Ohio Environmental Protection Agency
John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

June 27, 2012

RE: LORAIN
CITY OF AMHERST
NOTIFICATION OF MUNICIPAL STORM WATER PROGRAM INSPECTION

Ron Merthe
Superintendent of Utilities
City of Amherst
480 Park Ave.
Amherst, OH 44001

Dear Mr. Merthe:

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) OHQ000002 and Ohio Administrative Code 3745-39.

On May 21, 2012, Ohio EPA met with you and other representatives of the City of Amherst, Ohio, to determine compliance with the NPDES permit and it's associated Storm Water Management Plan (SWMP). 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 develop and implement a Storm Water Pollution Prevention Plan (SWP3) for the Utility Department, Streets Department, Springer Park and Maude Neiding maintenance facilities.** This is a violation of Part III.B.6.d.iii.2 of the NPDES Permit and Ohio Revised Code (ORC) 6111.04 and 6111.07. Although Bramhall Engineering provided Ohio EPA with a partial SWP3 for the Utility and Streets Department facilities, they were of insufficient scope and detail to meet the requirements of the NPDES permit. These facilities are required to have SWP3s in accordance with Ohio EPA industrial storm water regulations (NPDES permit #OHR000004, in particular). Further, the Comprehensive Site Compliance Evaluation for 2011 was not conducted at any of these facilities. Please review the attached Maintenance Facility Field Inspection Worksheet for these facilities to identify particular deficiencies in pollution prevention and good

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housekeeping. I will provide you with separate correspondence regarding the Amherst Water Pollution Control Center (WPCC).

- **Failure to develop and implement a program for the proper disposal of wastes removed from your MS4.** This is a violation of Part III.B.6.d.iii.3 of the NPDES permit and ORC 6111.04 and 6111.07. This citation pertains to your leaf collection program. The City can no longer give their collected leaves to ECO Tree, as they are not a licensed Class IV compost facility, or to farmers, as this is a violation of Ohio Administrative Code 3745-27-03. Leaves must be taken to a licensed Class IV composter in the future. More information on this topic is provided in the Municipal Storm Water Program Evaluation. You may also contact Clarissa Gereby of our Division of Materials and Waste Management at (330) 963-1224.

- **Failure to develop a program to ensure long-term operation and maintenance (O&M) of public/ private stormwater management facilities.** This is a violation of Part III.B.5.d of the Ohio EPA General Storm Water NPDES permit and ORC 6111.04 and 6111.07. Although the City has made some progress in developing this element of the municipal storm water program, e.g., a checklist by which to conduct inspections of storm water detention basins, the City has not developed or adopted checklists for other types of post-construction BMPs. Further, the City has not updated the SWMP to formally establish the inspection frequency for long-term O&M inspections. Please refer to the Storm Water Program Evaluation for more information on developing an effective long term maintenance program. A program to ensure long term maintenance of post-construction BMPs typically includes (a) maintaining an inventory of all public and those private post-construction BMPs installed since April 21, 2003, (b) maintaining a copy of the long-term maintenance plan or maintenance agreement for each BMP, (c) establishing a system to track maintenance activities by the responsible party, and (d) taking enforcement action if maintenance is not performed by the responsible party as required by the maintenance plan or agreement. Additional information can be found in the Center for Watershed Protection manual titled ***Managing Stormwater in Your Community**: A Guide for Building an Effective Post-Construction Program.* This manual can be downloaded at

  http://www.cwp.org/index.php?option=com_docman&task=cat_view&gid=76&Itemid=118

- **Failure to identify the source(s) of illicit discharge and eliminate sources not listed in Part III.B.3.g of NPDES permit #3GQ00101*BG.** This is a violation of Part III.B.3.e of the NPDES permit and ORC 6111.04 and 6111.07. The City was unable to provide us with a list of illicit discharges at the time of inspection and failed to attach a list to their 2011 Annual Report. The Lorain County General Health District has worked with the City to investigate sources of potentially illicit discharges. However, the City could not provide any documentation of any follow-up investigation to determine the sources of dry weather flows and determine if the sources are authorized under Part III.B.3.g of the NPDES permit. For sources not authorized by the NPDES permit or included in the SWMP as an authorized occasional storm water discharge, the City must take steps to eliminate them. Please provide me with a plan to investigate the sources of dry weather flow identified by the City and LCGHD, including a timeframe by which to complete each investigation. If the source of dry weather flow is indeed an illicit discharge, please

provide me with your plan to eliminate these sources or the steps you have taken to eliminate these sources.

- **Failure to maintain a written acceptance of obligation, i.e., Memorandum of Understanding or contract, whenever the City relies on another entity to provide best management practices (BMPs) contained in the SWMP.** This is a violation of Part III.C.3 of the NPDES permit and ORC 6111.04 and 6111.07. The City relies on the Lorain County General Health District and Bramhall Engineering to implement portions of the public education, illicit discharge, construction, post-construction, and pollution prevention programs for municipal operations on its behalf. During our interview, the City indicated that written agreements were not specific as to duties required of each entity further than payment on an hourly basis. Please develop a written agreement for services provided by these entities in regards to MS4 program implementation and submit a copy with your response to this letter.

Deficiencies

- Our records indicate that the Amherst WPCC has both a general industrial storm water permit (#3GR00938*EG) and authorization to discharge storm water within its individual NPDES permit (#3PD000001*KD). Thus, one of these storm water discharge authorizations is redundant. Please clarify if the City of Amherst intends to maintain storm water discharge authorization for the WPCC under its individual NPDES permit or if the City intends to maintain the general NPDES permit for this discharge. If you intend to maintain individual authorization, please submit an NOT for the general industrial storm water NPDES permit and continue to comply with Parts IV, V, and VI in NPDES permit #3PD000001*KD. If you intend to maintain general authorization, please submit an NPDES permit modification request to Chuck Allen of our office. You can contact Mr. Allen at (330) 963-1110 for further information on the permit modification procedure.

- The City needs to improve its tracking of salt usage. Usage must be tracked on a January-to-December calendar basis as stated in Part IV.C of the Small MS4 NPDES Permit #OHQ000002 for reporting with the Annual Report form. Further, the 2011 report contained the total amount of salt purchased that year when it should have contained the amount of salt used.

- The City does not appear to track the total amount of street sweepings and catch basin cleanings removed from the MS4. Please be sure to track these amounts if you have not yet begun to do so, as it is required to be reported on the Annual Report form. The amount of street sweepings should be tracked separately from the amount of catch basin cleanings.

- The City does not seem to have developed contract language to require storm water BMP implementation when a third-party provides municipal operations on behalf of the City. Contract language must be added to all contracts with such parties, e.g., lawn cutting providers, herbicide/ pesticide application and mulching services, as well as road maintenance activities and emergency repairs. Further, we recommend periodic inspection of their operations to assure that they are implementing BMPs.

- The City did not provide me with a copy of a pesticide, herbicide and fertilizer application plan. The development of a formal application plan is an important tool in minimizing the application of these storm water pollutants. Please provide me with an application plan.

- The City did not provide verification of staff training on illicit discharge identification. This was a required training topic during the first NPDES permit term (2003-2008). Please provide a sign-in sheet, training agenda and/or certificate of attendance to demonstrate compliance with this requirement.

Annual Report Review
In addition to the items noted above as a result of our MS4 program audit, Ohio EPA has reviewed the MS4 annual report submitted on March 13, 2012. Upon review, Ohio EPA has determined the annual report for reporting year 2011 is incomplete. Some of the information, which was not provided was covered in the review of the MCM #6 audit above; however, the annual report also does not provide the following information:

- A Table of Organization identifying the name and contact information for the party responsible for overall management and implementation of your program and each of the six minimum control measures. Guidance on developing a table of organization can be found on our website at http://www.epa.ohio.gov/Default.aspx?tabid=2697.

- An attachment that provides schedules for the elimination of illicit connections that have been identified but not yet eliminated. Please list each remaining incidence of known illicit connection, the address or other location indicator, a brief description of the situation and provide a schedule for its elimination.

