must be permanently capped or redirected to sanitary sewer immediately. The City did know that the drain in the Service Department was connected to storm sewer. At the time of inspection this drain was capped and the City was working on obtaining an oil separator to install. It was recommended that this drain still be connected to sanitary sewer once the oil water separator be installed to better ensure that</p>	

pollutants will not be released to the MS4 should regular maintenance not be carried out on the separator or should other pollutants become a factor in this drainage area.

### **Vehicle Washing**

At the time of inspection, a truck bed which had carried dirt and a vac truck were being hosed off outside. It was indicated that this is not common as the truck bed cannot be raised indoors as the roof is not high enough. Wash water is a waste water and cannot be released to the MS4. All washing activities must be done where wash water may be collected and disposed of properly, or directed to sanitary sewer. As discussed, some possible solutions would include washing inside, should you validate that indoor drains go to storm sewer, or installing an outdoor paved wash pad which would have a drain connected to sanitary sewer.

### **Street Sweepings and Catch Basin Cleanings**

Street sweepings and catch basin cleanings were stored in an uncontained pile a few feet from a storm drain. 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. Street sweepings and catch basin cleanings are a solid waste and any liquids which are decanted from such materials, as well as storm water which contacts stockpiles of this material is leachate, a wastewater which must be managed accordingly. The City must implement best management practices (BMPs) to prevent the discharge of this leachate such as installing a dewatering pad connected to sanitary sewer to store spoils on, storing spoils indoors where floor drains go to sanitary, storing spoils in a bermed area where storm water and leachate are properly managed and the pile is covered to minimize runoff, or by using a covered dumpster which is in good condition and will not allow leaks to store street sweepings and catch basin cleanings in until they can be disposed of at a licensed Municipal Solid Waste Landfill.

### **Salt Storage**

Some salt was not completely placed under the roof and some was bulging out of the side and back of the building. This building is need of repair and exposed salt is in need of better containment. All salt must be stored per the guidance provided at [http://www.epa.ohio.gov/portals/35/storm/Interim\\_Salt\\_Storage\\_Guidance.pdf](http://www.epa.ohio.gov/portals/35/storm/Interim_Salt_Storage_Guidance.pdf). Good housekeeping methods should be used to consistently clean up salt spills once they occur during the season to prevent buildup of salt around the dome.

If you must store salt outside the salt storage dome when it is delivered, please check our website at [www.epa.ohio.gov/dsw/storm/index.aspx](http://www.epa.ohio.gov/dsw/storm/index.aspx) to see if the final salt storage guidance document has been released. If released, storage practices should be in accordance with the final guidance document rather than the interim document.

### **Storm Water Pollution Prevention Plan (SWP3)**

The City of Sheffield Lake is required to develop a SWP3 for this facility. The SWP3 must contain a map indicating the location of potential pollutant sources, the control measures (best management practices) implemented to minimize or eliminate the discharge of pollutants, and the drainage systems and patterns. The City should show all catch basins, storm sewers and points of discharge for storm water from this facility and delineate drainage areas to each outfall. Refer to Part 5.1 of the Ohio EPA General NPDES Permit for Industrial Activities #OHR000005 to determine other required content of the SWP3. This permit can be downloaded from our website at [http://www.epa.ohio.gov/dsw/permits/GP\\_IndustrialStormWater.aspx](http://www.epa.ohio.gov/dsw/permits/GP_IndustrialStormWater.aspx). In developing the SWP3, the City must evaluate where all water is draining throughout the facility, including an assessment of non-storm water discharges. The goal is to certify that there are no illicit discharges from the facility to the MS4. Once created, employees must be trained on this SWP3.

**NOTE:** This facility is not a dump site. Please be sure to scrap out scrap metal and equipment when it can no longer be used.

**INSPECTION PHOTOS**  
**Service Department**  
City of Sheffield Lake  
Photos Taken: July 30, 2012



**Fig. 1 & 2:** A storm drain on the south side of the facility was filled with sediment. Inlet protection should be provided, sediment and erosion controls added, and the drain should be cleaned out.



**Fig. 3 & 4:** Catch basin and street sweeping spoils are stored uncontained right next to this storm drain.



**Fig. 5:** Some smaller yard waste items had missed being placed in the dumpster where it awaits pickup by Allied Waste.

**Fig. 6:** Washing can no longer occur over this storm drain by the Service Garage. Wash water may not be discharged to the MS4.



**Fig. 7:** This storm drain in the Service Garage has been plugged until changes can be made. The City planned to add an oil water separator, but it was suggested that they connect this drain to sanitary as well.



**Fig. 8:** Used oil must be labeled as "Used Oil".



**Fig. 9:** Maintenance on this piece of machinery was being done outside. Oils were leaking on the ground. Maintenance must be done inside or in an area where any leaks or spills such as this can be contained. Drip pans must be used should maintenance have to be done outside.



**Fig. 10:** Oil stains were evident around this piece of equipment. Leaky items such as this must not be stored outside, uncontained and exposed to the elements, and the area must be remediated immediately.



**Fig. 11:** This truck which had dirt in the bed and the vac truck were being hosed off outside at the time of inspection. Wash water is a waste water and cannot be released to the MS4.



**Fig. 12:** Wash water had accumulated in a muddy puddle and was also soaking some yard waste material which had missed the bin. This is unacceptable.



