

**Environmental
Protection Agency**

Ted Strickland, Governor
Lee Fisher, Lt. Governor
Chris Korleski, Director

F

December 30, 2010

RE: Lorain County
City of Lorain
Municipal Storm Water Program
MS4 Program Screening

NOTICE OF VIOLATION

CERTIFIED MAIL

Mr. Dale Vandersommen
Storm Water Program Manager
City of Lorain
200 West Erie Ave., 4th Floor
Lorain, OH 44052

Dear Mr. Vandersommen:

Our records indicate that discharges from the City of Lorain municipal separate storm sewer system (MS4) are regulated under the Ohio EPA General Storm Water National Pollutant Discharge Elimination System (NPDES) Permit for small MS4s #3GQ00119*BG. On May 27, 2010, Ohio EPA met with you and toured several municipal facilities to conduct a compliance screening of your municipal storm water program. In addition, we have reviewed information submitted in Annual Reports required under Part IV.C of the NPDES permit. In performing this screening, Ohio EPA used 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 areas where your municipal storm water program requires revision or improvement. The following is a summary of our findings. Violations are noted in bold:

Program Administration

- The City of Lorain must review how the municipal storm water program fits within its organizational structure. A review of the Table of Organization included within the 2009 Annual Report shows that the Storm Water Program Manager does not have authority over departments whose operations can affect compliance with the NPDES permit, nor is he responsible to monitor those departments for compliance with the permit. Illicit discharge incidents which have occurred since the time of this inspection and of which the City was notified in letters dated July 15, 2010, and August 10, 2010, further illustrate this deficiency. Department heads were unaware that the MS4 program has implications regarding their operations.

MCM #1 & 2: Public Education and Public Involvement

- The public education program appears to only be implementing one mechanism (educational brochures in utility bills) to deliver messages. During the current NPDES permit term, these messages have been geared toward educating residents on how to recognize storm water pollution sources and how to minimize fertilizer application. Please be aware that the NPDES permit requires the City to use more than one mechanism and to target at least one message to the development community over the current permit term, i.e., by June 4, 2014.
- Although the Annual Report indicates that the City participates in the Lorain County PIPE, we are unaware of any Memorandum of Understanding (MOU) between the Lorain Soil & Water Conservation District (SWCD) and the City of Lorain to provide public education and involvement activities. Please submit a copy of an executed MOU between the City and Lorain County PIPE if you are to receive credit for their activities. Further, you must be able to track participation in these activities by the residents of your community. Report only those activities and participation numbers that reflect your community.
- Be aware that education programs must deliver at least 5 different storm water messages and reach 50% of your population by end of the current permit term, i.e., June 4, 2014.

MCM #3: Illicit Discharge Detection and Elimination Program

- **VIOLATION: Failure to develop a storm sewer system map showing the location of all outfalls from the MS4.** This is a violation of Part III.B.3.b of the NPDES permit and Ohio Revised Code 6111.04 and 6111.07. Although the City does have a map of MS4 outfalls, it is only 85% complete. The City was required to fully complete the map of outfalls by the end of Year 5 of the first NPDES permit term, i.e., April 7, 2008. The City will remain in violation of this requirement until all outfalls from the MS4 are mapped. Further, please note that the current MS4 permit requires that this map be expanded (see attached for additional information). The expanded, comprehensive MS4 map must be completed by June 4, 2014.
- The City of Lorain has only completed dry weather screening of approximately one-third of their MS4 outfalls. Please be aware that the NPDES permit requires all MS4 outfalls to be screened for dry weather flows at least once by the end of the current NPDES permit term, i.e., June 4, 2014. Please be sure to plan accordingly.

MCM #4 & 5: Construction & Post-Construction Runoff Control Programs

- **VIOLATION: Failure to review the Storm Water Pollution Prevention Plan (SWP3) for all construction projects where the larger common plan of development or sale disturbs 1 or more acre of land.** This is a violation of Part III.B.4.c of the NPDES permit and ORC 6111.04 and 6111.07. When asked to provide a comment letter on the SWP3 for the Black River Restoration 2010 project, the Engineering Department stated that an SWP3 had not been submitted to them for review. Please be aware that the City is obligated to review all SWP3s for projects where the larger common plan of development or sale disturbs 1 or more acre of land, including municipal construction projects. The Black River Restoration 2010 project will disturb 137 acres, thus this project is subject to the SWP3 review requirements of the NPDES permit. Please indicate the changes you will make to your construction program to ensure that the sediment and erosion control plan is reviewed for all construction activities where the larger common plan of development or sale disturbs 1 or more acre. In addition, please indicate the changes you will make to your post-construction program to ensure the post-construction BMP plan is reviewed for all new development and redevelopment where 1 or more acre of land is disturbed. The erosion and sediment control plan together with the post-construction BMP plan constitute the SWP3.
- **VIOLATION: Failure to inspect active construction sites at least once per month for compliance with the approved SWP3.** This is a violation of Part III.B.4.c of the NPDES permit and ORC 6111.04 and 6111.07. The City reported only 2 construction site inspections during the whole of 2009. Ohio EPA records indicate that there are 60 active NPDES permits for construction sites within the City. Of these sites, six (6) have started construction since June 4, 2009, i.e., the date Ohio EPA renewed the City's MS4 permit coverage. As of this date, the City is required to inspect all active construction sites at least once per month. At a minimum, Ohio EPA expects the City to inspect construction projects started after June 4, 2009, at least once per month for compliance with the SWP3. Thus, if the City only performed 2 construction site inspections for the whole of 2009, the City has not met this performance standard. Please provide me with your plan to begin tracking active construction projects and inspecting them once per month for compliance with the approved SWP3.
- **VIOLATION: Failure to establish a program to ensure the long-term maintenance of post-construction BMPs.** This is a violation of Part III.B.5.d of the NPDES permit and ORC 6111.04 and 6111.07. This program was to be established by the end of the first NPDES permit term, i.e., April 7, 2008. During our interview, the City indicated that they require developers to submit inspection reports for privately-owned storm water management facilities, but did not provide any documentation. It appears that the City may be confusing the long-term maintenance

requirement with the inspection requirements contained in the Ohio EPA General Storm Water NPDES Permit for Construction Activities. Please see the Stormwater Management Facilities Operation and Maintenance section of the attached report for additional comment and determine how the City will implement its program to ensure long-term maintenance of post-construction BMPs.

- **VIOLATION: Failure to submit a Notice of Termination within 45 days of reaching final stabilization on municipal construction projects.** This is a violation of Part IV.A of NPDES permit #OHC000003. Our records show that the City of Lorain has 5 active municipal construction projects permitted under the Ohio EPA General Storm Water NPDES Permit for Construction Activities but indicated during the interview that two of these projects were completed and have reached final stabilization. Please submit an NOT for the projects that are complete or no longer viable (see attachments for list).
- Additional information is needed on several municipal construction projects to demonstrate compliance with the Ohio EPA General Storm Water NPDES Permit for Construction Activities. In particular, please submit information demonstrating how the Colorado Industrial Park (Permit #3GC02254*AG) and the Brownell Subdivision (Permit #3GC03813) met post-construction requirements of Part III.G.2.e of the NPDES permit.
- The City has not developed or adopted checklists to assist homeowners' associations and property owners in conducting periodic inspections of post-construction BMPs. Many homeowners' associations and property owners do not have the knowledge required to identify long-term maintenance needs. Developing a checklist and meeting with homeowners' associations to provide training on this topic should improve this element of your MS4 program. You may wish to contact Joe Reitz, Engineer for the City of Avon Lake, for information about their efforts to educate HOAs and property owners.

MCM #6: Pollution Prevention & Good Housekeeping for Municipal Ops

- **VIOLATION: Failure to obtain NPDES permit coverage for storm water discharges from the PQM and Black River Wastewater Treatment Plants.** This is a violation of ORC 6111.04 and Ohio Administrative Code (OAC) 3745-39-04. Although the City had submitted No Exposure Certifications for these facilities, our review of these facilities indicated that exposure exists during material transfer processes at the plants. Thus, the City does not qualify for the No Exposure exemption. The City may either make changes at the facility to eliminate points of exposure or will need to obtain separate NPDES permit coverage either under the Ohio EPA General Storm Water NPDES Permit for Industrial Activities #OHR000004 or a modification to the existing NPDES permit #3PE00005*JD (Black River WWTP)

Mr. Dale Vandersommen
City of Lorain
December 30, 2010
Page 5

and #3PD00040*FD (PQM). Either type of NPDES permit will require these facilities to develop and implement a Storm Water Pollution Prevention Plan (SWP3). Please contact Chuck Allen of this office for instructions on how to modify an existing NPDES permit if you choose that option. Chuck can be reached at (330) 963-1110 or chuck.allen@epa.ohio.gov. General NPDES permit coverage can be obtained by submitting a Notice of Intent (NOI). The form and instructions are available at www.epa.ohio.gov/dsw/storm/stormform.aspx.