- The total number of outfalls listed in each annual report was inconsistent. The City indicated in the interview that the total number of outfalls should be 135, therefore, this should be the number of total outfalls reported each year give or take any that are added or removed. Further, the number of outfalls reported should match the amount of outfalls indicated on your map. The MS4 map indicates approximately 65 outfalls.

- The amount of complaints received, which was recorded in the annual report, was the total amount of complaints the City received. The number of complaints provided in the annual report should only be those regarding storm water issues related to your construction site runoff control program.

Finally, the annual report indicates that SWP3 plan review and construction site inspection may not be occurring as required by the NPDES permit. During the reporting period, Ohio EPA issued NPDES permit coverage to the following construction sites within your community:

  - Amherst Wellness Center – 3GC05796*AG
  - Braeburn Estates (Lot AA18 &AA19) – 3GC02286*AG
  - Northpointe Estates (Lot 208, 211, 212) – 3GC00906*AG

During the interview, it was indicated that the following construction activities occurred during the reporting period on individual lots with a larger common plan of development of sale, which was greater than one acre:

- Shadow Creek – One individual lot under construction
- Timberview Estates – Individual lot on N. Woodhill
- Kempton Woods – One lot which had already been seeded and mulched

Please be aware that such activities are required to obtain an NPDES permit. This may indicate that you are not performing plan review and site inspection as required by your municipal storm water permit. See comments in the attached Municipal Storm Water Program Evaluation for further information.

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 July 27, 2012.** Please note that this response does not replace the requirement to submit an Annual Report. Your annual report for 2012 will be due on April 1, 2013.

If you have any questions, please contact me at (330) 963-1125 or via e-mail at kelly.mcvay@epa.ohio.gov.

Sincerely,

Kelly McVay
Assistant to the District Engineer
Division of Surface Water

KM/cs

cc: David Taylor, Mayor, City of Amherst
Doug Jones, City of Amherst
Aaron Appell, Bramhall Engineering

ec: Clarissa Gereby, Ohio EPA, DMWM, NEDO
Chuck Allen, Ohio EPA, DSW, NEDO

Municipal Storm Water Program Evaluation

MS4 Maintenance Component Worksheet

Date of Evaluation	Monday, May 21, 2012
Evaluator Name, Title	Dan Bogoevski, DSW, NEDO Kelly McVay, DSW, NEDO
MS4 Permittee	City of Amherst 3GQ00040*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**
Aaron Appell	Bramhall Engineering	(440) 934-7878 aappell@bramhall-engineering.com
Doug Jones	City of Amherst	(440) 988-7625
Ron Merthe Superintendent of Utilities	City of Amherst	(440) 988-4224 Utilities3@amherstohio.org

MS4 Mapping	
Interview Questions	**Response**
Outfalls and receiving waters mapped? Catch basins? Pipes, ditches, other conduits? Public stormwater facilities (BMPs)? Private stormwater facilities (BMPs)?	**YES** **NO** **NO** **NO** **NO**
How are maps used (i.e. tracking illicit discharges)?	The map is used to identify sampling points and problem areas where septic systems are failing. The map is also used to determine direction of flow and for flooding complaints (basement back-ups). The City uses it to isolate sources.

Applicable Documents	Reviewed	Obtained
Map(s) of MS4 system	YES	YES

Notes

MS4 Mapping

The City states that the map of major outfalls is complete. In 2011, they completed about 98% of the rest of the MS4 (pipes, open ditches, catch basins, etc.) and will complete mapping MS4s that discharge to minor tributaries this year. The map provided used colors which were too similar for private and publicly-owned storm water management structures, ditches and streams, and HSTSs existing and eliminated making it hard to differentiate between items. The agency suggested using colors that are easier to distinguish from one another. On June 6, 2012 Bramhall Engineering sent us a more clear map with more differentiable coloring.

Please be aware, to meet the mapping obligations of NPDES Permit #OHQ000002, i.e., the MS4 permit in effect from 2009-2014, the map must show ***catch basins*** and ***publicly-owned storm sewers, ditches, conduits*** and storm water management facilities (including ***publicly-owned post-construction BMPs and underground retention***). In addition, the map must show ***privately-owned storm water management facilities*** constructed as post-construction BMPs for new development or redevelopment which has occurred since April 21, 2003.

Identifying the Location of Discharging Home Sewage Treatment Systems (HSTSs)

Major HSTS pockets exist at the east end of North Ridge Road, along Middle Ridge Road, at Crosse Road and North Ridge, and Dewey and Habant. The City says they have a list of HSTSs that are failing and will provide the addresses to us. We did see this list for 2011. The 2011 list of HSTSs reported to the LCGHD is 7 addresses. 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. **ORC 6117.51 requires tie-in 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.

Illicit Discharge Detection

The City purchased a new camera truck and has found numerous illicit cross-connections. They will provide us with a list of illicit discharges discovered throughout that process. The City is reminded that illicit cross-connections that are discovered, but not yet eliminated, must be reported to Ohio EPA each year in the MS4 Annual Report. In addition, the City must provide a plan with timetable for the elimination of illicit cross-connections that have not yet been eliminated.

On the 2011 Annual Report, the City states that there were 56 outfalls with dry weather flows. No list of identifies illicit connections and plans for elimination were provided with the report. The City believes this may have been an error and will check to see if there were 56 outfalls with dry weather flows.

Please be aware that the NPDES permit #OHQ000002 requires the City to perform dry weather screening at all outfalls at least once by January 29, 2014 and that a plan should be in place to do so. *If any illicit discharges are detected during this screening, the city must perform investigations to identify the source(s) and develop a plan to eliminate them.* For more information on the illicit discharges from HSTSs see section above.

Catch Basin Cleaning	
Interview Question	**Response**
Schedule established for inspections and cleaning?	**NO** No schedule has been established yet, but the City does conduct catch basin cleaning.
Is cleaning and maintenance of catch basins tracked:	**YES** A manual log is kept in the truck where it is recorded which catch basins have been cleaned.
How are spoils materials disposed of?	The City uses the dumping pad at the WWTP to dewater their catch basin cleanings into the treatment works. They are then placed in a dumpster and taken to a landfill.
Are storm drain pipes inspected? Proactive or only in response to blockage event?	**YES** Will replace brick/pre-cast if possible. Some storm system inspections are proactive and some are due to complaints. The City prioritizes problem areas for proactive inspection/cleaning.

Applicable Documents	Reviewed	Obtained
List of active municipal construction projects	YES	YES
List of municipal projects covered under the Ohio EPA general storm water NPDES permit for construction activities **NONE** There is only one project, the Crocker Street waterline project where they are changing 4-inch line to 8-inch line for 1200 feet. This project is less than 1 acre, so no NPDES permit is required. **NOTE:** Permit is only required if project disturbs 1 or more acre (5 or more acres for "routine maintenance")	N/A	N/A

Notes
Construction Site Runoff Control Programs Although not the focus of this MS4 inspection, Ohio EPA did inquire about construction projects within the City. Bramhall Engineering said they would send us a comprehensive list of all active construction projects, including municipal construction projects, subject to the City's construction site runoff control program during 2011. Ohio EPA noted that the list of these projects was not included in the MS4 Annual Report for 2011. Please be aware that this list must be reported to Ohio EPA each year in the annual report. The Ohio EPA's NPDES permit list from 2011-Present indicated the following Construction and Individual Lot NOIs were submitted: • Amherst Wellness @ Community Recreation Facility – 3GC05796*AG

- Braeburn Estates (Lot AA18 & AA19) – 3GC02286*AG
- Northpointe Estates (Lot 208, 211, 212) – 3GC00906*AG

The City indicated that there may be individual lot construction within the following residential subdivisions where the larger common plan of development or sale is one or more acre:

- Shadow Creek has 1 individual lot under construction at this time
- Individual lot on N. Woodhill within the Timberview Estates (aka Cherry Blossom Ph 4)
- Kempton Woods has one lot that has been seeded and mulched

Please be aware that Ohio EPA records show that the NPDES permits associated with these subdivisions have all been terminated. However, this does not exempt individual lot construction within these subdivisions from storm water regulations. The operator (generally, the company building the home) is required to obtain coverage under the Ohio EPA General NPDES Permit for Storm Water Associated with Construction Activities. Since the NPDES permits for these subdivisions are terminated, the operator must submit a Notice of Intent (NOI, not Individual Lot NOI) to Ohio EPA. Ohio EPA records do not indicate that NOIs have been submitted by the operators of these construction activities.

