



3GQ0005720090904

CUYAHOGA MAPLE HEIGHTS CITY OF MAPLE HEIGHTS 3GQ00057 2009/09/04 BOGOEVSKI,
DANIEL

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State of Ohio Environmental Protection Agency

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

September 4, 2009

RE: CUYAHOGA COUNTY
CUYAHOGA RIVER WATERSHED
CITY OF MAPLE HEIGHTS
MUNICIPAL STORM WATER PROGRAM
AUDIT FINDINGS – MCM #6

Mr. Edward J. Hren
City Engineer
City of Maple Heights
22999 Forbes Road, Suite B
Cleveland, OH 44146

Dear Mr. Hren:

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. 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) #3GQ00057*BG and Ohio Administrative Code 3745-39.

On July 29, 2009, the Ohio EPA met with you and other representatives of the City of Maple Heights to determine compliance with the NPDES permit and the Storm Water Management Plan (SWMP) submitted by the City in March 2003. In performing this audit, Ohio EPA implemented the Municipal Storm Water Program Evaluation Guide developed by the United States Environmental Protection Agency.

Attached are the Municipal Storm Water Program Evaluation and Field Inspection Worksheet(s) 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 provide controls to reduce or eliminate the discharge of pollutants from all municipal operations.** This is a violation of Part III.B.6.d.iii.2 of the NPDES Permit #OHQ000002 and Ohio Revised Code (ORC) 6111.04 and 6111.07. The City of Maple Heights is not authorized to discharge leachate generated by composting, street sweeping and catch basin cleaning operations. The current design of the storage areas where this material is stockpiled does not prevent the discharge of leachate. Leachate is also

Mr. Edward J. Hren
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generated by the mulch/soil stockpile located at the Service Garage. Further, the improper disposal of tires and other solid waste at the municipal service garage and compost facility allows leachate to discharge directly to a water of the state and is a violation of ORC 3734.03 and Ohio Administrative Code 3745-27-05(C) in addition to ORC 6111.04. BMPs must be employed to eliminate the discharge of leachate from municipal operations.

Further, we noted issues regarding hazardous waste management at the Service Garage. Issues included improper (no) labeling of used oil containers and improper storage. This matter will be referred to our Division of Hazardous Waste Management for follow-up.

- **Failure to specifically list the municipal operations that are impacted by the operation and maintenance program.** This is a violation of Part III.B.6.d.i of the Ohio EPA General Storm Water NPDES Permit for Small MS4s #OHQ000002. The Storm Water Management Plan (SWMP) submitted in 2003 with your MS4 permit application was required to identify all municipal operations impacted by the MS4 program. The City of Maple Heights was unable to produce an inventory of municipal operations during this audit. Please amend the SWMP to include this information.
- **Failure to develop, implement and enforce a program to detect and eliminate illicit discharges.** This is a violation of Part III.B.3.a and III.B.3.i.iv of the Ohio EPA General Storm Water NPDES Permit for Small MS4s #OHQ000002. Although the City has been working in conjunction with the Cuyahoga County Board of Health to identify sources of illicit discharge, the City has not developed plans to eliminate the identified sources. The City must have a plan to address all identified illicit discharges to the MS4. During the audit, the City identified 3 known cross connections to the MS4. Please provide me with your plan to address these known sources of illicit discharge, including timeframes to eliminate them.

Further, please be aware that the City of Maple Heights is required to perform dry weather screening on 100% of its outfalls no later than June 2014. A guidance manual for illicit discharge detection is readily available from the Cuyahoga County Board of Health Web site at www.ccbh.net.

- **Failure to implement an employee training program to reduce the discharge of pollutants from municipal operations.** This is a violation of Part 3.2.6.1.2 of the NPDES permit #OHQ000001 and ORC 6111.04 and 6111.07. The first generation of the MS4 permit required the City of Maple Heights to implement an

employee training program on storm water pollution prevention for municipal operations. This training program was to be developed by April 1, 2008, i.e., the end of the first permit term. The City of Maple Heights failed to implement a program by this date. However, since that date, the City has developed a training program and it was presented to staff on June 8, 2009. Thus, this violation has been corrected. Please be aware that the current NPDES permit (#OHQ000002) requires the City to provide such training at least once per year.

Deficiencies:

- The Storm Water Pollution Prevention Plan (SWP3) for the Service Garage is not being implemented. Further, the City must investigate the drainage system associated with the floor drains inside the Service Garage buildings. Maintenance and vehicle wash activities occur within these structures, but the City was not sure if these drains were connected to storm or sanitary sewers. When developing the SWP3 for any municipal operation, you must consider interior floor drains that are connected to the MS4.
- The City does not conduct regular inspections of storm water BMPs at the Service Garage. Please be aware that an inspection must be conducted at least once per year during the next permit cycle in accordance with the City's SWP3 for this facility. A record of this inspection must be kept on file along with the SWP3. The site map for the facility could also use some improvements. Please reference Ohio EPA General Storm Water NPDES Permit for Industrial Activities #OHR000004 Part IV. D.2.a.1 for more information on the development of this site map.
- The City must develop and implement an SWP3 for the Composting Facility no later than June 3, 2011. However, remedial action to correct open dumping issues and leachate discharge from this facility must be taken immediately.
- The City has not developed an efficient way to track the amount of salt used. More detailed tracking may allow the City to better identify inefficiencies in salt application. The City will need to quantify the type and amount and the materials used for deicing activities under NPDES Permit #OHQ000002 beginning with the 2009-2010 winter season.
- The City needs to assure contract language/agreements specify that storm water BMPs must be implemented by a third party, when said third party is relied upon to enact a BMP. Please be sure to add this language to any future requests for proposal or contracts you sign with third party service providers whose activities can create storm water pollution.