- The City has not yet completed the SWP3 for the Street Department Garage and Sewer Department Facility, but is working on it. Please complete the SWP3 and implement it by June 4, 2011 as required by Part III.B.6.C of the NPDES permit.
- **VIOLATION: Failure to implement procedures for the proper disposal of waste removed from streets and catch basins.** This is a violation of Part III.B.6.d.iii.3 of the NPDES permit and ORC 6111.04, 6111.07 and 3734.03. The City of Lorain has not been properly disposing of catch basin cleanings, road kill, street sweepings and other solid wastes. These solid wastes were being disposed by open dumping at the Elmwood Nature Preserve. By the date of this inspection, the City had adopted new procedures for the disposal of catch basin cleanings, but not street sweepings, road kill and miscellaneous solid waste. These materials were still being improperly disposed at the Elmwood site. Some material may have been placed within the footprint of the nature preserve. The preserve was created as mitigation for a Section 401 Water Quality Certification for an unrelated construction project.

On July 7, 2010, the Ohio EPA Division of Solid and Infectious Waste Management (DSIWM) and the Lorain City Health Department conducted a follow-up inspection of the Elmwood Nature Preserve and confirmed the presence of improperly-disposed solid waste. The Lorain City Health Department issued a Notice of Violation on August 26, 2010 and instructed the City to remove the solid waste disposed on the property and ensure its proper disposal at a licensed municipal solid waste landfill. Please provide me with an update on your progress and, if the material has not yet been completely removed, a schedule for completing this work. Provide me with an estimate of the total amount of material that was (must be) removed and manifests from the disposal facility where it was (will be) taken.

- The City of Lorain has not developed a schedule for catch basin cleaning and only performs this activity in response to a blockage event. Measures such as catch basin cleaning reduce the discharge of pollutants from the MS4. The City recently began tracking which catch basins have been cleaned on a wall map at the Sewer Department, but tracking is not exact. The documentation for catch basin cleaning needs to be improved.

- Record keeping about street sweeping activities needs improvement. The Annual Report only requires the City to report the quantity of street sweepings collected, however Ohio EPA recommends that the City prioritize sweeping locations, dates and frequency based on the potential for environmental impact. Current records only indicate the time spent performing street sweeping and do not provide information needed to assess the effectiveness of the street sweeping program.
- **VIOLATION: Failure to properly manage wastewater associated with leaf composting activities at the Streets Department Garage.** This is a violation of Part III.B.6.d.iii.3 of the NPDES permit and ORC 6111.04, 6111.07. Leachate from leaf composting operations enters a drainage ditch on the Streets Department Garage property. On August 26, 2010, the Lorain City Health Department sent a Notice of Violation ordering the Streets Department to make changes to their operations to prevent these unauthorized discharges of wastewater to the MS4. Please indicate the changes that have been to this operation and the procedures that have been adopted to prevent future unauthorized discharges of wastewater from this facility.
- **VIOLATION: Failure to implement storm water BMPs when conducting road maintenance activities.** This is a violation of Part III.B.6.a of the NPDES permit and ORC 6111.04 and 6111.07. Standard operating procedures for the Streets Department staff do not incorporate the requirement to implement storm water BMPs when conducting maintenance activities. During her inspection of the Streets Department Garage on July 7, 2010, Clarissa Gereby noted that staff was rinsing off painting equipment outside, allowing the discharge of wastewater to the MS4. This incident was reported to you in my Notice of Violation dated July 15, 2010. In addition, review the comments on the Facility Inspection Worksheet for the Service Department Garage for other areas of concern. Please provide training to road maintenance crews and indicate the storm water BMPs that will be implemented by those crews when they conduct maintenance in the future.
- Salt is spilled during the salt truck loading process. Salt was still visible outside the salt dome at the Sewer Department facility on the date of inspection even though we were well past deicing season. Staff should be trained to clean spills up in a timely manner. Push brooms, dust pans and signage should be provided at each salt storage facility to encourage staff to sweep up salt outside the storage structure and place it back under roof.
- The City has not developed a pesticide, herbicide and fertilizer application plan for its facilities. The development of a formal application plan is an important tool in minimizing the application of these storm water pollutants and controlling the type and amount used. An application plan should be developed on an annual basis.

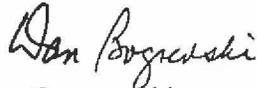
Mr. Dale Vandersommen
City of Lorain
December 30, 2010
Page 7

- The City should develop contract language or otherwise demonstrate that they have informed third party service providers of the need to utilize storm water best management practices when they conduct municipal operations on the City's behalf.

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 January 31, 2011.** Please note that this response does not replace the requirement to submit an Annual Report. Your annual report for 2010 will be due on April 1, 2011.

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

Sincerely,



Dan Bogoevski
District Engineer
Division of Surface Water

DB/mt

cc: Anthony Krasienko, Mayor, City of Lorain
Robert Gilchrist, Service Director, City of Lorain
Chuck Camera, Street Commissioner, City of Lorain
Jason Fyffe, Storm Water Section Manager, Ohio EPA, DSW, CO
Mike Smith, Section 401 Program, Ohio EPA, DSW, CO
Chuck Allen, Ohio EPA, DSW, NEDO
Clarissa Gereby, Ohio EPA, DSIWM, NEDO

SENDER: COMPLETE THIS SECTION

- Complete Items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Dale Vandersomman
 Storm Water Program Mnggr.
 City of Lorain
 200 West Erie Ave 4th Floor
 Lorain, OH 44052

2. Article Number

(Transfer from service label) 7010 1060 0000 0089 5175 (Boguckski; 12/30/10)

COMPLETE THIS SECTION ON DELIVERY

A. Signature

Gloria Giedling

- Agent
- Addressee

B. Received by (Printed Name)

C. Date of Delivery

1-3-11

D. Is delivery address different from item 1? Yes
 If YES, enter delivery address below: No

3. Service Type

- Certified Mail
- Registered
- Insured Mail
- Express Mail
- Return Receipt for Merchandise
- C.O.D.

4. Restricted Delivery? (Extra Fee)

Yes

PS Form 3811, February 2004

Domestic Return Receipt

102595-02-M-1540

7010 1060 0000 0089 5175

U.S. Postal Service
CERTIFIED MAIL RECEIPT
 (Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com.

Postage	\$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$

Postmark
Here

Sent To

Street, Apt. No.,
or PO Box No.
City, State, ZIP+4

PS Form 3800, August 2006

See Reverse for Instructions

Municipal Storm Water Program Evaluation

MS4 Maintenance Component Worksheet

Date of Evaluation	May 27, 2010
Evaluator Name, Title	Dan Bogoevski, DSW, NEDO
MS4 Permittee	City of Lorain

Intructions: 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
Dale Vandersommen, P.E. Storm Water Program Mgr.	Engineering Dept. City of Lorain	(440) 204-2003 dale_vandersommen@cityoflorain.org
Chuck Camera Street Commissioner and City Garage Manager	Street Department City of Lorain	(440) 204-2202 Chuck_camera@cityoflorain.org

MS4 Mapping			
Interview Questions	Response		
Outfalls and receiving waters mapped?	NO		
Catch basins?	NO		
Pipes, ditches, other conduits?	YES		
Public stormwater facilities (BMPs)?	N/A		
Private stormwater facilities (BMPs)?	NO		
How maps are used (i.e. tracking illicit discharges)?	The City utilizes the storm sewer and outfall map for the dry weather screening program. Only 1/3 of the 77 outfalls have been screened at this time.		
Applicable Documents		Reviewed	Obtained
Map(s) of MS4 system		YES	YES

Notes
<p>MS4 Mapping</p> <p>The City of Lorain has a hand-drawn map with outfalls and most of the publicly-owned storm sewer system, but they are in the process of transitioning to a computerized map through GIS. The map of the City's MS4 outfalls required by the first generation permit is only 85% complete. Also, the pipes, ditches, and other conduits of the City's MS4 are only 85% mapped because the newer divisions of the city have NOT been added to the map. There are no publically-owned stormwater management facilities in the city. An inventory of the privately-owned post-construction BMPs installed since April 21, 2003 does exist, but they are not included on the MS4 map at this time.</p>

Notes

To meet the mapping obligations of the Ohio EPA General Storm Water NPDES Permit for Small Municipal Separate Storm Sewer Systems #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). 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 (HSTS)

The City of Lorain has no HSTSs discharging to their MS4. City Health Department records were reviewed to determine this. The Lorain City Health Department (LCHD) ordered the failing system owner on North Ridge Road to tie into the sewer, but this order was ignored. The house has recently been demolished. In the event that all the HSTSs in the City have not been accounted for by the Health Department, *the City needs to be aware that these discharging systems are considered illicit discharges to the MS4.* Permit #OHQ000002 requires the City to work with LCHD to determine which of these systems are not operating as designed and intended. For systems not operating as designed and intended, LCHD must use the provisions in Ohio Revised Code 6117.51 to require connection to the sanitary sewer system where it is legal, feasible and economical to do so. For systems that cannot be eliminated through connection to sanitary sewers or the installation of a soil absorption system, the property owner must be notified to contact Ohio EPA and pursue coverage under an appropriate NPDES permit.