To comply with the requirements of Part III.B.4 of the NPDES permit for small MS4s, the City must review the sediment and erosion control plans before construction is authorized to commence, e.g., before a building permit is issued, and must conduct site inspections at least once per month to ensure compliance with the approved plan once construction starts. When reviewing plans for house construction within these subdivisions, the City should verify that the operator has obtained NPDES permit coverage by asking for a copy of the NOI submitted to Ohio EPA or a copy of the authorization letter for general permit coverage issued to the operator by Ohio EPA.

Ohio EPA also questioned the number of construction site inspections conducted by the City during 2011. The MS4 Annual Report for 2011 indicated that the City had conducted 75 inspections, which seemed much higher than Ohio EPA expected. The City stated that it had counted inspection of individual buildings within condominium developments as separate construction site inspections. Ohio EPA indicated that it was not appropriate to do so. Condominium developments should be counted as a single site since the concept of "individual lots" does not apply within condominium developments (land is not parceled and sold). Thus, each date that sediment and erosion controls are inspected at the condominium development should be counted as one inspection.

The following project submitted a Notice of Termination (NOT) to the Ohio EPA in 2011:

- SR 2 @ SR 58 Project - 3GC04975*AG

The City does not include state construction projects within their normal construction site program, but they did perform some "unofficial" inspections on this site. They do not know what post-construction BMPs were installed. Ohio EPA believes that municipalities have the authority to impose requirements of their construction and post-construction programs on all construction within their political jurisdiction that discharges to the City of Amherst MS4, including projects operated by state and local governments. Please clarify if the SR 2 & SR 58 project discharges to the City of Amherst MS4 and, if so, please identify the post-construction BMPs implemented for this project.

Stormwater Management Facilities Operation and Maintenance	
Interview Questions	**Response**
Public facilities inspected?	YES

Stormwater Management Facilities Operation and Maintenance	
Interview Questions	**Response**
Frequency:	Twice a year.
Private facilities inspected? Frequency:	**YES** Currently, twice a year.
Checklist used for inspections?	**YES**
Have maintenance standards and procedures been established for these facilities?	**YES** These standards are established as part of the inspection check-list.
How is maintenance prioritized? Is data evaluated to target maintenance resources?	**NO** Each site is given equal notice.

Applicable Documents	Reviewed	Obtained
Inspection checklist	YES	YES

Notes

Inspections of Stormwater Management Facilities

The City has inspected all privately-owned BMPs once. The City will conduct follow-ups in 6 months to ensure that maintenance concerns were addressed. A follow-up frequency has not been formally set and is currently just a verbal plan that is not incorporated into the SWMP. Please update the SWMP via the next MS4 Annual Report, i.e., report for 2012 due April 1, 2013, to reflect the inspection frequency the City of Amherst intends to use for long-term maintenance inspections of privately-owned post-construction BMPs.

The City of Amherst indicated there is one publicly-owned stormwater management facility, the KTM basin. This basin is periodically inspected using a detention basin inspection checklist. This checklist was created since the last inspection of the public KTM basin; therefore, the City does not have a completed inspection to present us currently.

As a reminder, the City is required to ensure long-term maintenance of stormwater management facilities. Ohio EPA requires that this program include privately-owned facilities constructed since April 21, 2003, and all publicly-owned stormwater management facilities. Storm water management facilities include best management practices (BMPs) designed to treat the Water Quality Volume (WQv), otherwise improve the quality of runoff or reduce the volume of runoff generated. BMPs include structures such as bioretention cells, permeable pavements, green roofs, enhanced water quality swales, sand filters, extended detention ponds, constructed wetlands and proprietary devices (including underground structures). Your post-construction BMP program must include the following components:

1. Plan review to assure that post-construction storm water quality BMPs are being provided, are designed per required standards and have a long-term maintenance plan
2. Tracking the location of post-construction BMPs and the party responsible for implementing the long-term maintenance plan
3. Performing an inspection to assure that post-construction BMPs are installed per the approved

plan.

4. Periodically inspecting or otherwise verifying that the post-construction BMP is being maintained in accordance with the long-term maintenance plan. A *checklist is recommended to perform inspections and should be reflective of the operation and maintenance standards established by the City.*
5. Taking enforcement action against the responsible party if they fail to maintain the BMP as required.

As indicated above, the City recently developed a detention basin inspection checklist to conduct long-term maintenance inspections, but checklists for other types of post-construction BMPs still need to be created. Thus, the City has not yet fully-developed the long-term maintenance program for post-construction BMP as required by the NPDES permit. This 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. (****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:	**YES** Street sweeping occurs twice a week. Every street with a curb is swept once a year. The sweeper is run throughout the year, except during winter. The City has a log but is not sure that this log is reviewed or evaluated to ensure that all streets have actually been swept.
Frequency based on water quality factors (e.g. proximity to streams)?	**NO**
How are spoils disposed of?	Street sweepings are segregated from catch basin cleanings. Street sweepings are sampled and emptied directly into a dumpster at the Streets Department garage. Sweepings are not wet. Sweepings are then transported to landfill.
Does the community collect road kill? What do they do with the carcasses?	**YES** Carcasses go into a waste dumpster at the Service Department and are then taken to the landfill.

Road Maintenance	
Interview Questions	**Response**
	NOTE: MS4s are not obligated to collect road kill, but if they do, carcasses 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.
Does the community have a leaf collection program? What do they do with the collected leaves?	**YES** Some leaves are sent to a composting facility and some are given to local farms. For farming use, they grind up the leaves and spread them out like fertilizer. Other landscapers have also taken leaves in the past. **NOTE:** Landfills have been banned from accepting yard waste, so MS4 cannot dispose of leaves and yard waste in their solid waste dumpster. These materials must be composted at a licensed Class IV composting facility. Communities may temporarily store leaves awaiting transport to a composting facility but leafate must be prevented from discharging.
BMPs used during road maintenance activities? Describe types of road maintenance conducted by community staff and the BMPs used	**YES** The City does patching, driveway aprons, and other minor repairs themselves. All other maintenance is contracted out. As discussed, inlet protection or sweeping up dust from saw cutting should be a commonly practiced BMP for these activities.
BMP guidance available to field staff?	**YES** In-house training is provided to staff along with verbal instruction on how to conduct the activity.
Deicers used by MS4?	**YES**
Type and amount of deicer and additives tracked? What measures are being taken to minimize the application of deicers?	**YES** The City indicated that 3,579.59 tons of salt was used in 2011 in their annual report, however, this is actually the total amount purchased. Policy is that arterial roads and collector roads are salted completely. Local roads are salted

Road Maintenance	
Interview Questions	**Response**
	only at intersections and steep grades.
Sand/salt swept up after application? How soon?	**YES** Immediately for salt spills during the loading process. The City responds to complaints about salt spills on roadways for smaller incidents and proactively for larger.
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?	**YES** Gravel parking lot on Maple Street. This is a municipal parking lot which is also used as a construction staging area. **NO** **N/A**

Applicable Documents	Reviewed	Obtained
BMP guidance	YES	Excal training videos
Street sweeping records	YES	YES
Deicer application records	YES	YES

Notes

Leaf Collection and Composting

Some leaves which have been collected by the City are sent to ECO Tree (a composting facility located on Baumhart Road in Lorain, north of SR 2) and some are given to local farmers (placed around blueberry bushes for frost protection) and Dalton Farms for farming use, they grind up the leaves and spread them out like fertilizer. *Please be aware that ECO Tree is not included on the Ohio EPA's list of licensed Class IV composters, therefore, you should not send them your leaves or yard waste. Further, farmers cannot accept your leaves for use on their land as this is a violation of Ohio Administrative Code Rule #3745-27-03 Part A.8.c.i.b, which states that wastes such as this can be land applied only on fields only if the waste was generated by the same entity that owns the fields.* The City should send all leaves to a licensed Class IV composter in the future.