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- The City, as indicated by the State of Ohio Department of Agriculture, is classified as a commercial applicator and as such needs to use a licensed applicator when applying pesticides and herbicides. The licensed applicator must be present during application or train staff and be within 2 hours distance when products are applied. Otherwise, the City should not be applying these materials.
- The City has not provided any storm water pollution prevention guidance materials to field staff that they can take out with them in the field. By making materials available to staff at the field level, implementation of storm water BMPs should improve.

Please review my comments and provide me with a letter of response indicating the actions you will take to address my concerns. **Your response should be received no later than October 5, 2009.** 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,



Dan Bogoevski
District Engineer
Division of Surface Water

DB/mt

cc: Jeffrey Lansky, Mayor
Ed Urbanek, Service Director
Dane Tussell, Cuyahoga County Board of Health
Colum McKenna, Ohio EPA, DSIWM, NEDO
Karen Nesbit, Ohio EPA, DHWM, NEDO

Municipal Storm Water Program Evaluation

MS4 Maintenance Component Worksheet

Date of Evaluation July 29, 2009	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.
Evaluator Name, Title Kenneth Safranek, Ohio EPA Assistant to the District Engineer	
MS4 Permittee City of Maple Heights	

Staff Interviewed		
Name	Department/Agency	Phone Number/Email
Chris Hartman Stormwater Technician	Chagrin Valley Engineering (CVE)	440.439.1999
Stacey M. Yanetta Stormwater Technician	CVE	440.439.1999
Ed Urbanek Service Director	City of Maple Heights	216.587.9013
Ken Selva Supervisor	City of Maple Heights	
Tim Kosmata Supervisor	City of Maple Heights	

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 current outfall and receiving water map is used by the Cuyahoga County Board of Health as a reference to determine sources of

MS4 Mapping			
Interview Questions	Response		
	illicit discharge. It is also used for follow up to any citizens' complaints.		
Applicable Documents		Reviewed	Obtained
Map(s) of MS4 system		YES	YES

Notes
<p>MS4 Map</p> <p>The Cuyahoga County Board of Health has mapped all the outfalls and receiving waters in the City of Maple Heights. To comply with the new permit requirements, a GIS technician from the Chagrin Valley Engineering company will be compiling all previously recorded data into shape files. The permit in effect from 2009-2014 requires that all catch basins and publicly-owned storm sewers, ditches and storm water management facilities be mapped. In addition, 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. This must be completed by 2014.</p>

Catch Basin Cleaning			
Interview Question	Response		
Schedule established for inspections and cleaning?	NO		
Is cleaning and maintenance of catch basins tracked:	YES		
How are spoils materials disposed of?	<p>The vacuum truck has water from the material pumped to a sanitary sewer line. The solid material is stockpiled at the Maple Heights Composting Facility and mixed with street sweepings and construction debris.</p> <p>This constitutes improper disposal of solid waste. The City of Maple Heights is engaging in the practice of open dumping. You must cease this practice immediately.</p>		
Are storm drain pipes inspected?	NO		
Proactive or only in response to blockage event?	Storm pipes are only inspected if there is a blockage event.		
Applicable Documents		Reviewed	Obtained
List of active municipal construction projects		NO	NO

Notes
<p>Catch Basin Cleanings:</p> <p>Every catch basin is cleaned at least once a year with the City's vactor truck. There is no official schedule of these cleanings besides recording which catch basin has been cleaned. A map is located at the service garage where crews can mark the streets where catch basins have been cleaned. Several catch basins are cleaned more frequently that lie in shallower areas of the city. Debris will be cleaned by hand from grates if there is a large storm event. Any further cleanings will be prompted by</p>

blockage events or complaints. A more proactive cleaning schedule could be implemented to improve your MS4 program and reduce pollutants.

Currently, materials collected from catch basin cleanings are initially drained to a sanitary sewer from the vactor truck. This prevents a large spill when the truck is opened. The material is deposited at the Maple Heights Compost Facility where it is mixed in with street sweepings and construction debris. A mound of this material has accumulated over several years of dumping. This practice is unacceptable and must be corrected immediately. The MS4 permit does not authorize the City to discharge leachate from its operations. The design of the spoils storage area is unacceptable and results in an unauthorized discharge of leachate. Further, using solid waste and construction and demolition debris as fill material is a violation of Ohio Revised Code 3734.03 and Ohio Administrative Code 3745-27-05(C). This constitutes open dumping. This pile must be removed. This matter will be referred to the Cuyahoga County Board of Health and the Ohio EPA Division of Solid and Infectious Waste Management for follow-up.

MS4 System Repair and Maintenance

The storm pipes have not been inspected except for blockage events or complaints. The City does have a small camera that they use to inspect catch basins after they have cleaned them. A proactive inspection of the storm pipes should be implemented.

Municipal Construction Projects

The City of Maple Heights does not have any NPDES permitted construction projects at this time. A road reconstruction project will begin shortly on Maple Heights Boulevard. An internal SWP3 will be developed for this project along with inspections by the City's Engineer. Please be sure to obtain coverage under the Ohio EPA General Storm Water NPDES Permit for Construction Activities #OHC000003 if one or more acre of land is disturbed by this planned construction activity.

Stormwater Management Facilities Operation and Maintenance	
Interview Questions	Response
Public facilities inspected? Frequency:	NO There is only one publicly-owned facility and it is an old regional detention basin.
Private facilities inspected? Frequency:	NO
Checklist used for inspections?	YES Please clarify your intent. Since facilities are not currently inspected, does the City of Maple Heights intend to use this checklist to begin inspecting public and private storm water management facilities?
Have maintenance standards and procedures been established for these facilities?	NO

Stormwater Management Facilities Operation and Maintenance		
Interview Questions	Response	
How is maintenance prioritized? Is data evaluated to target maintenance resources?	NO	
Applicable Documents		Reviewed
Inspection checklist		At CVE
		Obtained
		NO