Illicit Discharge Detection

The City of Lorain is a third of the way done with the dry weather screening of all outfalls mapped for the MS4. There was no information given on whether illicit discharges or dry weather flows were detected during these screenings. Please be aware that the NPDES permit #OHQ000002 requires the City to perform dry weather screening at all outfalls at least once by June 2014 and that a plan should be in place to do so. If any illicit discharges are detected during this screening, the city must develop a plan to eliminate them. For more information on the illicit discharges from HSTSs please read Part III.B.3.e of the Ohio EPA General Storm Water NPDES Permit for small MS4s #OHQ000002 for expectations to address these sources.

Catch Basin Cleaning

Interview Question	Response
Schedule established for inspections and cleaning?	NO The City has not developed a schedule for the inspection or cleaning of catch basins. Cleaning is not proactive and there are no plans to expand the program to a more proactive one. The City cleans catch basins in response to blockage events only.
Is cleaning and maintenance of catch basins tracked:	NO The Sewer Department Superintendent, Bob Saultzbaugh, said that the cleaning crew recently started highlighting streets on a map that have had catch basins cleaned, but it is not an exact tracking system.

<p>How are spoils materials disposed of?</p>	<p>Spoils are dewatered the PQM WWTP where the leachate is directed back to sanitary. They are then put into dumpster after dewatered and taken to a landfill. <i>The City was asked to provide waste manifests to demonstrate that the spoils were taken to a landfill but none were ever received.</i></p> <p>NOTE: This is a recent change to operations. Previously, the City was dumping the spoils at the Elmwood Cemetery off North Ridge Road. The Street department still disposes of their street sweepings at this site. There is a small service road that leads back to a clearing in the woods at the back of the Cemetery. This is where the spoils have been stockpiled for years. See Notes.</p>	
<p>Are storm drain pipes inspected?</p> <p>Proactive or only in response to blockage event?</p>	<p style="text-align: center;">NO</p> <p>The Cities MS4 is inspected only in response to a blockage event. On the occasion that a blockage event does occur, camera trucks are used to investigate the problem.</p>	
Applicable Documents		
<p>List of active municipal construction projects</p>	Reviewed YES	Obtained NPDES permit list
<p>List of municipal projects covered under the Ohio EPA general storm water NPDES permit for construction activities:</p> <p>3GC02272*AG Sanitary Sewer System – Broadway/Clinton/Homewood 2006 – no post-construction required – sewer project</p> <p>3GC01402*AG Riverfront Urban Renewal Ph 3 – Public Improvements 2005 (Colorado Ave between C & F Streets) – no post-construction required for road projects prior to March 2006</p> <p>3GC02254*AG Colorado Industrial Park 2006 – 21.6 acres *May file NOT if vegetation is at 70% growth density or greater, but this will mean that any subsequent construction needs its own NPDES permit. City is done installing infrastructure, so they would simply be selling lots to businesses who would further develop each lot.</p> <p>3GC03813*AG Brownell Subdivision (W. 10th and Brownell) 2008 – 2.3 acres *Also eligible for NOT, but it means that each lot needs its own NOI when homes are built in future.</p>	<p style="text-align: center;">STATUS COMPLETE</p> <p style="text-align: center;">COMPLETE</p> <p>Still more lots to develop, but idle at this time.</p> <p>4 lots left to build on. All are vegetated and stable.</p>	<p style="text-align: center;">ISSUE File NOT</p> <p style="text-align: center;">File NOT</p> <p>Need information on post-construction for this site</p> <p>No post-construction provided. May be able to retrofit w/bioretenion in back yards.</p>
<p>3GC04859*AG Black River Restoration Project 2010 – no post-</p>	On site of	Engineering

<p>construction required *No SWP3 review was conducted on this project *No comment letter by the Engineering Department</p>	<p>steel plant. Utilities department is primarily responsible.</p>	<p>Department needs to review SWP3 for all projects, including municipal construction projects</p>
---	--	--

Notes

Catch Basin Cleaning Schedule and Disposal

A formal schedule by which to perform catch basin cleaning has not been developed. Catch basins are cleaned on an as needed basis when a visual problem is noted by the crews or when a complaint is called in to the Department. *A more proactive cleaning schedule should be implemented to improve your MS4 program and reduce pollutants, especially in problem areas where more frequent maintenance is required.* The EPA would like to see the City track the amount of material cleaned out, the date it was cleaned and the location, which will be placed in the City's annual report for 2010.

The spoils from catch basin cleaning are now taken to the PQM WWTP where the leachate is directed back to sanitary. The spoils are then placed into dumpsters after dewatering and taken to a landfill. No waste manifests have been provided to Ohio EPA at this time to demonstrate the disposal of these spoils at a landfill. Please submit the manifests for 2010 with your Annual Report due April 1, 2011.

Note that this is a recent change in operations. Previously, the City utilized a clearing at the back of the Elmwood Cemetery as a catch basin and street sweeping spoils dump site. These spoils have been stockpiled at this location for years. As of the date of inspection, the City continues to drop off their street sweepings at this location. This method of disposal is unacceptable and constitutes as open dumping of solid waste. Catch basin cleanings and street sweepings are defined as solid waste in Ohio Revised Code 3734.01 (E) and Ohio Administrative Code 3745-27-01 (23) and must be disposed at a licensed municipal solid waste landfill. Liquids which are decanted from catch basin cleanings and street sweepings as well as storm water which contacts stockpiles of these materials is leachate, a wastewater and must be managed accordingly. Your NPDES permit does not permit the discharge of wastewater from municipal operations. At the time of inspection, there is no containment of the stockpiles at the Elmwood Cemetery, which allows for an illegal discharge of leachate.

On August 26, 2010, the Lorain City Health Department sent the Street Department a Notice of Violation ordering the solid waste to be removed and disposed of properly. Please provide me with an update of your progress toward properly disposing of this solid waste.

MS4 System Repair and Maintenance

At this time the City only inspects the storm drain pipes in response to complaints, problems or blockage events. The EPA would like to see a more proactive inspection of the storm pipes in the coming years of the new permit term to help improve your MS4 program and reduce pollutants.

Municipal Construction Projects

If construction is complete or the project is no longer viable, please submit Notices of Termination (NOTs) for these projects to close out coverage under the Ohio EPA General Storm Water NPDES Permit for Construction Activities. Coverage under this NPDES permit is only required until such time that construction activities are complete and disturbed areas have reached final stabilization. Part IV of this general NPDES permit (#OHC000003) outlines the requirements for submitting an NOT. The

NOT and instructions can be obtained on the Ohio EPA Storm Water Program webpage at www.epa.ohio.gov/dsw/storm/stormform.aspx. As a reminder, coverage under the Ohio EPA General Storm Water NPDES Permit for Construction Activities is to be terminated within 45 days of when the project reaches final stabilization. Please be sure to incorporate this requirement into your procedures on all future projects.

Stormwater Management Facilities Operation and Maintenance			
Interview Questions	Response		
Public facilities inspected? Frequency:	N/A The City does not own any public stormwater management facilities at this time.		
Private facilities inspected? Frequency:	NO The City requires developers to inspect private facilities annually and submit reports to them. There is no active inspection carried out by the City. No documentation of the inspections conducted by developers could be provided at the time of the interview.		
Checklist used for inspections?	NO The City may want to present developers with a checklist for the inspection of post-construction BMPs to make sure all BMPs are constructed and maintained according to the City's adopted standards.		
Have maintenance standards and procedures been established for these facilities?	YES The City has officially adopted the Rainwater and Land Development manual as their standards and does not allow BMPs that are not in the manual to be utilized.		
How is maintenance prioritized? Is data evaluated to target maintenance resources?	N/A The City does not own any stormwater management facilities		
	Applicable Documents	Reviewed	Obtained
	Inspection checklist	Does not exist.	N/A

Notes
<p><u>Inspection of Stormwater Management Facilities</u> The City of Lorain does not own any public storm water facilities at this time. Any privately-owned storm water management facilities are said to be inspected by the developers. No documentation was provided to show that these inspections are actually being conducted.</p>

Please be aware that this line of questioning is geared toward determining if the City has established a long-term maintenance program for post-construction BMPs as required by Part III.B.5.d of the NPDES permit. The developer of a project may not be the owner or operator of the post-construction BMPs after a project is completed. Thus, a system that requires developers to submit inspections will not address the requirements of this program.