A list of such operations can be obtained via following website:
http://www.epa.ohio.gov/portals/34/document/facility_lists/reg_c3_c4_cmpst.pdf

Should you have further questions on this topic, please contact Clarissa Gereby, of our office's Division of Materials and Waste Management, at (330) 963-1224.

Notes
Deicer Usage In the Annual Report for 2011, the City of Amherst was required to report the amount of salt used from that year, however, the number provided was the total amount of salt purchased in 2011. 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 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?	**YES**
Structures been assessed for stormwater retrofit?	**NO**
New structures include water quality considerations?	**YES**

Applicable Documents	Reviewed	Obtained
Inventory	No list because this is an inventory of one currently.	NO

Notes
Inventory As indicated previously, an inventory of public/privately-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. Currently the following projects are proposed and not yet started according to the City: • South Downtown Project (Mill, Spring, Tenney, S. Main, Beaver Court) • Long Street These projects are still in the design stages. We informed the City about the need to assess for WQv

Notes
treatment. **Stormwater Retrofits** The KTM Basin was built to address a flooding issue downstream off Baldwin Ct. in Apple Orchard Estates. It was constructed in 2006 but the basin was not assessed for water quality control. This basin should either be retrofitted or off-site mitigation for WQv should be provided. 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)?	YES	
Types of facilities included *These need their own NPDES storm water permit for industrial activities, if there is a discharge of runoff from these operations:*	**Response**	**SWP3 Developed?**
• Landfills Type: **Closed MSW**	NO	N/A
• Airports	NO	N/A
• Shipping Ports or Marinas	NO	N/A
• Steam Electric Power Plants	NO	N/A
• Wastewater Treatment Plants ≥ 1 MGD or with a pretreatment program	YES	YES
Amherst WPCC (3GR00938*EG) **931 N. Lake Street** **Amherst, OH 44001**		
These do not need their own permit, but do have to develop an SWP3 unless noted as N/A:	**Response**	**SWP3 Developed?**
• Impound Lots	NO	N/A

Facilities Operation & Maintenance		
Interview Questions	**Response**	
• Leaf Collection Yards ✓ No discharge of leafate permitted	**NO**	**N/A**
• Maintenance Yards ➢ How many do they operate? ___2___ ➢ List facility names/locations: **Streets Department** **545 Gordon St.** **Amherst, OH 44001** **Amherst Utilities Complex** **941 N. Lake St.** **Amherst, OH 44001**	**YES**	**NO**
	Response	**SWP3 Developed?**
• Composting Operations ✓ No discharge of leachate permitted	**NO**	**N/A**
• Solid Waste Transfer Stations or Operations ✓ Under landfill permit if community owns the transfer station and the landfill where waste will be taken ✓ 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	**NO**	**N/A**
• Parks & Cemeteries ➢ How many in UA? ___5___ ➢ List facility names/locations: **Maude Neiding Park** **960 Cleveland Avenue** **DePaola & Jaworski Parks** **Cooper Foster Park Road** **Veterans Park** **Tenney Avenue & Church Street** **Springer Park** **Milan Ave., W of N. Main St.** **Crownhill Cemetery** **Crownhill Dr.** **Cleveland Street Cemetery** **NE corner of Forest & Cleveland St.**	**YES**	**N/A** Except where noted below as a Vehicle Maintenance Garage

Facilities Operation & Maintenance	
Interview Questions	**Response**
• Parking Lots ➢ How many do they operate? __3___ ➢ List facility name/locations: **Park & Tenney** **Church & Tenney** **Maple Street**	**YES** **N/A** This lot is equipped with three catch basin inserts to improve water quality. Please ensure that these devices are included in your inventory of post-construction BMPs.
• Bus Terminals	**NO** **N/A**
• Vehicle Maintenance Garages ➢ How many do they operate? __4___ ➢ List facility name/locations: **Maude Neiding Park Maintenance Facility** **960 Cleveland Avenue** **Springer Park** **Milan Ave west of N. Main St.** **(Mower washing)**	**YES** **NO**
Facilities inspected? Frequency:	**YES** Once a month is policy.
Checklist used? **NOTE:** Checklist should be part of each facility SWP3.	**YES**
Staff which perform the inspections (department or agency: **NOTE:** Checklist should document name of inspector.	The foreman for each site conducts the inspections. A department head is tasked with that function.
Is there a designated stormwater contact person for each facility? **NOTE:** Name in SWP3 should match name given. If not, SWP3 must be updated.	**YES** Amherst Utilities Complex – Doug Jones Streets Department – Jeff Barnes Electric Building – Joe Szabo Parks Department(all parks) – Richard Rumpler WWTP – Alan Brailer Town Hall, Sand-Springs Building, Office of

Facilities Operation & Maintenance	
Interview Questions	**Response**
	Aging, Main Street – Ron Merthe
Describe enforcement procedures used to address noncompliance on a MS4-owner facility, i.e., what disciplinary measures are taken against those that do not implement standard operating procedures?	The City does have a progressive disciplinary policy as per union contract, but needs to make department heads aware that there is responsibility for SWP3 implementation.
Parking lots owned/operated by the permitee swept? Frequency? Do you operate any asphalt parking lots? Do you use any coal tar-based sealants on those asphalt parking lots?	**NO** **N/A** **YES** **NO** **NOTE:** 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.
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, but private sources exist.** There are some private sources of illicit cross connections to the MS4. These will appear on the illicit discharge list for 2012. The City only became aware of those discharges after purchasing a sewer camera this year (2012). As indicated previously, the City is required to use the provisions of the illicit discharge ordinance, Chapter 922 to eliminate these cross-connections.
Have you investigated the extent of infiltration and inflow into storm sewer system? What methods have been used to conduct this investigation? What are your plans to repair and eliminate this source	**NO** **N/A** **N/A**

Facilities Operation & Maintenance	
Interview Questions	**Response**
of illicit discharge?	
Sewer spill and cleanup procedures in place?	NO Designed SSO eliminated in 2010. There have been other SSOs and they are reported to Chuck Allen at the Ohio EPA. Remember, these incidences should be reported on the illicit discharge list in the annual report if they overflow to the MS4.

Applicable Documents	Reviewed	Obtained
Facility inventory	YES	YES
Facility SWPPP	YES	YES

Notes

Closed Municipal Landfill

The City owns a 17-acre closed MSW landfill on Pyle-S. Amherst Rd south of the Ohio Turnpike. The City has submitted an application to DMWM for a Rule 13 authorization to use this property as a laydown yard (municipal storage yard). Currently the facility is being operated as a solid waste transfer station by Allied Waste and the waste is taken to Lorain County Landfill from there. Please ensure that contract language between the City and Allied Waste obligates them to implement storm water BMPs as appropriate for their operations at this site.

Storm Water Pollution Prevention Plans (SWP3s)

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

1. **Amherst WPCC (3GR00938*EG)**
   931 N. Lake Street

2. **Streets Department**
   545 Gordon St.

3. **Amherst Utilities Complex**
   941 N. Lake St.

4. **Maude Neiding Park Maintenance Facility**
   960 Cleveland Avenue

5. **Springer Park**
   Milan Ave west of N. Main St.