Notes
<p>Stormwater Management Facilities</p> <p>There is only one public facility in City which is a large regional detention basin in Stafford Park. This basin has not been assessed for retrofit or inspected. A newly developed private facility is being implemented in a reconstruction project for R.L Lipton Distribution but is not finished yet. The City should review the long-term maintenance program established for this BMP. In addition the City should look for retrofit opportunities since it is mostly built out. This will be the primary means of implementing post-construction BMPs within your community.</p>

Road Maintenance	
Interview Questions	Response
Streets regularly swept?	YES
Frequency:	Roads are swept at least two times a year and some are swept more frequently depending on collection of debris.
Frequency based on water quality factors (e.g. proximity to streams)?	YES
How are spoils disposed of?	Low lying areas and main streets are targeted where pollutant loads are expected to be higher. Spoils are stockpiled with catch basin debris and construction debris. This storage is unacceptable and will need remediation. Street sweepings are a solid waste. See notes under Catch Basin Cleaning section of this worksheet.
Does the community collect road kill?	YES
What do they do with the carcasses?	Carcasses are placed in dumpsters and taken to a landfill.
Does the community have a leaf collection program?	YES
What do they do with the collected leaves?	The City collects leaves and takes them to its Class IV licensed composting facility.
BMPs used during road maintenance activities?	YES
Describe types of road maintenance conducted by community staff and the BMPs used	The city has a concrete crew that will repair catch basins, fix pot holes, complete curb repair, and any other cement work. Road maintenance crews will use Dandy Bags for

Road Maintenance		
Interview Questions	Response	
	storm drain inlet protection and concrete washout pits to contain washwater.	
BMP guidance available to field staff?	NO	
Deicers used by MS4?	YES	
Type and amount of deicer and additives tracked?	The City of Maple Heights uses road salt (NaCl) for their deicing operation.	
What measures are being taken to minimize the application of deicers?	There was a long discussion about sensible salting practices and setting salt minimization goals. Currently the City employs spot salting, salting only hills, curves, and intersections but does not abide by strict guidelines.	
Sand/salt swept up after application?	YES	
How soon?	Salt is swept up after a storm event.	
Applicable Documents	Reviewed	Obtained
BMP guidance	Does Not Exist	NO
Street sweeping records	YES	YES
Deicer application records	YES	YES

Notes
<p>Street Sweeping</p> <p>The city has a vactor truck that they use to sweep streets. Immediately after winter, streets are swept to remove collected debris from snow piles. Several streets, including main streets and low lying areas, are swept more frequently as they accumulate additional material. Industrial areas should be looked at for frequent sweepings to limit stormwater pollution. Street sweeping logs are kept at the service garage in handwritten records. It is unknown how much material is cleaned every year. <i>The City should always track the amount of catch basin debris and street sweepings collected every year. This data should be included in your MS4 Annual Report.</i></p>
<p>Leaf Collection Program</p> <p>Leaves are composted at the Maple Heights Composting Facility on 14580 Schreiber Road and given back to citizens upon their request. The area will need to be assessed for stormwater impacts. The pile is located within 100 feet of a stream. A small berm built of asphalt grindings has been constructed, but leachate is still being discharged at this site due to lack of BMP implementation. The City of Maple Heights is not authorized to discharge leachate from composting operations. Additional BMPs must be implemented to prevent leachate discharge.</p>
<p>Salt Application</p> <p>Practices that minimize the application of salt should be adopted and made official through staff training and public outreach. Because there are no effective treatment systems to remove salt once it is introduced to the MS4, practices must focus on source control to minimize the amount that enters the MS4. During the interview, it was thought that setting salt minimization goals would be frivolous or unattainable. Please review the sensible salting practices encouraged by ODOT and determine official</p>

Notes
actions that would be attainable and practical for the City to adopt. Salt is tracked through purchase orders only. <i>It might be beneficial to track salt usage per event to better understand its usage and develop minimization techniques.</i>
<u>BMPs Available to Staff During Road Maintenance</u>
To improve your road maintenance BMPs any training material can be developed into field handbooks. These handbooks can improve the implementation of BMPs used during maintenance.

Flood Management			
Interview Questions	Response		
Inventory of flood management structures completed?	NO		
Structures been assessed for stormwater retrofit?	NO		
New structures include water quality considerations?	YES		
Applicable Documents		Reviewed	Obtained
Inventory		Does Not Exist	No

Notes
<u>Inventory</u>
There is only one flood management structure located in Stafford Park. It is the regional detention basin and it has not been looked at for retrofit opportunities. An inventory of public/private-owned stormwater management facilities built since April 21, 2003 is part of the new mapping requirements of NPDES permit #OHQ000002. This inventory must be completed by the end of your next permit term, i.e., June 2014.
<u>Water Quality/ Retrofitting</u>
The city requires water quality to be considered for all new projects, and have already incorporated water quality units such as bioretention cells at the new service garage. The City should also be evaluating existing infrastructure for water quality retrofitting such as tree boxes that act as sand filters, permeable pavement or converting the outlets on existing detention and retention basins so that they provided extended detention of the Water Quality Volume (WQv). As a community that is mostly built-out, retrofitting will be your primary means to implement post-construction BMPs.