Please be aware that the City is required to ensure long-term maintenance of stormwater management facilities. Ohio EPA requires that this program include privately-owned facilities constructed since April 21, 2003, and all publicly-owned stormwater management facilities. At present, the City indicates it does not own any stormwater management structures, but be aware that municipal projects constructed after April 21, 2003, are subject to post-construction BMP requirements in the Ohio EPA General Storm Water NPDES Permit and, thus, the City may not have a full account of the BMPs subject to this requirement. Storm water management facilities include best management practices (BMPs) designed to treat the Water Quality Volume (WQv), otherwise improve the quality of runoff or reduce the volume of runoff generated. BMPs include structures such as bioretention cells, permeable pavements, green roofs, enhanced water quality swales, sand filters, extended detention ponds, constructed wetlands and proprietary devices (including underground structures). An acceptable post-construction BMP program consists of:

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 using a checklist
5. The checklist used to perform inspections should be reflective of the operation and maintenance standards established by the City
6. Taking enforcement action against the responsible party if they fail to maintain the BMP as required

The City has not yet developed the robust long-term maintenance program for post-construction BMPs, which is a violation under Part III.B.5 of NPDES Permit #OHQ000002.

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.

Road Maintenance	
Interview Questions	Response
Streets regularly swept?	YES
Frequency:	The City sweeps all curbed streets throughout the city "several times per year" per the Street Department Commissioner, but documentation

Road Maintenance	
Interview Questions	Response
	does not provide detailed tracking, only hours spent sweeping. The locations on the records received by the EPA are vague if anything at all. There is a map in the foreman's office at the Streets Department for workers to mark locations swept, but it is not permanent (wipeable). Main and secondary streets are reportedly swept once a month from April to November.
Frequency based on water quality factors (e.g. proximity to streams)?	NO Downtown streets are swept most frequently, but not based on water quality. Colorado Ave and E. 28 th Street are done more frequently because of high truck traffic.
How are spoils disposed of?	Street sweeping spoils are taken to the back of Elmwood Cemetery, same as catch basin cleanings. The City has been dumping at this for years. This method of disposal is unacceptable and constitutes as open dumping of solid waste. See Notes under Catch Basin Cleaning section of this report.
Does the community collect road kill? What do they do with the carcasses? NOTE: MS4s are not obligated to collect road kill, but if they do, can be disposed in dumpsters or taken to a licensed, Class II composting facility. Cannot have pile of carcasses stacked up. This is open dumping.	YES The City buries the carcasses at the back of the Elmwood Cemetery (The same location where catch basin cleanings and street sweepings are dumped). This method of disposal is unacceptable and constitutes as open dumping of solid waste. The easiest solution to this problem is for the City to start placing the carcasses into a dumpster to be taken to a landfill
Does the community have a leaf collection program? What do they do with the collected leaves?	YES The City targets areas of town where there is heavy leaf fall. They compost the leaves behind the Streets Department garage. The facility is a licensed compost facility. The leachate from the piles is either recirculated or the city uses infiltration techniques. See Facility Inspection Notes. The controls for leachate collection are failing and leachate is discharging to the City's MS4.
BMPs used during road maintenance activities?	NO

Road Maintenance	
Interview Questions	Response
Describe types of road maintenance conducted by community staff and the BMPs used	<p>The City partakes in activities such as road striping, pothole patching, crack filling and sealing, grade alleys, concrete repair, etc.</p> <p>No BMPs are used and no standard operating procedures are in place. There has also been no training of staff on these issues.</p>
BMP guidance available to field staff?	<p style="text-align: center;">NO</p> <p>No written training program. Nothing provided in trucks, no posters at the Streets Department Garage.</p>
Deicers used by MS4?	YES
Type and amount of deicer and additives tracked?	YES
What measures are being taken to minimize the application of deicers?	<p>The City uses straight road salt with no additives. The amount of salt used on an annual basis is converted from the dollars spent for that year. Cost is based on the number of loads the trucks apply per event.</p> <p>The City only salts mains and secondaries. Residential streets are not salted. They have gone down from 500 lbs/lane mile to 300 lbs/lane mile. They do use videos and informational booklets to train snow plow drivers. Information comes from the Salt Institute. Spreaders are computerized and are calibrated by computers once at the beginning of each season. Please review manufacturer's recommendation for this system to be sure the City is following manufacturers recommendations on calibration frequency.</p> <p>The computer system is synchronized to the engines so that the spreaders shut off when the engines idle.</p>
Sand/salt swept up after application?	NO
How soon?	When loading, not all the salt makes it into the spreaders, and there is no program in place to clean up after spills. Any spill outside the salt dome should be swept up as soon as possible to avoid storm water from reaching the exposed salt.

Road Maintenance		
Interview Questions	Response	
Does your community operate a snow stockpile yard to store snow that has been removed from community streets and parking lots?	YES	
If YES, location of the yards:	On occasion, based on if there is a heavy snow, the City will stockpile snow at a paved parking lot at Black River Landing where there is a grassy hill that acts as a buffer. There are no catch basins in this area. The last time this was done was 3 years ago because there was nowhere to take snow from Broadway.	
Has your community considered implementing best management practices to control the discharge of pollutants from snowmelt associated with snow storage yards?	NO	
If YES, what BMPs have you implemented?	See response above. The City was advised to develop a list of sites that might be more appropriate for this purpose.	
Applicable Documents	Reviewed	Obtained
BMP guidance	Does not exist	
Street sweeping records	YES	YES
Deicer application records	Need to submit annual total	

Notes
<p>Street Sweeping</p> <p>The City of Lorain is broken down into 4 sections: Far West, Central, East and South. The City only sweeps curbed roads; any street that is salted is also swept (mains and secondaries). The tracking system for street sweeping and street sweeping debris is very inaccurate. The City accounts for how many miles per year have been swept and the amount of material swept up, but these totals are not very accurate. The City needs to come up with a better system of tracking street sweeping and relaying that information back to the EPA in their Annual Report. The manner in which the City disposes of street sweeping spoils at this time is NOT acceptable. Please refer to the notes above on Catch Basins for more information on this topic. <i>The same goes for the burial of road kill at this site in the back of Elmwood Cemetery. All acts are considered open dumping of solid waste and must be stopped.</i></p> <p>Deicer Usage</p> <p>The City uses straight road salt (NaCl) with no additives. In October, before the winter season, the city runs through salting procedures and routes with the crews. The tracking for the City's salting operation could improve. No total tonnage was provided for 2009. The total is tracked by the amount purchased. It may be beneficial for the City to start tracking salt usage per event. Track the number of loads that each spreader takes out per event. This will help the City gain a better understanding of their salting program, and allow for the detection of over application, etc. Also, be aware that the Annual Report covers the January-to-December time period. Review how deicer usage records are kept to ensure that you are reporting the amount used on a calendar year basis, not a seasonal basis.</p>

Flood Management			
Interview Questions	Response		
Inventory of flood management structures completed?	N/A – do not own any		
Structures been assessed for stormwater retrofit?	N/A		
New structures include water quality considerations?	YES		
	Post-Construction ordinance requires treatment of WQv		
Applicable Documents		Reviewed	Obtained
Inventory		N/A	N/A

Notes
<p>Retrofit Opportunities:</p> <p>The City has no flood management projects planned in 2010. In the future, all projects should be assessed for stormwater retrofitting opportunities such as tree boxes that act as sand filters, permeable pavement, bioretention cells and enhanced swales. Retrofit projects will be a primary means of implementing post-construction BMPs in previously-developed portions of your community.</p>