A SWP3 was developed for the WPCC, but was missing some information and has not been updated to reflect the requirements of the current Ohio EPA General NPDES Permit for Storm Water Associated with Industrial Activities #OHR000005. A separate letter was sent to the WPCC documenting these missing portions and observations from the inspection. There was some confusion at the WPCC because they did not remember renewing their general industrial storm water permit, yet our records reflect that they did. Further, the facility recently had Parts IV, V, and VI (storm water language) added to

Notes
their individual NPDES permit that authorizes the discharge of the wastewater treatment plant effluent. Please refer to the instructions contained in the separate correspondence provided to the WPCC on how best to straighten out the confusion. A copy of this letter will be sent to the Mr. Merthe's office as well. With the exception of the WPCC (which has been required to implement an SWP3 since October 1992), the Ohio EPA General Storm Water NPDES Permit for Small MS4s #OHQ000002 requires the City of Amherst to develop and begin implementing the SWP3 for the other facilities within 2 years of permit renewal, i.e., by June 2011. Although the City did provide Ohio EPA with minimal SWP3s for the Streets Department and Amherst Utilities Complex, these SWP3s were not developed to meet the requirements of Ohio EPA's industrial general storm water permit OHR000004 as required by Part III.B.6.c of the NPDES permit. No SWP3s were provided for the Maude Neiding Park Maintenance Facility or Springer Park. The City indicated that lawn mower washing occurs at Springer Park, but it was unclear if other activities associated with a maintenance garage occur at this site. If no other activities associated with a maintenance garage occur at Springer Park, the City may want to prohibit mower cleaning here. This would eliminate industrial activities at this facility and remove Springer Park from the list of municipal facilities that require an SWP3. If the City chooses to continue lawn mower cleaning at Springer Park, the City should use lawnmower cleaning methods that do not generate wastewater, e.g., scraping and sweeping. The City of Twinsburg uses an air compressor to blow grass and dirt off lawnmowers, sweeps up what is removed and disposes of it appropriately. Although this will not eliminate the need to develop an SWP3 for this facility, this is an equipment cleaning method that is more storm water-friendly. 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 5.1.2.*** Also refer to the following website for information on developing SWP3s for these facilities: http://www.epa.ohio.gov/dsw/permits/GP_IndustrialStormWater.aspx

Pesticides, Herbicides & Fertilizers	
Interview Questions	**Response**
Certified applicators used?	**YES**
Integrated Pest Management (IPM) practices used?	**NO** John Koba, an employee of the City Electric Dept., is a certified (licensed) applicator and a trained arborist. The City indicated that IPM is used at the cemetery.
Storage location of pesticides, herbicides, and fertilizers:	One drum of herbicide is stored at Amherst Utilities Complex. This is only such material stored at any City facility. City only cuts the

	grass at DePaola and Jaworski parks, but users (soccer associations) may be applying fertilizers. There is no grass at Veterans Park.
BMPs used during application:	Could not answer. Needed to talk to Mr. Koba.
Fertilizer/pesticide application plan utilized?	**NO**

Applicable Documents	Reviewed	Obtained
Fertilizer/pesticide application plan	Does not exist	

Notes

BMPs for Pesticide, Herbicide and Fertilizer Application

Pesticides, herbicides and fertilizers should not be applied when the forecast calls for rain. The label of most products will provide guidance on when and how much of these materials should be applied. Do not exceed manufacturers' recommendations. In addition, crews must be trained to avoid overspray and to implement dry clean-up methods, e.g., sweep up, should spills occur. Under no circumstance should crews hose spilled materials into storm drains. Storm drains near application areas can be temporarily covered to prevent overspray or spills from entering the MS4. The usage of fertilizers can also be reduced by replacing typical lawn-type grasses with natural, slow-growing grass species that require less or no fertilizers to be sustained. The City of Cleveland is using this method to revegetate neighborhoods where blighted homes have been razed. The City of Twinsburg recently planted a field with native vegetation at their Stone House park. This will reduce costs to these cities to maintain these new greenspaces.

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

Example pesticide, herbicide and fertilizer application plans are available from our MS4 education workshops. Information is archived at www.epa.ohio.gov/ocapp/storm_water.aspx.

Application Plan

The City does not have a documented pesticide, herbicide and fertilizer application plan. The application records should keep track of the name of the substance being applied and the type of chemical, amount used and time the material is being applied as well as who the applicator was. If a contractor is being used as well, the *City needs to include language into the contract that requires the contractor to implement pollution controls where the activities undertaken are a potential source of storm water pollution.*

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

Notes
NPDES Permits for Pesticide Application On October 31, 2012, Ohio EPA issued a general NPDES permit for the discharge of biological pesticides and those chemical pesticides that leave a residue (NPDES permit #OHG870001). MS4s that apply such pesticides in, over or near waterways, e.g., as part of golf course or green space management, are subject to the requirements of this NPDES permit. Most situations are covered by rule meaning submittal of an NOI (permit application) is typically not required. However, an NOI is required if pesticides are applied: • Directly to public water supply reservoirs • To very high quality waters (outstanding national resource waters, outstanding state waters or superior high quality waters other than Lake Erie) • To waters to control non-native fish populations • To more than 80 acres of wetlands per year • To forests, or applied aerially to Lake Erie The best way for MS4s to avoid a permit violation is to leave a buffer around surface waters (lakes, ponds, wetlands, rivers, streams and ditches that connect to surface waters or ground water) when applying pesticides. Ohio EPA has not set technical criteria for the term "near water" because doing so would not limit an applicator's liability under the federal Clean Water Act. If you must apply pesticides to surface waters, e.g., mosquito control, it must occur in compliance with the NPDES permit. If the treatment area exceeds certain threshholds, there are additional documentation and reporting requirements. Those threshholds are: • 6400 acres for mosquito/insect control • 80 acres for wetland and lake application • 20 linear miles for stream/ditch bank application or intrusive vegetation control Communities with populations less than 10,000 are not required to implement Integrated Pest Management (IPM) and do not have to prepare a Pesticide Discharge Management Plan, even if thresholds are exceeded. However, they must still submit the annual report required by NPDES permit #OHG870001 to Ohio EPA. All applications of pesticides and herbicides "in, over or near" surface waters are covered, including small-scale uses. A fact sheet on the new permit can be found on the Ohio EPA website at http://www.epa.ohio.gov/portals/35/permits/Pesticide_Final_FS_oct11.pdf. If you need more information about this program, please contact Eric Nygaard in our Central Office at (614) 644-2024.

Standards, BMPs, & Outreach	
Interview Questions	**Response**
BMP technical guidance document available to maintenance staff?	**YES** Through training. Brochures on good housekeeping issues, herbicide application
MS4 use contractual staff to complete MS4 maintenance activities?	**YES** Lawn cutting, herbicide, road maintenance, sewer line replacement, road resurfacing, infrastructure replacement (including catch basin repair). etc. Contract with Allied Waste for

Standards, BMPs, & Outreach	
Interview Questions	**Response**
	waste transfer station. Guardian Environmental Services for hazardous waste disposal. Barnes Nursery does herbicide application at substations.
BMP guidance materials provided to contracted staff?	**NO**
Requirement to consider stormwater impacts and utilize appropriate BMPs in contracts?	**SOME, BUT NOT ALL** For construction projects, they do require that ESCs be included in scope of work.
Materials used to educate the public regarding stormwater impacts on MS4 property (if applicable, i.e. public spaces):	Pet waste: Have installed dog poop signs at parks as well as educational brochures at parks, Town Hall, Main St building, Sand Springs Building, etc. Litter reduction: "No Dumping" signs in areas where they have found open dumping to be causing storm sewer blockages. Trash receptacles are provided at parks.

Applicable Documents	Reviewed	Obtained
BMP manual or guidance document	YES	YES
Contract language for MS4 operation and maintenance activities	Does not exist.	

Notes

Contracted Staff

Contracted staff is used for lawn cutting, herbicide application, road maintenance, sewer line replacements, road resurfacing, infrastructure replacements (including catch basin repair), etc. Allied Waste is under contract for the waste transfer station, Guardian Environmental Services does hazardous waste disposal, and Barnes Nursery does herbicide application at substations. 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.

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.

Notes
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 discharges?	**NO**
Frequency:	The City indicated that staff training has occurred and that this has included training on illicit discharge identification. ***However, Ohio EPA could not verify this at the time of audit.*** Ohio EPA asked for documentation to demonstrate compliance with this requirement, e.g., attendance sheets or certificates, but these were not provided to us at the time of audit. The City must provide Ohio EPA with the required documentation with the response to this audit.
Materials used to train staff:	Will provide documentation, but City states they have used Excal Videos on pollution prevention and good housekeeping for municipal operations.

Applicable Documents	Reviewed	Obtained
Training materials	YES	YES

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.