Facilities Operation & Maintenance		
Interview Questions	Response	
Inventory of MS4 facilities complete (i.e. facilities owned and operated by the MS4)?	NO	
<u>Types of facilities included</u>		
<i>These need their own NPDES storm water permit for industrial activities, if there is a discharge of runoff from these operations:</i>		
	<u>Response</u>	<u>SWP3 Developed?</u>
• Landfills Type: _____	NO	N/A since do not operate
• Solid Waste Transfer Stations	NO	N/A since do not operate
• Airports	NO	N/A since do not operate
• Shipping Ports	NO	N/A since do not operate

Facilities Operation & Maintenance

Interview Questions	Response	
<ul style="list-style-type: none"> • Steam Electric Power Plants • Wastewater Treatment Plants ≥ 1 MGD 	NO	N/A since do not operate
	NO	N/A since do not operate
<i>These do not need their own permit but do need an SWP3:</i>	<u>Response</u>	<u>SWP3 Developed?</u>
<ul style="list-style-type: none"> • Impound Lots 	NO	N/A since do not operate
<ul style="list-style-type: none"> • Composting Operations <ul style="list-style-type: none"> ✓ No discharge of leachate permitted 	YES	NO
<ul style="list-style-type: none"> • Leaf Collection Yards <ul style="list-style-type: none"> ✓ No discharge of leafate permitted 	NO	Leaf storage is at composting facility. Include in that SWP3.
<ul style="list-style-type: none"> • Maintenance Yards <ul style="list-style-type: none"> ➤ How many do they operate? <u> 1 </u> ➤ List facility names/locations: <p align="center">Maple Heights Service Garage 5501 Dunham Rd</p>	YES	YES
<ul style="list-style-type: none"> • Bus Terminals 	NO	N/A since do not operate
<ul style="list-style-type: none"> • Vehicle Maintenance Garages <ul style="list-style-type: none"> ➤ How many do they operate? ➤ List facility name/locations: <p align="center">5501 Dunham Rd</p>	YES	YES. Included in maintenance facility SWP3.
<i>These do not need a permit or SWP3 but BMPs should be implemented at these operations:</i>	<u>Response</u>	<u>SWP3 Developed?</u>
<ul style="list-style-type: none"> • Parks and Open Space (include cemeteries) <ul style="list-style-type: none"> ➤ How many in UA? <u> 5 </u> ➤ List facility names/locations: <p>Stafford Park: Pool, pavilion, sport fields, rain garden Dunham: Pavilion, small playground, tennis court Beneff Park: Open space Koon Park: Playground Northwood Park: Playground</p> <p>No cemetery</p>	YES	N/A
<ul style="list-style-type: none"> • Parking Lots <ul style="list-style-type: none"> ➤ How many do they operate? <u> 3 </u> ➤ List facility name/locations: 	YES	N/A

Facilities Operation & Maintenance	
Interview Questions	Response
Facilities inspected? Frequency:	NO The CVE has developed a SWP3 for Maple Heights and they will perform one inspection per year and the Supervisors of the Service Garage (Ken Selva and Tim Kosmata) will perform a separate inspection once per year. Please provide a date by when inspection will occur with your response.
Checklist used?	YES A checklist was developed and will be used to perform inspections.
Staff which perform the inspections (department or agency):	Ken Selva and Tim Kosmata
Is there a designated stormwater contact person for each facility	Ed Urbanek
Describe enforcement procedures used to address noncompliance on a MS4-owned facility, i.e., what disciplinary measures are taken against those that do not implement standard operating procedures?:	Union staffs are tied to a labor agreement. Disciplinary actions are outlined in the labor manual. This system has not been carried out for any issue concerning stormwater or other environmental compliance issue.
Parking lots owned/operated by the permittee swept? Frequency?	YES Stafford Park lot swept after the Winter season. Other lots are swept before city parades.
Do you have any combined sewer systems? If yes, do you have any combined sewer overflows? ➤ How many? _____ ➤ Do you track frequency and volume? Are you aware of any illicit cross connections between your sanitary sewer and MS4? If so, what is your plan to eliminate this illicit discharge?	NO N/A NO The Cuyahoga Co. Board of Health is in the process of inspecting and investigating 3 sites for cross connections, but there is no real plan set for the elimination. A plan to identify illicit discharges and eliminate them must be developed and implemented in order to comply with your NPDES permit.

Facilities Operation & Maintenance			
Interview Questions	Response		
	Please provide me with a summary of CCBH's findings on these 3 cross connections and the actions taken by the City or plan with timeframes to eliminate them.		
Have you investigated the extent of infiltration and inflow into storm sewer system?	NO		
What methods have been used to conduct this investigation?	No investigation has taken place. The city needs to begin efforts to start investigating infiltration and inflow as well as cross connections.		
What are your plans to repair and eliminate this source of illicit discharge?			
Sewer spill and cleanup procedures in place?	YES		
Applicable Documents		Reviewed	Obtained
Facility inventory		Does not exist	NO
Facility SWPPP		YES	NO

Notes
<p><u>Facility Inventory</u></p> <p>The City has not compiled an inventory of all MS4 facilities. This inventory was required under Part 3.2.6.2.1 of the NPDES permit #OHQ000001 and should be in the City's SWMP. The inventory should be kept up to date in the SWMP and easily accessed.</p> <p>Further, please note that an SWP3 will need to be developed and implemented for:</p> <p>City of Maple Heights Composting Facility 14580 Schreiber Road Maple Hts., OH</p> <p>The City is required to develop and implement the SWP3 no later than June 3, 2011. NOTE: Remedial action to address open dumping issues at this facility must be taken immediately. The SWP3 pertains to ordinary operations of the compost facility.</p> <p><u>Composting Operation</u></p> <p>An unpermitted discharge of leachate was noted from a compost pile entering a wooded area with a stream running less than 200 feet from the site. BMPs need to be implemented to prevent discharges of wastewater such as leachate. Most composting facilities will segregate leachate from storm water runoff and collect it for reuse using berms around compost piles. Compost piles are placed in windrows. Leachate is collected and recirculated onto compost piles to aid in the composting process. Excess leachate is directed to sanitary sewer or is stored in tanks and taken off-site for proper disposal.</p> <p><u>Service Garage</u></p> <p>The City of Maple Heights has already developed a SWP3 for their Service Garage; identifying a facility contact person, a facility inventory, a list of BMPs and potential pollutants, a spill response plan, and an inspection checklist. The city has developed a site map, but the map does not indicate all drainage</p>

Notes
areas and pollutions sources. Please reference Ohio EPA General Storm Water NPDES Permit for Industrial Activities #OHR000004 Part IV. D.2.a.1 for more information on the development of this site map . The SWP3 must be developed and implemented within 2 years, i.e., by June 3, 2011.