Facilities Operation & Maintenance														
Interview Questions	Response													
Inventory of MS4 facilities complete (i.e. facilities owned and operated by the MS4)?	YES See attachments													
<p>Types of facilities included</p> <p><i>These need their own NPDES storm water permit for industrial activities, if there is a discharge of runoff from these operations:</i></p> <ul style="list-style-type: none"> • Landfills Type: _____ • Airports • Shipping Ports or Marinas • Steam Electric Power Plants • Wastewater Treatment Plants ≥ 1 MGD or with a pretreatment program <p>Philip Q Maiorana WWTP 6301 West Erie Avenue Lorain, OH 44053</p> <p>Black River WWTP 100 Alabama Avenue Lorain, OH 44052</p>	<table border="1"> <thead> <tr> <th>Response</th> <th>SWP3 Developed?</th> </tr> </thead> <tbody> <tr> <td>NO</td> <td>N/A since do not operate</td> </tr> <tr> <td>YES</td> <td>NO</td> </tr> </tbody> </table>	Response	SWP3 Developed?	NO	N/A since do not operate	YES	NO	<p>Submitted a No Exposure Certification, but points of exposure exist. See Facility Inspection Worksheet.</p> <p>Submitted a No Exposure Certification, but points of exposure exist. See Facility Inspection Worksheet.</p>						
Response	SWP3 Developed?													
NO	N/A since do not operate													
NO	N/A since do not operate													
NO	N/A since do not operate													
NO	N/A since do not operate													
YES	NO													

Facilities Operation & Maintenance		
Interview Questions	Response	
<i>These do not need their own permit, but do have to develop an SWP3 unless noted as N/A:</i>	Response	SWP3 Developed?
<ul style="list-style-type: none"> • Impound Lots 	NO	N/A since do not operate
<ul style="list-style-type: none"> • Leaf Collection Yards <ul style="list-style-type: none"> ✓ No discharge of leafate permitted 	NO	N/A since do not operate
<ul style="list-style-type: none"> • Maintenance Yards <ul style="list-style-type: none"> ➤ How many do they operate? 2 ➤ List facility names/locations: 	YES	NO
<p style="margin-left: 40px;">Street Department Garage 115 E. 35th St Lorain, OH 44052</p>		SWP3 due June 4, 2011
<p style="margin-left: 40px;">Sewer Department Facility at PQM 6301 West Erie Avenue Lorain, OH 44053</p>		SWP3 due June 4, 2011
<ul style="list-style-type: none"> • Composting Operations <ul style="list-style-type: none"> ✓ No discharge of leachate permitted Compost operations located at Street Department Garage. 	YES	Include in SWP3 for Street Department Garage
<ul style="list-style-type: none"> • Solid Waste Transfer Stations or Operations 	NO	N/A since do not operate
<ul style="list-style-type: none"> • Parks & Cemeteries (with maintenance facilities) <ul style="list-style-type: none"> ➤ How many in UA? 57 ➤ List facility names/locations: **List located on the City's website 	YES	N/A
		Be sure parks are listed in inventory of municipal operations.
<ul style="list-style-type: none"> • Parking Lots <ul style="list-style-type: none"> ➤ How many do they operate? 4 ➤ List facility name/locations: 	YES	N/A
<p style="margin-left: 40px;">Lot behind the Palace Theater Lot between 7th and 8th St. Lot by Lorain National Bank City Hall Lot</p>		City should consider retrofitting parking lots with bioretention cells, permeable pavement and other storm water quality BMPs.
<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? 1 ➤ List facility name/locations: 	YES	N/A
<p style="margin-left: 40px;">Street Department Garage</p>		Vehicle maintenance occurs at the Streets Department Garage. Include in SWP3 for that facility. SWP3 due June 4, 2011.

Facilities Operation & Maintenance	
Interview Questions	Response
<p>Facilities inspected?</p> <p>Frequency:</p>	<p style="text-align: center;">NO</p> <p>The City has not started inspections for pollution prevention for all facilities requiring a SWP3 at this time. The City plans on implementing a plan for inspections in 2010. A minimum of one inspection per year is required, but monthly inspections are recommended to reduce potential for storm water pollution. The following facilities need to be inspected: Streets Department Garage, Sewer Department, PQM WWTP, and Black River WWTP.</p>
<p>Checklist used?</p>	<p style="text-align: center;">YES</p> <p>The City has developed a checklist for site inspections which was received during the interview. There is also an annual comprehensive site evaluation ready to be used this year. <i>Please be sure to develop each checklist specific for the different facilities and their operations.</i> A checklist will ensure that each facility is inspected thoroughly and that there is consistency between inspectors.</p>
<p>Staff which perform the inspections (department or agency):</p>	<p>Department heads will do the inspections of their facilities. Dale Vandersommen will assist with the annual evaluation until the department heads are up to speed on what to look for.</p>
<p>Is there a designated stormwater contact person for each facility?</p>	<p style="text-align: center;">NO</p> <p>Please be aware that all facilities requiring an SWP3 are required to have a Pollution Prevention Team with specific responsibilities regarding implementation of the SWP3. For other facilities, Ohio EPA recommends that a person be designated to inspect facilities periodically to assure that storm water BMPs are implemented in accordance with the SWMP. This will develop a certain level of accountability for BMP implementation at these facilities.</p>
<p>Describe enforcement procedures used to address noncompliance on a MS4-owner facility, i.e., what disciplinary measures are taken against those that do not implement standard operating procedures?</p>	<p>Enforcement is a struggle in Lorain because the Storm Water Program Manager has no direct authority over the department heads to enforce storm water compliance. But Department heads do have direct authority over the staff and they</p>

Facilities Operation & Maintenance	
Interview Questions	Response
	<p>follow union procedures.</p> <p>The City needs to be sure that the department heads realize that enforcement of storm water pollution prevention procedures is part of this disciplinary process.</p>
<p>Parking lots owned/operated by the permittee swept?</p> <p>Frequency?</p>	<p style="text-align: center;">YES</p> <p>All municipally-operated parking lots are swept once in the spring and restriped. Lots are plowed in winter as needed.</p>
<p>Do you have any combined sewer systems?</p> <p>If yes, do you have any combined sewer overflows?</p> <ul style="list-style-type: none"> ➤ How many? _____ ➤ Do you track frequency and volume? <p>Are you aware of any illicit cross connections between your sanitary sewer and MS4?</p> <p>If so, what is your plan to eliminate this illicit discharge?</p>	<p style="text-align: center;">NO</p> <p style="text-align: center;">N/A</p> <p style="text-align: center;">NO</p> <p>They did find a sanitary lateral on the east side tied to the MS4, but that was eliminated in 2006. The City has not actively looked for illicit cross connections other than through the dry weather screening program. To date, no illicit discharges have been found via the dry weather screening program. The dry weather screening was done first on outfalls to Lake Erie because that's where the 2006 incident occurred.</p> <p>There are problems throughout the City with sanitary sewer overflows. Most have been eliminated by installing holding tanks. The remaining overflows are directed to the Black River WWTP and not the MS4.</p>
<p>Have you investigated the extent of infiltration and inflow into storm sewer system?</p> <p>What methods have been used to conduct this investigation?</p> <p>What are your plans to repair and eliminate this source of illicit discharge?</p>	<p style="text-align: center;">NO</p> <p>Dale Vandersommen stated that the City would only investigate the extent of I/I into their MS4 if it was a requirement. He does not feel this is a large source of pollution to the MS4.</p> <p>Please be sure that you are not overlooking a possible source of illicit discharge to the MS4. Your IDDE program should include a proactive I/I program.</p>
<p>Sewer spill and cleanup procedures in place?</p>	<p style="text-align: center;">NO</p>

Facilities Operation & Maintenance		
Interview Questions	Response	
	Bob Saultzbaugh (Superintendent of the Sewer Department) said there is no spill response plan in place at this time.	
Applicable Documents	Reviewed	Obtained
Facility inventory	YES	YES
Facility SWPPP	Does not exist yet	

Notes
<p>Storm Water Pollution Prevention Plans (SWP3s)</p> <p>The City is required to obtain NPDES permit coverage for facilities that discharge storm water runoff associated with industrial activity. Municipal operations subject to this requirement are:</p> <p>Lorain Black River WWTP 100 Alabama Avenue Lorain, OH 44052</p> <p>PQM WWTP 6301 West Erie Avenue Lorain, OH 44053</p> <p>No Exposure Certifications were submitted for these facilities, but our review of their operations indicated that points of exposure exist (see Facility Inspection Worksheets for these facilities). If points of exposure cannot be eliminated, the City must obtain NPDES permits to discharge storm water associated with industrial activity for these facilities. This permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWP3). Until either points of exposure are eliminated or NPDES permit coverage is obtained, the City of Lorain is in violation of Ohio Revised Code 6111.04 and Ohio Administrative Code 3745-39-04 for failure to obtain NPDES permit coverage and implement SWP3s for these facilities.</p> <p>The City can either (a) obtain coverage under the Ohio EPA General Storm Water NPDES Permit for Industrial Activities #OHR00004 or (b) modify the existing NPDES permits for these facilities to include storm water requirements. General NPDES permit coverage is obtained by submitting a Notice of Intent and permit fee (currently \$350). The current general permit for industrial storm water discharges is scheduled for renewal by June 1, 2011. Thus, the City may be faced with paying two permit fees within a 6-month period if this option is chosen. Please contact Chuck Allen of this office if you opt to modify your existing NPDES permits.</p> <p>If exposure is eliminated, no action is required, however be aware that the No Exposure Certification must be resubmitted to Ohio EPA once every 5 years in order to remain in effect.</p> <p>Due to requirements in the MS4 permit, a Storm Water Pollution Prevention Plan (SWP3) must be developed and implemented for the following facilities:</p> <p>Streets Department Garage 115 E. 35th Street Lorain, OH 44052</p>