**Fig. 13:** The larger items of yard waste are stored in this dumpster uncovered.



**Fig. 14:** The general trash dumpster did not have a cover and staining indicated that leachate had been released in the past.



**Fig. 15 & 16:** This swale behind the facility took some drainage from the salt storage/pipe storage area and the excavated material pile. It was filled with sediment and debris. Measures must be taken to keep such items out of this swale. This drainage path must be included on your site map in your SWP3 as well.



**Fig. 17 & 18:** An old used oil tank and two drums of used oil were stored outside next to the salt bin. Significant staining was observed. These containers must be placed within secondary containment and the area remediated immediately.



**Fig. 19 & 20:** Some salt was spilling out of the salt storage bin. Spilled salt must be swept up and placed back in the bin and any salt not under the cover of the roof must be contained, for example, by the cover of a tarp.



**Fig. 21:** Salt spilling out of a crack in the back of the salt storage building.

## FIELD INSPECTION WORKSHEET

### MS4 SWMP Evaluation

#### MS4 Maintenance Facility Field Inspection Worksheet

<b>Permittee:</b> City of Sheffield Lake – Police and Fire Station	
<b>Address of facility:</b> 609 Harris Road	<b>Size of facility:</b> 1 acre
<b>Date of visit:</b> 7/30/2012	<b>Time of visit:</b> 11:45am
<b>Provide the name(s) and title(s) of permittee staff present during inspection</b>	
<b>Name</b>	<b>Title</b>
<i>Len Smith</i>	<i>Service Director</i>
<b>Evaluator Observations:</b>	
<b>SWPPP or stormwater plan</b>	
Has the maintenance facility developed a SWPPP or stormwater plan?	<b>NO</b>
Does the plan include a site map, list of pollutant sources, BMPs, and maintenance procedures?	No plan has been developed.
Does the permittee conduct and document periodic inspections of the facility?	<b>NO</b>
Are storm drains labeled and free of debris?	Drains are not labeled.
<b>Vehicle maintenance, fueling and washing</b>	
Are vehicle maintenance activities conducted in a designated place not exposed to stormwater?	<b>YES</b> , only minor maintenance is done on site in the garage where it was believed that drains go to sanitary sewer. Most repairs are taken to the Service Department.
Are fueling stations properly designed with spill kits nearby?	No emergency shutoff button was observed at the pump. Signage should clearly indicate where the emergency shutoff is.  A spill kit should be placed at the fuel station to allow for quick response and immediate cleanup should a spill or leak occur.
Are vehicles washed on-site? Is wash water discharged to the MS4 or sanitary sewer?	Vehicles are washed in the fire station garage, where they believe the drain may be connected to sanitary sewer. This should be verified. If connected to storm, washing activities must cease in this garage.  It was indicated that vehicles are sometimes washed outside of the Fire or Police Department. This practice must be stopped. Wash water is a waste water and may not be discharged to the MS4. All washing activities should be done at a commercial car wash or where the wash water can be discharged to sanitary sewer.
<b>Material storage</b>	
Are all materials that are potential stormwater contaminants stored under cover or in secondary containment?	<b>YES</b>
<b>Hazardous waste management</b>	
Are all hazardous materials properly labeled and stored to prevent exposure to stormwater runoff?	<b>YES</b>
<b>Waste management</b>	
Are waste bins covered with waste properly disposed in containers?	<b>YES</b>
How is landscape waste stored?	N/A

<b>Spill response</b>	
Does the facility have a spill response plan, and are spill kits readily available?	YES
<b>Employee training</b>	
What type of stormwater training does maintenance staff receive?	Employee training on storm water pollution prevention practices and identifying pollution sources must be provided.
<b>Notes or additional information:</b>	
<p><b>Interior Drains</b> Interior drains were located in the Police bay and Fire Station garage. The City was unsure as to whether the drains on this site went to sanitary or storm sewer. Testing must be done to determine where these drains are connected. If these drains go to the storm sewer, they must be permanently capped or redirected to sanitary sewer immediately.</p> <p><b>Storm Water Pollution Prevention Plan (SWP3)</b> The City of Sheffield Lake is required to develop a SWP3 for this facility since vehicle washing and minor vehicle maintenance is done at this facility. The SWP3 must contain a map indicating the location of potential pollutant sources, the control measures (best management practices) implemented to minimize or eliminate the discharge of pollutants, and the drainage systems and patterns. The City should show all catch basins, storm sewers and points of discharge for storm water from this facility and delineate drainage areas to each outfall. Refer to Part 5.1 of the Ohio EPA General NPDES Permit for Industrial Activities #OHR000005 to determine other required content of the SWP3. This permit can be downloaded from our website at <a href="http://www.epa.ohio.gov/dsw/permits/GP_IndustrialStormWater.aspx">http://www.epa.ohio.gov/dsw/permits/GP_IndustrialStormWater.aspx</a>. In developing the SWP3, the City must evaluate where all water is draining throughout the facility, including an assessment of non-storm water discharges. The goal is to certify that there are no illicit discharges from the facility to the MS4. Once created, employees must be trained on this SWP3.</p>	

**INSPECTION PHOTOS**  
**Police and Fire Station**  
City of Sheffield Lake  
Photos Taken: July 30, 2012



**Fig. 1:** The fueling station at the Police/Fire Station. No emergency shutoff sign was observed and no spill kit was placed nearby.