Pesticides, Herbicides & Fertilizers			
Interview Questions	Response		
Certified applicators used?	NO		
Integrated Pest Management (IPM) practices used?	NO		
Storage location of pesticides, herbicides, and fertilizers:	Weed & Feed is purchased as needed and not stored.		
BMPs used during application:	Common sense practices are executed during application, such as looking at the weather before applying.		
Fertilizer/pesticide application plan utilized?	NO		
Applicable Documents		Reviewed	Obtained
Fertilizer/pesticide application plan		NO	NO

Notes
<p>Application</p> <p>The City, as indicated by the State of Ohio Department of Agriculture, is classified as a commercial applicator. The application of pesticides and herbicides must be done by or under the direction of a certified applicator. This applicator can be no more than 2 hours away when products are applied, otherwise no application is to occur.</p> <p>A record of pesticide, herbicide and fertilizer application should be maintained and may help you identify ways to reduce their use. Also, be sure to implement dry clean-up methods to address spills and overspray onto paved surfaces. Employee training on proper application and spill response is encouraged.</p>

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
BMP guidance materials provided to contracted staff?	NO
Requirement to consider stormwater impacts and utilize appropriate BMPs in contracts?	YES
Materials used to educate the public regarding stormwater impacts on MS4 property (if applicable, i.e. public spaces):	Pet waste: No pets are permitted in the city parks. Litter reduction: The trash cans in the parks are emptied every

Standards, BMPs, & Outreach		
Interview Questions	Response	
	morning, although there is no public outreach on litter reduction.	
Applicable Documents	Reviewed	Obtained
BMP manual or guidance document	NO	NO
Contract language for MS4 operation and maintenance activities	NO	NO

Notes
<p>BMP Guidance</p> <p>Currently, there are no resources available to the municipal staff on Storm Water BMPs. The City was informed on how to develop material that will allow staff to understand their contribution to storm water pollution and what methods they should use to limit the pollutants. This could include binders or flip books placed in maintenance vehicles or in a locker room for easy reference. For more ideas, please consult the Rainwater and Land Development manual (ODNR, 2006). We also recommend you review 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.</p> <p>Contracted Services and Guidance</p> <p>The city contracts out all street repaving, any large scale projects, crack sealing, stripping, and resurfacing. The submittal of a SWP3 with any project contracted out is required by the City of Maple Heights. If this is only a matter of policy rather than required by contract, please see next paragraph.</p> <p>It is the city's obligation to assure contract language/agreements specify that storm water BMPs must be implemented by the third party. Please be sure to add this language to any future requests for proposal or contracts you sign with third party service providers whose activities can create storm water pollution. The contractor should be held accountable to meet standards established by the City. Periodic inspection of their operations in your community is also suggested.</p> <p>Public Education and Outreach</p> <p>Please be aware that the performance standards established in NPDES permit #OHQ000002, i.e., the permit in effect for the next 5-year term, requires 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.</p>

Staff Education and Training	
Interview Questions	Response
Staff trained to identify potential storm water pollution sources which would result in an illicit discharge?	YES, but only started in 2009
Frequency:	The City failed to provide training for the first permit term between 2003 and 2008. CVE developed a power point for the year 2009 for good housekeeping and pollution prevention training. The power point was presented on June 8, 2009 and an attendance sheet was provided to the EPA.

Staff Education and Training		
Interview Questions	Response	
Materials used to train staff:	Power Point presentation developed by CVE.	
Applicable Documents	Reviewed	Obtained
Training materials	YES	YES

Notes
<p>The Ohio EPA General Stormwater NPDES Permit #OHQ000002 requires the City of Wadsworth to train maintenance and other field staff on storm water pollution prevention at least <i>once every year</i>.</p> <p>The following materials may help with the training development: Ohio EPA's Office of Compliance Assistance and Pollution Prevention (OCAPP) as well as ODOT's Local Technical Assistance Program (LTAP) have provided a number of training opportunities on pollution prevention and good housekeeping for municipal operations over the past several years. Materials presented at OCAPP's session are archived on the internet at: www.epa.state.oh.us/ocapp/storm_water.html and can be used to provide training to your staff. In addition, Cleveland State University through the NE Ohio Storm Water Training Council is planning several pollution prevention workshops in Spring 2010. Please contact Daila Shimek at (216) 687-92221 or Laura Travers at (216) 201-2001 at the CCBH for further information. The Center for Watershed Protection also has information available for training in their Manual #9: Municipal Pollution Prevention/Good Housekeeping Practices.</p>

**MS4 SWMP Evaluation
MS4 Maintenance Facility Field Inspection Worksheet**

Permittee: City of Maple Heights	
Address of facility: 5501 Dunham Rd., Maple Hts. Service Garage	Size of facility: Unknown
Date of visit: July 29, 2009	Time of visit: 11:00am
Provide the name(s) and title(s) of permittee staff present during inspection	
Name	Title
<i>Chris Hartman</i>	<i>Stormwater Technician</i>
<i>Stacey M. Yanetta</i>	<i>Stormwater Technician</i>
<i>Ed Urbanek</i>	<i>Service Director</i>
<i>Ken Selva</i>	<i>Supervisor</i>
<i>Tim Kosmata</i>	<i>Supervisor</i>
Evaluator Observations:	
SWPPP or stormwater plan	
Has the maintenance facility developed a SWPPP or stormwater plan?	YES. A SWP3 for this facility has been developed but implementation is lacking.
Does the plan include a site map, list of pollutant sources, BMPs, and maintenance procedures?	There is a site map for the Service Garage, but the map needs to be updated to show the drainage of the area, list pollutant sources and BMPs as well as maintenance procedures.
Does the permittee conduct and document periodic inspections of the facility?	A checklist has been developed but no formal inspections of stormwater BMPs have occurred at this time.
Are storm drains labeled and free of debris?	No. Grates are not labeled and some basins need maintenance and inlet protection.
Vehicle maintenance, fueling and washing	
Are vehicle maintenance activities conducted in a designated place not exposed to stormwater?	All vehicle maintenance occurs inside the service garage. The city is unsure of whether the floor drains lead to sanitary or storm. This investigation should have occurred at the time the SWP3 was developed.
Are fueling stations properly designed with spill kits nearby?	The fueling station is equipped with a spill kit, but the emergency shut-off button is located inside the building, too far from view.
Are vehicles washed on-site? Is wash water discharged to the MS4 or sanitary sewer?	All vehicles are washed in the wash bay area inside the service garage. Unsure as to where the drains lead.
Material storage	
Are all materials that are potential stormwater contaminants stored under cover or in secondary containment?	Materials such as tires, recycled paint, empty drums, equipment, cars, stockpiles of fines, mulch and soils piles, and plow attachments need to be cover or contained in some way to eliminate polluted stormwater runoff.
Hazardous waste management	
Are all hazardous materials properly labeled and stored to prevent exposure to stormwater runoff?	In the Service Garage, all drums are on secondary containment in a bermed area where there are no floor drains. In the Cold Storage Building, waste oil and other drums are leaking. These drums need to be on secondary containment trays or some other form of containment. All waste oil drums should also be labeled "Used Oil."
Waste management	