Notes
<p>Sewer Department Facility at PQM 6301 West Erie Avenue Lorain, OH 44053</p> <p>The Ohio EPA General Storm Water NPDES Permit for Small MS4s #OHQ000002 requires the City of Lorain to develop and begin implementing the SWP3 for the above facilities within 2 years of permit renewal, i.e., by June 4, 2011. Still, although a formal SWP3 is not required until this date, be aware that the City is not authorized to discharge pollutants from operations at these facilities. Our inspection of the Streets Department Garage identified a number of compliance issues that should have been remedied immediately.</p> <p>The Streets Department Garage and Sewer Department Facility must be inspected at least once per year and a record of the inspection and its findings must be kept with the SWP3. If this annual inspection reveals deficiencies in the SWP3 or BMPs that are ineffective, the SWP3 must be revised to correct the problems. The City is developing a checklist to provide consistency to facility inspections. 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 a <i>site map</i> for the SWP3s. Also refer to the following website for information on developing SWP3s for these facilities: Developing your SWP3: http://www.epa.gov/npdes/pubs/industrial_swppp_guide.pdf</p>

Pesticides, Herbicides & Fertilizers			
Interview Questions	Response		
Certified applicators used?	YES		
	Ariel Vazquez is a licensed applicator and does all the fertilizer, pesticide and herbicide application in the City. He now works with the Utilities Department.		
Integrated Pest Management (IPM) practices used?	NO		
	No integrated pest management practices are used at this time.		
Storage location of pesticides, herbicides, and fertilizers:	All pesticides, herbicides, and fertilizers are stored at the Sewer Department.		
	See Notes below regarding storage requirements.		
BMPs used during application:	Application never occurs on windy or rainy days. The City uses non-leaching materials and extensive training is provided to applicators.		
Fertilizer/pesticide application plan utilized?	NO		
	The City uses manufacturer's recommendations for application, but no plan is in place.		
Applicable Documents		Reviewed	Obtained
Fertilizer/pesticide application plan		Doesn't Exist	

Notes

Certified Applicator Requirements

Communities are considered to be commercial pesticide applicators and are subject to the rules and requirements of the Ohio Department of Agriculture. As such, the City must have at least one licensed applicator on staff, and currently does. The licensed applicator may train others on the staff to apply pesticides as long as he conducts certain training and maintains records. However, a licensed applicator can be no more than 2 hours away when pesticides are applied. So, if your community only has one licensed applicator and he's on vacation more than 2 hours away, the community cannot apply pesticides.

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 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. This will reduce costs to the City to maintain this new greenspace.

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

The City does not 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 use storm water pollution controls.

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

Standards, BMPs, & Outreach

Interview Questions	Response
BMP technical guidance document available to maintenance staff?	YES Video training once in 2009. Documentation of attendance provided subsequent to inspection. Fire Department modified their procedures and training materials as a result of an illicit discharge incident during the summer of 2010.
MS4 use contractual staff to complete MS4 maintenance activities?	YES
BMP guidance materials provided to contracted staff?	NO

Standards, BMPs, & Outreach		
Interview Questions	Response	
Requirement to consider stormwater impacts and utilize appropriate BMPs in contracts?	The City needs to add pollution controls to their contract language. Contractors are used for major road projects.	
Materials used to educate the public regarding stormwater impacts on MS4 property (if applicable, i.e. public spaces):	<u>Pet waste:</u> There was a message put into the utility bill, but nothing has been done at parks facilities. <u>Litter reduction:</u> A flyer through utilities is the only form of litter reduction outreach thus far.	
Applicable Documents	Reviewed	Obtained
BMP manual or guidance document	YES	YES
Contract language for MS4 operation and maintenance activities	NO	Need to develop it.

Notes
<p>Technical Guidance and Specifications for Maintenance Staff</p> <p>The City needs to develop a program for the dissemination of technical guidance to its maintenance staff on storm water pollution prevention matters. The City should look for posters that can be hung in work areas or lunchrooms, or guidebooks that can be taken out into the field with maintenance crews. This will help reinforce employee training. Once it is prepared, the City will need to train staff on the SWP3s for the Streets Department Garage and the Sewer Department and should look to adopt standards and specifications for storm water pollution prevention implementation in all its municipal operations with the potential to release pollutants in storm water runoff. Existing guidance manuals you may find useful to meet this goal include the <i>Rainwater and Land Development</i> manual (ODNR, 2006) and the <i>Municipal Pollution Prevention/Good Housekeeping Manual #9</i> (Center for Watershed Protection, September 2008). This manual is available as a free download on their website at http://www.cwp.org/formmaker/Download-Form_RedirectFormPage.html.</p> <p>Contracted Staff</p> <p>Once again, please be sure to include language requiring pollution controls in all contracts and requests for proposal (RFPs) where the activities are a potential source of storm water pollution. The operations of third party service providers should be reviewed periodically by the City to ensure that the required pollution controls are being implemented.</p> <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. To date, the City indicates that only one mechanism (brochures in utilities bill) is being used for public education on storm water issues. This does not meet the required performance standard. Please contact Nancy Funni at Lorain Soil & Water Conservation District or Joe Reitz with the City of Avon Lake Utilities Department for ideas and information on their public education programs.</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	
Frequency:		In progress. In 2009, the City had a training program with the Sewer Dept, WWTPs and Water Purification. There Street Department staffs were not trained at this time and will be trained this year in 2010. The City is also working on a new employee training piece on storm water.	
Materials used to train staff:		Storm Watch: Municipal Storm Water Pollution Prevention videos by ExCal Visual Co.	
Applicable Documents		Reviewed	Obtained
Training materials		YES	YES

Notes
<p>MS4 Staff Training</p> <p>Although training has been offered to staff at the Sewer Department, POM WWTP, and Black River WWTP in 2009, the staff at the Streets Department still need to be trained and should have been trained at least once during the first permit term between 2003 and 2008. The City has not developed the required staff training program expected under the MS4 program. The first generation of the MS4 permit required the City to develop an employee training program to prevent and reduce storm water pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances and storm water system maintenance. The City was not able to document any training throughout the first permit term. This does not constitute an acceptable employee training program. <i>Please note that NPDES permit #OHQ000002 requires the City to conduct at least one employee training event on these topics per year.</i> 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.</p> <p>For training that the City organizes for its staff, please retain: (1) the agenda for the training session, including the date that training was provided and names/organizations of the speakers, (2) an attendance list with the signatures of attendees and (3) one copy of the materials used for training. For outside training attended, include an agenda (if available) or a list of topics, the names of attendees, date attended and a copy of any attendance certificate issued by the training organization.</p> <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. The Center for Watershed Protection also has information available for training in their Manual #9: Municipal Pollution Prevention/Good Housekeeping Practices.</p>