Notes

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 of training opportunities on pollution prevention and good housekeeping for municipal operations over the past several years. Materials presented at OCAPP's session are archived on the internet at: http://epa.ohio.gov/ocapp/storm_water.aspx and can be used to provide training to your staff. Future training events involving Ohio EPA are listed on this site as well.

ODOT's Local Technical Assistance Program (LTAP) maintains a library of training videos, including videos on storm water pollution prevention that can be borrowed at no cost. Adrienne LaFavre of Ohio EPA's OCAPP program also has training videos available for loan at no cost. Adrienne can be contacted at (330) 963-1250.

US EPA has 2 to 3 webcasts per minimum control measure that can be viewed at any time over the internet at www.epa.gov/npdes/training.

The Center for Watershed Protection also has information available for training in their Manual #9: Municipal Pollution Prevention/Good Housekeeping Practices.

The Lake County (OH) Stormwater Management Department has developed a series of Toolbox Talks that can be used during staff meetings to train maintenance staff on a single storm water pollution prevention topic at a time. This tool is intended to provide training by eliciting discussion amongst the staff and can be completed in less than 15 minutes per topic. Please contact Tim Miller, Director of the LCSMD at (440) 350-5900 for further information.

FIELD INSPECTION WORKSHEET

MS4 SWMP Evaluation
MS4 Maintenance Facility Field Inspection Worksheet

Permittee: City of Amherst Streets Department	
Address of facility: 545 Gordon Street	**Size of facility:** 4.63 acres
Date of visit: 5/21/2012	**Time of visit:** 4:35 PM
Provide the name(s) and title(s) of permittee staff present during inspection	
Name	**Title**
Jeff Barnes	***Streets Foreman***
Dave Jones	***City of Amherst***
Aaron Appell	***Bramhall Engineering***
Evaluator Observations:	
SWPPP or stormwater plan	
Has the maintenance facility developed a SWPPP or stormwater plan?	**NO**, they just have a series of aerial maps with some drainage sewers shown. This is a violation of the NPDES permit. The SWP3 should have been developed and implemented no later than June 2011.
Does the plan include a site map, list of pollutant sources, BMPs, and maintenance procedures?	**NO**, it only includes a map.
Does the permittee conduct and document periodic inspections of the facility?	Inspections are conducted once a month, but this is not documented.
Are storm drains labeled and free of debris?	Not labeled. Suggested color coding storm vs. sanitary. The catch basin on the south side of the main building drains to sanitary.
Vehicle maintenance, fueling and washing	
Are vehicle maintenance activities conducted in a designated place not exposed to stormwater?	**YES**, all maintenance activities occur inside. Washing is done outside over a drain which goes to sanitary.
Are fueling stations properly designed with spill kits nearby?	**YES**, located in double-walled container with spill kits nearby.
Are vehicles washed on-site? Is wash water discharged to the MS4 or sanitary sewer?	**YES**, washed over drain that goes to sanitary.
Material storage	
Are all materials that are potential stormwater contaminants stored under cover or in secondary containment?	**NO**, erodible materials (304s, dirt, etc.) are stockpiled out back. The SWP3 calls for a berm and tarp coverage which are not installed. This berm needs to be added along the east side of the site as shown in the SWP3 to provide sediment control. An earthen berm with vegetation was recommended. The scrap metal dumpster should be covered as a few greasy wheel bearings are inside. The container is in bad shape with many holes, but no liquid material is

	placed here, just metals. This dumpster should be tarped to prevent storm water from contacting greasy parts and causing them to be released. Some snow plows have bags on hydraulic fittings and some do not. It would be best to adopt one consistent procedure to prevent these fittings from leaking hydraulic fluids onto the ground. Some snow plows have bags on hydraulic fittings and some do not. It would be best to adopt one consistent procedure to prevent these fittings from leaking hydraulic fluids onto the ground.
Hazardous waste management	
Are all hazardous materials properly labeled and stored to prevent exposure to stormwater runoff?	**NO**, the used oil tank was labeled "Motor Oil". The used oil tank, oil filter drum, and red trolley containing used oil must be labeled as "Used Oil". There is an asphalt berm around the used oil, spent antifreeze, and oil filter drum for containment, but it does not hold 110% of the largest container (200 gal. used oil tank). The size of berm should be increased to provide adequate containment.
Waste management	
Are waste bins covered with waste properly disposed in containers?	**YES**, waste bins were empty. Streets sweepings go in one and there is no evidence of leachate. Sweepings put in the dumpster are dry.
How is landscape waste stored?	**N/A**
Spill response	
Does the facility have a spill response plan, and are spill kits readily available?	**NO** spill response plan, but spill kits were available. Please add a spill response plan to the SWP3.
Employee training	
What type of stormwater training do maintenance staff receive?	Excal video within past year. Posters located on bulletin boards. Posters need to be customized to provide emergency contact information pertinent to the City of Amherst.

Notes or additional information:

Interior Drains

Two 4" floor drains inside go to oil water separator to sanitary. They have been dye tested and are pumped once a year. The storm drain by the old generator building has been plugged.

Wash Pad

There is an outdoor wash pad with a drain that goes to sanitary. The drain was not clearly labeled " to sanitary" and looked as if it could go to storm sewer at first. It was retrofitted about 5-6 years ago to drain to sanitary. Steam cleaning, truck washing, salt removal from trucks, and degreasing or equipment washing occur here. The oil water separator is connected to this as well.

Salt Storage

Lots of excess salt is currently stored outside of the salt dome temporarily. It is covered with a tarp weighed down by tires and surrounded with concrete barriers. Some salt is stored on gravel rather than concrete pad. The City plans on relocating this portion of the pile to Amherst Twp. Garage. A small amount of salt was spilled outside of the temporary storage area and should be cleaned up. We recommended the City think about extending the roof to the salt dome over the concrete pad to allow loading to occur under cover.

Storm Water Pollution Prevention Plan (SWP3)

The City of Amherst is required to develop a SWP3 for this facility. In developing this SWP3, the City must evaluate where all water is draining to throughout the facility. The City should include all catch basins and their outfalls on the site map that is required to be developed. Potential pollution sources need to be identified e.g. salt storage, used oil tank, material stockpiles, dumpsters, etc. and the City needs to state the BMPs they plan to enforce to ensure that water pollution does not occur. For more information of this matter please refer to the Municipal Storm Water Program Evaluation Worksheet.

INSPECTION PHOTOS
Streets Department
City of Amherst
Photos Taken: May 21, 2012

Fig. 1: The used oil tank was labeled "Motor Oil". This tank and any other containers holding used oil must be labeled "Used Oil". The asphalt berm around this area was a good idea to provide some secondary containment; however, the area enclosed by the berm should be able to contain 110% of the largest container inside of the bermed area.
Fig. 2: This area is used as a wash pad. The drain here goes to sanitary sewer.

Fig. 3: This dumpster containing metal scraps was is poor condition with holes around the sides. No liquids are stored in this dumpster but it should be covered with a tarp to prevent any leachate from being released.
Fig. 4: There was a small stained area near the fueling station. All spills should be cleaned immediately and contaminated soils removed and disposed of in a dumpster.


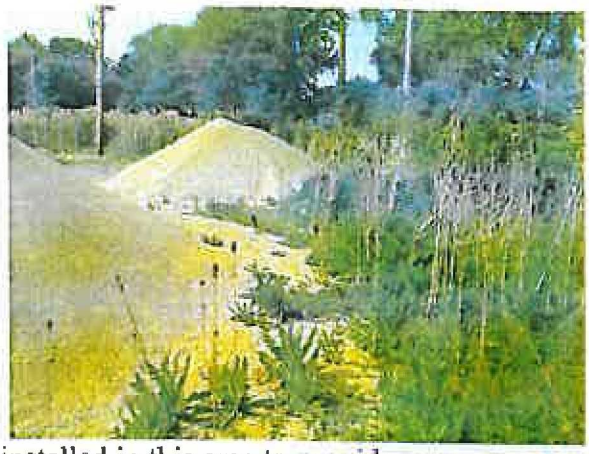

Fig. 5 &6: The SWP3 called for a berm to be installed in this area to provide some sediment control but there was no berm in place at the time of inspection.