Are waste bins covered with waste properly disposed in containers?	All dumpsters need to be lidded and regularly inspected for leaks.
How is landscape waste stored?	Mulched.
Spill response	
Does the facility have a spill response plan, and are spill kits readily available?	A spill kit was present within the service garage. Because the City is unsure of where the floor drains lead, a spill kit should be in the Cold Storage building as well.
Employee training	
What type of stormwater training does maintenance staff receive?	See Interview.

Notes or additional information:

Interior Floor Drains

The City must investigate the floor drains located inside the Service Garage and Cold Storage Building to determine if they are connected to storm sewers. Vehicle washing and maintenance occurs inside the service garage, and hazardous materials/ chemicals are stored in both facilities. Hazardous chemicals and materials should be stored in secondary containment to control spills and must be labeled appropriately.

If floor drains are connected to storm sewers or have a direct discharge to a water of the state, they should be capped to eliminate this point of exposure. If drainage inside the building must be maintained, floor drains should be connected to sanitary sewers. The operator of the wastewater treatment plant will likely require the installation of a pretreatment system if this option is chosen. Please consult with NEORS D regarding this matter.

Please note that the floor drains in the wash bay must be connected to sanitary sewers if you intend to keep washing municipal vehicles at this location. If this is not feasible, options include taking vehicles to a commercial carwash facility, washing vehicles on a collection pad so as to capture wastewater so that it can be taken off-site for proper disposal, or contracting with a nearby community so as to share their carwash facility.

Outside Catch Basins

Many of the storm drains throughout the lot need maintenance immediately, and once cleaned, inlet protection or catch basin inserts should be added to those basins that are more susceptible to pollutant and sediment filled runoff.

Fueling Station

The fueling station is equipped with a spill kit filled with oil dry. The pumping stations are showing signs of leakage, and the city should investigate this problem and make necessary repairs immediately. Clean-up all spills. The emergency shut-off for the station is located inside the service garage and out of view. There needs to be some sort of clear sign showing employees where this button can be found in case of an emergency.

Outside Storage

The pile of tires is a health concern, and the city needs to find a way to store the tires undercover or have the tires removed from the ground more often. This matter will be referred to the Cuyahoga County Board of Health (CCBH) for follow-up.

The empty drums stored outside contain residual liquids and need to be rinsed and capped.

There are over 10 old cars parked on the lot of the service garage that have not been drained of fluids. The stains around the vehicles indicate leaking. These stains need to be cleaned up (not rinsed down the storm drain) and the vehicles need to be drained of all fluids. Salvage parts from the vehicles and dispose of what cannot be reused at a licensed junkyard. The Service Garage is not a junkyard.

Materials and equipment stored outside should be kept to a minimum, and anything containing liquid (such as the plow attachments) should be drained before stored outside. Relocate these items indoors if possible. You may also place drip pads or trays to collect leaks from plow attachments, however they should be stored under cover to keep storm water from causing unintended discharges from these control measures. Tarps may be used for this purpose. Scrap

metal and recyclables should be disposed of as soon as possible. Items such as recycled paint need to be kept out of the weather and in containment away from run-on.

Sediment controls are needed around stockpiles of fines and other erodible construction materials to prevent runoff from entering the storm drains.

Mulch and soil piles were found throughout the lot, and a noticeable amount of leachate was observed to discharge from these piles. The city is not permitted to discharge any such leachate, and the piles need to be moved to an area where the leachate is collected and managed properly.

Dumpsters

All dumpsters need to be completely lidded so that the materials inside are covered from stormwater. The dumpsters should also be inspected regularly for leaks and, if leaking, replaced or fixed as necessary.

Animal Warden

The dog kennel pads are rinsed and washed off in the grassy area in the back of the facility. This process occurs very close to a storm drain in the yard allowing the discharge of fecal coliform to the MS4. All animal excretions should be taken to a dumpster and rinse activities must be directed to the sanitary system.

City of Maple Heights MS4 Program Audit

Service Garage Photos

Location: 5501 Dunham Road
Date Photos Taken: July 29, 2009
Taken by: Cory Harris and David Rischar, DSW-NEDO



Fig 1(LEFT): Open pile of tires on the service garage lot is not being managed properly. Tires should be stored in containers and be covered to prevent the accumulation of stagnant water. Unneeded tires should be removed and disposed of properly. Please consult with the Cuyahoga County Board of Health for proper disposal procedures.

Fig 2(RIGHT): All dumpsters need to be lidded and inspected for leaks. This dumpster showed signs of leaking.



Fig 3(LEFT): Recycled paint and old leaking drums need to be stored undercover and within containment and be disposed of properly if not of use.