FIELD INSPECTION WORKSHEET

Street Department Garage MS4 Facility Worksheet

Permittee: City of Lorain	
Address of facility: 115 E. 35 th Street	Size of facility: 2 to 3 acres
Date of visit: May 27, 2010	Time of visit: 3:00 pm
Provide the name(s) and title(s) of permittee staff present during inspection	
Name	Title
Chuck Camera	Superintendent of Streets
Frank Shukait	Crew Leader
Dale Vandersommen	Storm Water Program Manager
Evaluator Observations:	
SWPPP or stormwater plan	
Has the maintenance facility developed a SWPPP or stormwater plan?	Not Yet. A Storm Water Pollution Prevention Plan (SWPPP) must be developed and implemented by June 4, 2011. See Notes.
Does the plan include a site map, list of pollutant sources, BMPs, and maintenance procedures?	These are required elements of an SWPPP.
Does the permittee conduct and document periodic inspections of the facility?	No. Periodic inspection for the need and implementation of storm water best management practices is required at least once per year, but once per month is recommended.
Are storm drains labeled and free of debris?	Storm drains are not labeled. Waste is being flushed or runs off into the drainage channel out in the yard.
Vehicle maintenance, fueling and washing	
Are vehicle maintenance activities conducted in a designated place not exposed to stormwater?	Not Sure. Vehicle maintenance occurs indoors, however there are floor drains. Although many of them appear to be clogged from lack of maintenance, you must determine if the floor drains are connected to sanitary or to storm sewers. If the connection is to storm sewers, floor drains must be permanently capped, re-directed to sanitary sewers or a number of best management practices must be implemented to prevent the discharge of pollutants to the floor drain system. We observed significant spillage of automotive fluids onto the floor of the mechanics garage, oil filter crushing operations, and drum and used oil storage that could all pose a risk if floor drains are connected to storm sewers.
Are fueling stations properly designed with spill kits nearby?	NO. The emergency shut-off valve is not labeled and the spill kit is located inside the garage. Ohio EPA recommends providing a spill kit at the pumps. Further, we recommend labeling the emergency shut-off valve with signage that will be seen quickly in an emergency. A pig mat or other such spill control

	<p>measure should be placed on nearby storm drain when fuel deliveries are received. Signage can be added to encourage staff to remain at the pump when fueling. Pumps should be equipped with automatic shut-off nozzles.</p>
<p>Are vehicles washed on-site? Is wash water discharged to the MS4 or sanitary sewer?</p>	<p>YES, but causing a violation. We observed lawnmowers being washed off outside. On July 7, 2010, a site inspection by Ohio EPA revealed that painting equipment was also being washed off outside at this facility. The wastewater generated by this process enters a drainage ditch and is discharged off-site. These are unauthorized discharges of wastewater and sources of illicit discharge to the MS4.</p> <p>Vehicle and equipment washing generates wastewater and it must be managed accordingly. If feasible, discharges should be directed to the sanitary sewer. Many communities have established indoor car wash stations where floor drains are connected to the sanitary sewer system. Mobile wash pads are also available to allow the capture and subsequent proper disposal of wastewater if vehicles must be washed outdoors. Some communities take vehicles off-premises to a commercial car wash facility.</p> <p>Vehicles are also washed indoors in the Sanitation Department area. It is believed these floor drains go to sanitary sewers. Please verify. There is also an interior floor drain in the Parks and Recreation Building. Please determine if this drain connects to sanitary or storm.</p>
<p>Material storage</p>	
<p>Are all materials that are potential stormwater contaminants stored under cover or in secondary containment?</p>	<p>NO. See Notes.</p>
<p>Hazardous waste management</p>	
<p>Are all hazardous materials properly labeled and stored to prevent exposure to stormwater runoff?</p>	<p>NO. The used oil tank in the mechanics garage is not labeled and we observed an unlabeled drum outside near the area where lawnmowers were being washed. Containers with used oil must be labeled "Used Oil" per Ohio hazardous waste regulations.</p> <p>All containers should be labeled so that materials are properly identified and managed.</p>
<p>Waste management</p>	
<p>Are waste bins covered with waste properly disposed in containers?</p>	<p>NO. There are several dumpsters on this site and none of them are tarped or lidded. Dumpsters containing solid</p>

	waste must be in good condition to prevent leaks and, be tarped or lidded when not in use. Employees must be trained to sweep up waste and place it in the dumpster when a spill occurs.
How is landscape waste stored?	<p>NOT PROPERLY. The facility also houses a licensed composting operation. Storm water that contacts compost piles or liquids that leach from these piles is leachate, a wastewater, and must be managed accordingly. On the date of inspection, there were no controls in place to prevent leachate from discharging into the drainage ditch on property. The City indicates that it is looking to move this operation to the RTI site, but until that occurs, measures must be taken here to prevent the discharge of leachate from composting operations.</p> <p>A significant amount of landscape waste is stored out in the yard without any controls. This material should be stored within containment, e.g., a tarped dumpster or within a bermed area.</p>
Spill response	
Does the facility have a spill response plan, and are spill kits readily available?	No. This is a required component of the SWPPP. Please be sure that it includes spill response procedures. If you have a Spill Prevention Control and Countermeasure (SPCC) Plan for this facility, it can be referenced in the spill response section of the SWPPP as long as the SPCC plan is kept with the SWP3 on site.
Employee training	
What type of stormwater training do maintenance staff receive?	NONE. The City intends to train staff of the Service Department on storm water pollution prevention during 2010.
Notes or additional information:	
<p>General Comment Despite the fact that Ohio EPA does not require you to implement a formal SWPPP until June 4, 2011, the MS4 permit does not authorize the discharge of pollutants from municipal activities. Thus, Ohio EPA expects the City to address the issues associated with this municipal operation in an expeditious manner. Of municipal operations inspected during this audit, the Streets Department was the least compliant with storm water pollution prevention requirements.</p> <p>There are a number of unauthorized discharges of wastewater from this facility. Please be aware that each instance of discharge is a violation of Ohio Revised Code 6111.04 and subject to penalties. ORC 6111 requires wastewater discharges to be in compliance with an NPDES permit. The NPDES permit for discharges from your MS4 does <u>not</u> authorize the discharge of wastewater.</p>	

Material Storage

Salt spreaders containing residual salt were observed out in the yard. Mr. Shukait indicated that they were awaiting "cleaning". Please see note above about equipment washing and the proper disposal of wastewater. In addition, the residual salt on this equipment will be washed off by storm water. Thus, salt spreaders should be stored indoors, kept under an overhang or be tarped if they must be stored outdoors to await cleaning.

Although salt is stored in a dome, improvements can also be made to the salt storage area. The area in front of the dome is not paved, making it difficult to sweep up salt that gets tracked out or spilled during truck loading operations. The City may want to consider paving this area. The Salt Institute recommends asphalt as a paving material over concrete. If concrete is used, it must be sealed to prevent corrosion. Any salt that is spilled or tracked out of the dome should be swept up and placed back in the dome in a timely manner. Ohio EPA recommends that this occur after every salting event. We also recommend that a dust pan, broom and signage be provided at the dome to encourage this activity.

Paint drums for road striping are also stored outdoors. There is no secondary containment around the storage area and paint was observed on the ground around the drums. Secondary containment can prevent spilled paints from migrating to the storm drainage system.

Tires collected by the City are stored at this facility in a trailer. However, on the date of inspection, the trailer was full and a significant number of tires were stored outdoors. Tires stored outdoors should be tarped or otherwise covered to prevent stagnant water that could lead to mosquito production.

STREETS DEPARTMENT INSPECTION PHOTOS

Photos Taken: May 27, 2010



Fig 1 – 3. Various automotive fluids are spilled on the floor of the mechanics garage and none of the drums are stored in secondary containment. Floor drains are located in the mechanics garage and could allow pollutants to be conveyed to the MS4 if they are connected to storm sewers.

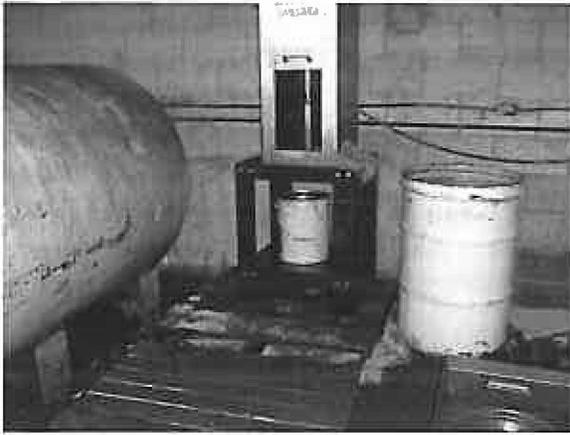


Fig 4 (ABOVE). Oil filter crusher.



Fig 5 (RIGHT). The used oil tank is not labeled.



Fig 6 (LEFT). Vehicle washing occurs within the Sanitation Department area. Please verify that floor drains are connected to sanitary sewers.



Fig 7 (RIGHT). The area in front of the salt dome is not paved making it difficult to clean up residual salts.



Fig 8 (LEFT). Residual salt stains indicate that salt is being conveyed to a drainage ditch by storm water runoff. Control measures are required to minimize this source of storm water pollution. Salt BMPs are all focused on preventing salt from becoming exposed to storm water or minimizing usage.

Fig 9 (RIGHT). Leachate was observed in the drainage ditch just downslope of the composting operations. This is an illicit discharge to the MS4.



Fig 10 (LEFT). Silt fence has been placed between the compost operations and the drainage ditch, however, be aware that this will not prevent a discharge of leachate, even if the silt fence had been installed correctly (which, it is not).