Fig. 7: Some of the equipment stored outside had the hydraulic fittings bagged to prevent leakage; however this one was not properly contained and was leaking. This equipment should be monitored to ensure no leakage is occurring and to clean up any contaminated soils. It is suggested that all of the equipment have the fittings bagged to prevent any other leakage.

Fig. 8: Salt was temporarily stored outside under cover of a tarp within confinement of concrete barriers. Some salt was spilled on the ground outside of this area and should be swept up. Salt which was off the concrete pad and on gravel is supposed to be going to Amherst Twp. Garage.

FIELD INSPECTION WORKSHEET

MS4 SWMP Evaluation
MS4 Maintenance Facility Field Inspection Worksheet

Permittee: City of Amherst Utility Department	
Address of facility: 941 N. Lake Street	**Size of facility:** 10.74 acres
Date of visit: 5/21/2012	**Time of visit:** 2:10 PM
Provide the name(s) and title(s) of permittee staff present during inspection	
Name	**Title**
Ron Merthe	***Superintendent of Utilities***
Aaron Appell	***Bramhall Engineering***
Evaluator Observations:	
SWPPP or stormwater plan	
Has the maintenance facility developed a SWPPP or stormwater plan?	**NO**, they just have a series of aerial maps with some drainage sewers shown. This is a violation of the permit and should have been done in 2011.
Does the plan include a site map, list of pollutant sources, BMPs, and maintenance procedures?	**NO**, it only includes a map.
Does the permittee conduct and document periodic inspections of the facility?	Inspections are conducted once a month.
Are storm drains labeled and free of debris?	Not labeled.
Vehicle maintenance, fueling and washing	
Are vehicle maintenance activities conducted in a designated place not exposed to stormwater?	**NO**, vehicles are taken to the Streets Department for maintenance.
Are fueling stations properly designed with spill kits nearby?	**YES**, the dike around the fuel tank is plugged and the water is sent to the WWTP for disposal.
Are vehicles washed on-site? Is wash water discharged to the MS4 or sanitary sewer?	**YES**, they are washed inside only where drains go to sanitary sewer.
Material storage	
Are all materials that are potential stormwater contaminants stored under cover or in secondary containment?	**NO**. Soil, asphalt grindings, dirt, stone, and concrete slabs are stored out in the yard area. Area all drains to a "stone filter" and "berm". Ohio EPA suggests replacing this "filter and berm" system with a sediment-settling pond. Forks for the bobcat are leaking petroleum product onto the ground. Tracing dye drums were left outside of the building and not on secondary containment.
Hazardous waste management	
Are all hazardous materials properly labeled and stored to prevent exposure to stormwater runoff?	Brake cleaners, Round-Up, etc. are kept in a locker room inside of the main building. Universal waste and hazardous waste are kept in a storage barn outside of the main building. There is evidence of spills inside the barn, but not outside. It was

	recommended that spill containment trays be used to prevent any leakage to the outside.
Waste management	
Are waste bins covered with waste properly disposed in containers?	**YES**, lids were closed and the bins are in good condition.
How is landscape waste stored?	Yard waste is stored out in the yard. Mr. Merthe says it was illegally dumped there.
Spill response	
Does the facility have a spill response plan, and are spill kits readily available?	No spill response plan, but spill kits were available.
Employee training	
What type of stormwater training do maintenance staff receive?	They are shown a BMP video by Excal and given verbal instruction based on information obtained at Ohio EPA OCAPP Pollution Prevention Good Housekeeping seminars.

Notes or additional information:

Interior Drains

The floor drains inside the building go to a grease trap then to sanitary sewer. This was verified through inspection.

Sediment and Erosion Control

Soil, asphalt grindings, dirt, stone, and concrete slabs are stored out in the yard area. Area all drains to a "stone filter" and "berm". As discussed, sediment control is necessary in this area and we would suggest the addition of a sediment basin or trap to help better filter the particulates from any storm water. Please use the specifications in ***Rainwater and Land Development*** (Ohio Dept. of Natural Resources, 2006) when designing the sediment basin or trap.

The land behind the fueling area is covered in mulch. This area drains to a stone covered area and into the culvert. This is not an issue at this point; however, we recommended the creation of a sediment basin or trap at the culvert to improve the filtration of the storm water runoff from this area should this area be redisturbed by construction activity.

Mulch being stored on the far end of the yard was being pushed too close to the creek and beginning to fall over down the slope. This should be moved further from the steep slope to keep material out of the creek.

Storm Water Pollution Prevention Plan (SWP3)

The City of Amherst is required to develop a SWP3 for this facility. In developing this SWP3, the City must evaluate where all water is draining to throughout the facility. The City should include all catch basins and their outfalls on the site map that is required to be developed. Potential pollution sources need to be identified e.g. disturbed areas, hazardous waste storage barn, material stockpiles, dumpsters, etc. and the City needs to state the BMPs they plan to enforce to ensure that water pollution does not occur. For more information of this matter please refer to the Municipal Storm Water Program Evaluation Worksheet.

INSPECTION PHOTOS
Utility Department
City of Amherst
Photos Taken: May 21, 2012

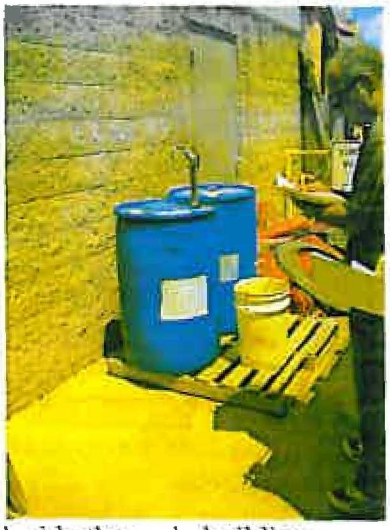

Fig. 1: These materials were stored off the ground and inside the main building as a good storm water pollution prevention practice.

Fig. 2: Tracing dye drums were being stored outside of the main building. These drums should either be moved indoors or placed on a containment tray to prevent any spills from spreading.

Fig. 3: The storage barn outside of the building was used to store universal and hazardous wastes. Although there was no sign of leakage or spills outside of the building, there was some staining inside. It was recommended that spill containment trays be used to prevent any of this material from making its way outside should more spills or leaks occur.

Fig. 4: The hydraulic fittings on these plows were bagged as a BMP to prevent leakage of fluids.

Fig. 5: This equipment showed signs of leaking fluids based on dark stains seen by nearby soils. This equipment should be checked for leaks regularly and any fluids should be contained by use of drip pans, bagging as was done on the plows, moving the equipment to a concrete area away from a storm drain, and contaminated soils removed and disposed of in a dumpster.

Fig. 6: One of the City's vehicles had been leaking and this drip pan was kept in the parking area to catch and drips. This is a good BMP; however, the vehicle was still being used meaning that leaking could be occurring off site while it is in use. This leak should be repaired as soon as possible and employees should be trained to watch for signs of leaking while on a job so spills can be contained and disposed of properly to not contaminate storm water off site.

Fig. 7: The area behind the fueling station was mulched and did not appear to be an issue at the time of inspection.

Fig. 8: Behind the mulched area in Figure 7, runoff flows towards a small area of rocks and into a culvert. As discussed, this is not an issue at this point in time, but a sediment basin should be considered to improve the filtration of storm water from this area.

Fig. 9: This part of the yard is typically used for storage but was not being used at the time of inspection. Disturbed areas such as this could be vegetated or stoned as a form of sediment control to prevent this dirt from being washed off site.

Fig. 10: Concrete, asphalt grindings, dirt, and stone were store in the maintenance yard which drains to this "stone filter" and a "berm". It was suggested that a sediment basin/trap be added here to more effectively filtrate particulates from runoff.

Fig. 11: Mulch stored toward the end of the yard was beginning to be pushed over this embankment which leads down to a creek. As discussed, the mulch piles should be moved further from the steep slope to prevent them from falling into the creek.