Fig 4(RIGHT): Empty drum and pallet storage area.



Fig 5(LEFT): The junk cars on the lot showed major signs of leaking. These vehicles need to be drained of all fluids before stored outside. Salvage useable parts and junk the remainder of these vehicles so as to avoid the accumulation of materials that belongs in a junkyard rather than the service garage.

Fig 6(RIGHT): More stains from the leaking vehicles.



Fig 7(LEFT): Sediment and other debris from the truck have settled on and in the storm drain. This catch basin needs to be cleaned and equipped with the proper protection.



Fig 8(RIGHT): A close up view of the clogged catch basin.



Fig 9(LEFT): The plow attachments stored outside are leaking hydraulic fluid. These need to be drained of all fluids before stored outside during the off season or place drip pans and absorbents to collect fluids. Regardless, they should be tarped or stored under cover.



Fig 10(RIGHT): A spill on the service garage lot that needs to be cleaned/ soaked up to avoid the pollutant from entering the MS4. Proper implementation of the SWP3 includes spill response.



Fig 11(LEFT): The fueling station is showing sign of leaking. This problem should be addressed immediately and the spill should be cleaned up.



Fig 12(RIGHT): The spill kit is located inside the old bus stop shelter next to the fueling station.



Fig 13(LEFT): A pile of soils and mulch found on the lot of the service garage that is discharging leachate.



Fig 14(RIGHT): Close-up view of leachate generated by the mulch pile, which the city is not authorized to discharge.



Fig 15(LEFT): Another picture of the leachate coming off the mulch and soil pile.



Fig 16(LEFT): Drain in the cold storage building. The cardboard cover is not sufficient in blocking the drain from pollutants. If the drains in this building are not in use, they should be capped off if possible.



Fig 17(RIGHT): Waste oil drum in the back of the building needs to be labeled "Used Oil."



Fig 18(LEFT): Oil drums next to the waste oil dike are leaking. These drums need to be placed in secondary containment and the spills need to be soaked up.



Fig 19(RIGHT): The oil leak from the drums spreading.



Fig 20(LEFT): As a good housekeeping BMP, the city should keep all materials organized in order to avoid chaos.



Fig 21(LEFT): Wash bay in the Service garage. The City does not know where the floor drains lead.



Fig 22(RIGHT): Oil dike in the service garage is contained and in a bermed area, but the drum next to it is not.

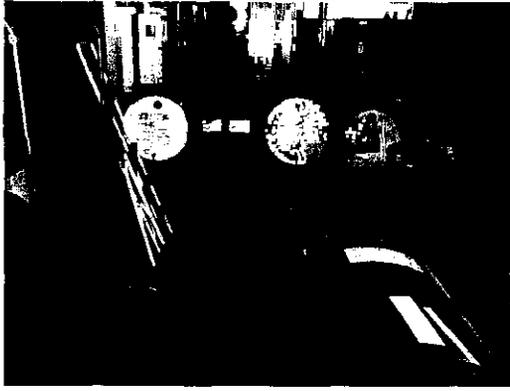


Fig 23(LEFT): All drums in this area are in containment and placed in a bermed area.

Fig 24(RIGHT): The City's salt storage bins face east, away from most bad weather and winds. The salt was well contained within the bins, but the City should make sure that if any salt does escape the bins, it should be swept back. Placing a curtain across the open side of the bin will also improve salt storage operations.

**MS4 SWMP Evaluation
MS4 Maintenance Facility Field Inspection Worksheet**

Permittee: City of Maple Heights	
Address of facility: 14580 Schreiber Rd., Maple Hts. Compost Facility	Size of facility: Unknown
Date of visit: July 29, 2009	Time of visit: 12:00pm
Provide the name(s) and title(s) of permittee staff present during inspection	
Name	Title
<i>Chris Hartman</i>	<i>Stormwater Technician</i>
<i>Stacey M. Yanetta</i>	<i>Stormwater Technician</i>
<i>Ed Urbanek</i>	<i>Service Director</i>
<i>Ken Selva</i>	<i>Supervisor</i>
Evaluator Observations:	
SWPPP or stormwater plan	
Has the maintenance facility developed a SWPPP or stormwater plan?	NO. Facility needs to develop and implement an industrial SWP3 for this facility.
Does the plan include a site map, list of pollutant sources, BMPs, and maintenance procedures?	Does not exist.
Does the permittee conduct and document periodic inspections of the facility?	No formal inspection of stormwater BMPs.
Are storm drains labeled and free of debris?	No storm drains in area. Only surface flow to stream.
Vehicle maintenance, fueling and washing	
Are vehicle maintenance activities conducted in a designated place not exposed to stormwater?	No vehicle maintenance occurs at this site.
Are fueling stations properly designed with spill kits nearby?	No fueling station present.
Are vehicles washed on-site? Is wash water discharged to the MS4 or sanitary sewer?	No vehicle washing occurs on site.
Material storage	
Are all materials that are potential stormwater contaminants stored under cover or in secondary containment?	See Notes.
Hazardous waste management	
Are all hazardous materials properly labeled and stored to prevent exposure to stormwater runoff?	See Notes.
Waste management	
Are waste bins covered with waste properly disposed in containers?	No waste bins on site. Open dumping of solid waste must cease.
How is landscape waste stored?	N/A
Spill response	
Does the facility have a spill response plan, and are spill kits readily available?	Should be part of SWP3, but does not appear to be a necessary component of the SWP3 for this facility.
Employee training	
What type of stormwater training does maintenance staff receive?	See interview. Staff received no training until 2009.

Notes or additional information:

Composting Operation

The city is not permitted to discharge any sort of leachate or leafate; therefore, the compost facility must be equipped with controls to contain leachate and leafate. One example discussed on site, was to use an earthen berm with some sort of impermeable clay to keep runoff from discharging off site. The berm should be seeded and placed along the contour lines of the area. Excess leachate can be pumped out with the vac truck when necessary and taken to a WWTP for disposal. Any disturbed areas should be reseeded and all stockpiles of potential pollutants should be removed from the site. Please refer to interview worksheet for other guidance on how to set up BMPs at composting operation.