Fig. 12: Yard waste was left uncontained in the yard. We were told that this was illegally dumped. Yard wastes should not be left on the property uncontained and should be sent to a licensed composting facility.

FIELD INSPECTION WORKSHEET

MS4 SWMP Evaluation
MS4 Maintenance Facility Field Inspection Worksheet

Permittee: City of Amherst WPCC	
Address of facility: 931 N. Lake Street	**Size of facility:** 6 acres
Date of visit: 5/21/2012	**Time of visit:** 3:35 PM

Provide the name(s) and title(s) of permittee staff present during inspection

Name	Title
Ron Merthe	***Superintendent of Utilities***
Doug Jones	***City of Amherst***
Aaron Appell	***Bramhall Engineering***
Alan Brailer	***Superintendent of Amherst WPCC***

Evaluator Observations:	
SWPPP or stormwater plan	
Has the maintenance facility developed a SWPPP or stormwater plan?	**YES**, but Ohio EPA recommends that it be updated to reflect the new industrial permit #OHR000005's language.
Does the plan include a site map, list of pollutant sources, BMPs, and maintenance procedures?	**YES**, but it needs to be updated. There are 3 piped storm outfalls to Beaver Creek and one by the sludge drying beds which are not shown on the map. These outfalls and the direction of sheet flow should be added to the maps.
Does the permittee conduct and document periodic inspections of the facility?	No inspections have been done yet due to permitting confusion. Mr. Brailer thought he had 12 months to implement this aspect of the new permit. However, please be aware that, regardless of which NPDES permit this facility will maintain, a Comprehensive Site Compliance Evaluation is required at least once per year. Failure to conduct these inspections and keep documentation of their findings with the SWPPP is a violation of NPDES requirements.
Are storm drains labeled and free of debris?	Storm drains were not labeled and contained some grass clippings.
Vehicle maintenance, fueling and washing	
Are vehicle maintenance activities conducted in a designated place not exposed to stormwater?	**YES**, maintenance activities are conducted inside the garage only.
Are fueling stations properly designed with spill kits nearby?	**YES**, a spill kit is located inside the building. It was recommended that it be moved closer to the fuel tank.
Are vehicles washed on-site? Is wash water discharged to the MS4 or sanitary sewer?	**YES**, they are only washed inside the building which drains to sanitary sewer.

Material storage	
Are all materials that are potential stormwater contaminants stored under cover or in secondary containment?	**NO**, the rag dumpster was stored outside uncovered. Although empty at the time, leachate was observed on the pavement. This is not acceptable and the dumpster should be moved indoors to prevent leachate from being released to the MS4. The scum dumpster off of the clarifier was leaking outside. Better direction to the floor drain is necessary to prevent this from happening. Installation of berms to provide containment within the building is also a possible solution. The sludge loading area is exposed. Spills and leaks do occur; one occurred recently due to operator error. More training should be administered to educate employees on proper procedure and clean-up. Spill kits should be relocated nearby as well.
Hazardous waste management	
Are all hazardous materials properly labeled and stored to prevent exposure to stormwater runoff?	Used oil was labeled as "Waste Oil". All used oil must be labeled "Used Oil".
Waste management	
Are waste bins covered with waste properly disposed in containers?	**NO**, all waste goes into the rag dumpster which was outside and uncovered.
How is landscape waste stored?	N/A
Spill response	
Does the facility have a spill response plan, and are spill kits readily available?	They have elements of a spill plan, but it could be further developed.
Employee training	
What type of stormwater training do maintenance staff receive?	No specific training provided.

Notes or additional information:

<u>Permitting Issues</u>.

At the time of inspection there was some confusion about whether or not the WPCC had obtained coverage of the new general Industrial NPDES permit #OHR000005 (Facility #3GR00938*DG). Our records indicate that you have obtained the new general permit; however, the facility also was issued an individual NPDES permit (#3PD00001*KD) on June 27, 2011 that contains industrial storm water discharge authorization. Ohio Administrative Code 3745-38-01(D) states that once an individual NPDES permit is issued, general permit coverage is no longer necessary. Please clarify your intent as to which NPDES permit the City wishes to maintain and terminate or modify the other, as appropriate. Only one of these permits is required to authorize storm water discharges from the Amherst WPCC.

Regardless of which permit the City chooses to maintain, it is still highly recommended that your SWP3 be upgraded to fulfill the requirements of the new general Industrial NPDES permit #OHR000005 to best manage your facility and to prepare for the future. Ohio EPA is currently in the process of replacing the storm water language used in Parts IV, V and VI of individual NPDES permits with language to reflect the requirements contained in general permit #OHR000005. This change to the individual NPDES permit would be made at the time of its renewal.

Transfer of Spoils for Disposal

The dewatering pad for the catch basin and sanitary sewer cleanings goes back to the treatment works but transfer of dried materials to the dumpster for disposal is a point of exposure. As discussed, this dumpster could be moved closer to the pad to prevent any materials from being spilled in the transfer process or proper measure must be taken to ensure that no materials are being spilled in the transfer process.

INSPECTION PHOTOS
WPCC
City of Amherst
Photos Taken: May 21, 2012

Fig. 1: This drum containing used oil was marked "Waste Oil". Hazardous waste regulations require that anything containing used oil (drums, drip pans, etc.) must be labeled "Used Oil".

Fig. 2: The rag dumpster was stored uncovered outside and had wet trails streaking the pavement indicating a leak. This dumpster should be covered and inspected for leaks regularly to ensure no unauthorized discharge of leachate.

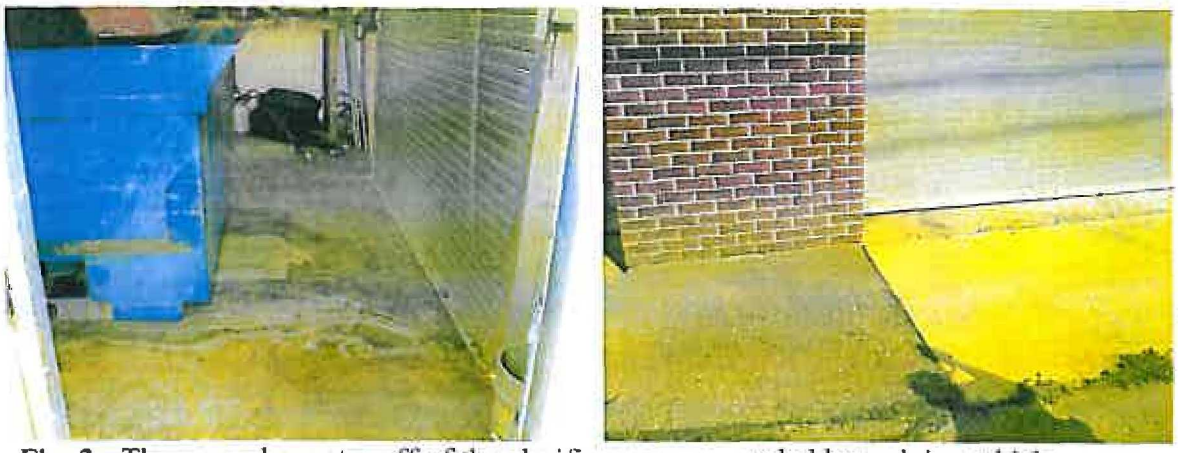

Fig. 3: The scum dumpster off of the clarifier was surrounded by staining which indicated leachate had run out of the building. This area should be modified to have drainage directed towards the floor drains inside which are attached to sanitary sewer to prevent this leachate from leaving the building and contaminating storm water.

Fig. 4: A view of the outside of the building where the scum dumpster appeared to be leaking towards. Some staining is visible on the pavement indicating leachate has exited the building before.

Fig. 5: The fuel pumps did have leak guards attached, however, some staining appeared on the tank under the pumps indicating previous drips or spills. This area should be monitored to ensure cleanliness and functionality of the leak guards which may need replaced.

Fig. 6: Staining on the wall near the loading error caused by operator error in disconnection. Training should be provided to all employees to ensure that they are aware or proper prevention techniques and responsive measures for situations like this.