Solid Waste

Currently, materials collected from catch basin cleanings are initially drained to a sanitary sewer from the vac truck. This prevents a large spill when the truck is opened. The material is deposited at the Maple Heights Compost Facility where it is mixed in with street sweepings and construction debris. A mound of this material has accumulated over several years of dumping. This practice is unacceptable and should be corrected immediately. This constitutes open dumping of solid waste and creates an unauthorized discharge of leachate. Solid waste must be removed from the site and properly disposed. See Notes in interview worksheet for further direction on this matter.

City of Maple Heights MS4 Program Audit

Compost Facility Photos

Location: 14580 Schreiber Road
Date Photos Taken: July 29, 2009
Taken by: Cory Harris and David Rischar, DSW-NEDO



Fig 1(LEFT): The pile of catch basin cleanings, street sweepings, and construction debris accumulated over several years.



Fig 2(RIGHT): Another angle of the solid waste pile.



Fig 3(LEFT): View from the top of the slope of the solid waste pile. The picture shows the beginning of the sediment runoff and deposits.

Fig 4(RIGHT): Continuing along the sediment deposit trail downslope of solid waste pile

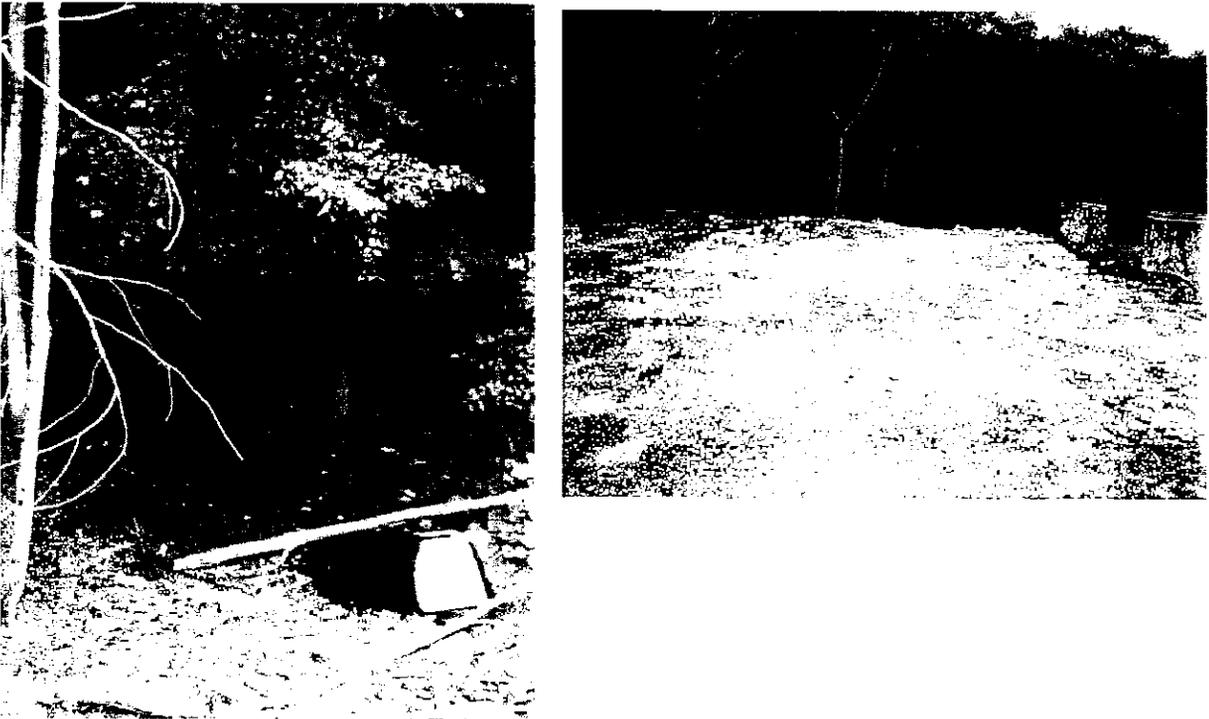


Fig 5(LEFT): More of the deposit trail into the wooded area less than 200 feet from a stream.

Fig 6(RIGHT): Parts of the pile were compacted and used as fill.

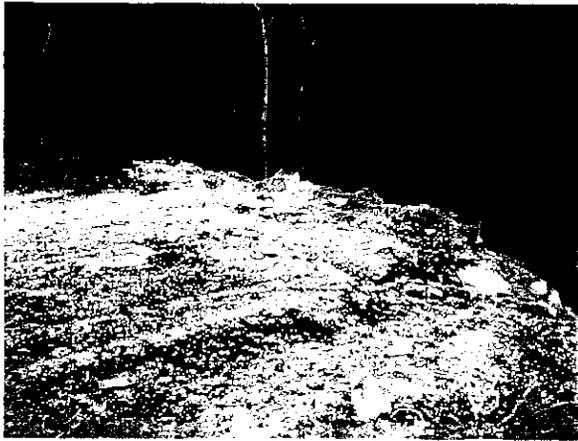


Fig 7(LEFT): Another view of the solid waste pile being push around to flatten the area.



Fig 8(RIGHT): Solid waste pile and sediment deposits imposing on wooded area.



Fig 9(LEFT): Street sweepings and asphalt piled on the site with no controls to prevent leachate, runoff and erosion from entering into the adjacent wooded area and stream.



Fig 10(LEFT): Rusty colored leachate being discharged from the pile with no controls.



Fig 11(RIGHT): Compost pile with no controls to contain the leachate, adjacent to the wooded area and stream.



Fig 12. Outfall on the compost site shows clear evidence of the discharge of leachate into the waters of the State.



Fig 13. Another view of discharge shown in Fig 12.