Fig 11 (RIGHT). A significant number of tires are stockpiled outdoors without cover. This can cause a public health concern.



Fig 12 (LEFT). What appears to be residual salt and street debris was observed pushed up against the back of a building. These materials should be swept up and disposed in the dumpster.



Fig 13 (RIGHT). The pad where paint drums are stored has no secondary containment. Evidence of past paint spills is obvious.



Fig 14 – 16. Wastewater from mower washing enters the drainage ditch on this facility causing an illicit discharge to the MS4.



Fig 17 (LEFT). A drum containing an unknown substance was observed behind the buildings. Please characterize the material in the drum and dispose of it properly. Drums and other containers that store liquids or pollutants that can be mobilized in storm water runoff should be stored in secondary containment if they are stored outdoors.

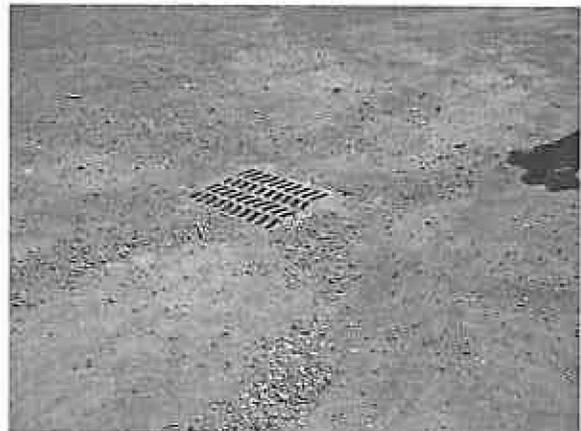


Fig 18 (RIGHT). Some storm sewer catch basins are located within unpaved areas allowing sediment and other solids to enter the storm sewer drainage system. The City may want to consider installing catch basin inserts to reduce the discharge of suspended solids in runoff.



Fig 19 (LEFT). A salt spreader is stored outside. Note the residual salt on the spreader and around its base. This is a storm water pollution source.



Fig 20 (RIGHT). Although the fuel station is under a roof, it is obvious that spills have occurred during the fueling process. Spills must be cleaned up immediately. See Notes above for other recommended storm water pollution prevention measures.

FIELD INSPECTION WORKSHEET

SEWER DEPARTMENT FACILITY

M54 Facility Worksheet

Permittee: City of Lorain	
Address of facility: Enter off Oak Point Rd at PQM	Size of facility: 20 acres, including PQM
Date of visit: May 27, 2010	Time of visit: 1:30 pm
Provide the name(s) and title(s) of permittee staff present during inspection	
Name	Title
Bob Saltzbaugh	Superintendent of Sewer Collection
Dale Vandersommen	Storm Water Program Manager
Mary Ivan-Garza	Environmental & Safety Coordinator
Evaluator Observations:	
SWPPP or stormwater plan	
Has the maintenance facility developed a SWPPP or stormwater plan?	NO. The facility must complete and implement an SWP3 by June 4, 2011.
Does the plan include a site map, list of pollutant sources, BMPs, and maintenance procedures?	These are required components of an SWP3. For further guidance on the development of an SWP3 for industrial activities, please refer to the US EPA website at www.epa.gov/npdes/stormwater/indust .
Does the permittee conduct and document periodic inspections of the facility?	Facility is not regularly inspected for storm water issues. The SWP3 must set a schedule for routine facility inspection. Ohio EPA recommends inspections be conducted on a monthly basis. In addition, a Comprehensive Site Evaluation is required once per year.
Are storm drains labeled and free of debris?	Drains not labeled, but are free of debris.
Vehicle maintenance, fueling and washing	
Are vehicle maintenance activities conducted in a designated place not exposed to stormwater?	YES. Vehicle maintenance occurs indoors. Please verify that floor drains in the vehicle maintenance area are connected to sanitary sewers. The City believes this to be the case. Please indicate how this determination was made.
Are fueling stations properly designed with spill kits nearby?	NO. A spill kit is available, but it is located inside the garage. A storm sewer inlet is within proximity to the fuel pump area. The fueling area is not roofed. The emergency shut-off valve is not labeled. Pumps are equipped with automatic shut-off nozzles. Ohio EPA recommends providing a spill kit at the pumps. Further, we recommend labeling the emergency shut-off valve with signage that will be seen quickly in an emergency. A pig mat or other such spill control measure should be placed on the storm drain when fuel deliveries are received. Signage can be added to

	<p>encourage staff to remain at the pump when fueling. Should the fueling area ever be rebuilt, the City should consider a roof and grading to prevent rainfall and run-on from contacting the fueling area and/or the installation of an oil/water separator.</p>
<p>Are vehicles washed on-site? Is wash water discharged to the MS4 or sanitary sewer?</p>	<p>YES. All vehicle washing occurs indoors where wastewater is directed to floor drains. Please verify that floor drains in the vehicle wash area are connected to sanitary sewers. The City believes this to be the case. This indicate how this determination was made.</p>
<p>Material storage</p>	
<p>Are all materials that are potential stormwater contaminants stored under cover or in secondary containment?</p>	<p>NO. A small pile of sewage sludge was observed on the ground out in the yard. The City indicated that this was removed from a blockage at the PQM plant. This is improper disposal of sewage sludge. The City was told to remove the material and dispose of it properly.</p> <p>Also, there is a soil pile (ditch cleanings?) stored out in the yard. The City indicated that the soil is not used at this facility and would be removed from the site. Please be sure to implement sediment and erosion controls should soil be stockpiled at this facility in the future.</p> <p>Limit the accumulation of scrap metal in the yard. Items that will not be reused should be taken to the salvage yard on a regular basis. Corrodible materials should be kept under tarp, roof or other cover.</p>
<p>Hazardous waste management</p>	
<p>Are all hazardous materials properly labeled and stored to prevent exposure to stormwater runoff?</p>	<p>Not Sure. We observed two 5-gallon buckets in the "greenhouse", i.e., former sludge drying beds, without labels. Please determine what is in these buckets and dispose of properly.</p> <p>Pesticides are stored properly in a caged (locking) area of the Sewer Department garage when not in use.</p>
<p>Waste management</p>	
<p>Are waste bins covered with waste properly disposed in containers?</p>	<p>YES. The lid to the dumpster was kept shut. Please be sure that side panel is also shut between uses.</p> <p>Catch basin cleanings are dewatering in a pit connected to the sanitary sewer system (PQM WWTP) and then transferred to a lidded dumpster for disposal at a solid waste disposal facility.</p>
<p>How is landscape waste stored?</p>	<p>N/A. There is no yard waste on site.</p>
<p>Spill response</p>	
<p>Does the facility have a spill response plan, and</p>	<p>NO. A spill response plan is a required component of</p>

are spill kits readily available?	the SWP3. If you have a Spill Prevention Control and Countermeasure (SPCC) plan, you may reference it in the SWP3 as long as it is maintained in the same location as the SWP3.
Employee training	
What type of stormwater training do maintenance staff receive?	<p>Staff of this facility viewed the StormWatch video training materials in 2009.</p> <p>Please be sure to implement a regular program of employee training on storm water pollution prevention. The NPDES permit requires the City to provide training to municipal staff at least once per year. This training does not have to encompass all municipal employees each year. Storm water pollution prevention training should be incorporated into new employee training materials.</p>
Notes or additional information:	
NONE.	

SEWER DEPARTMENT INSPECTION PHOTOS

Taken: May 27, 2010



Fig 1 & 2. Any washwater or other release of liquids within the Sewer Department garage is directed to floor drains. The City states that floor drains are connected to the sanitary sewer system.



Fig 3 (LEFT). One of the Jet Vac trucks in for repair is leaking. Oil-Dri, drip pans or absorbent pads should be placed under leaking equipment to clean up and control spills.



Fig 4 (RIGHT). Fuel island at the Sewer Department Facility.



Fig 5 (LEFT). Unlabeled totes containing liquids are being stored on the former sludge drying beds in the “greenhouse”. This does not appear to be causing a storm water issue, but containers should be labeled so that material can be properly disposed.



Fig 6 (RIGHT). An unknown material is stored out in the yard in a location where any resulting runoff would enter the storm sewer system.



Fig 7 (LEFT). Catch basin cleanings are placed in the dewatering pit before being placed in the dumpster. Be sure to clean up any materials that may spill in front of the pit when materials are transferred.

Fig 8 (RIGHT). Material removed from a blocked sewer was observed out in the yard. This material is solid waste and must be managed the same as catch basin cleanings.



Fig 9. Soil piles were observed out in the yard. Soils should be stabilized with seed and mulch if they remain on site and unworked for 21 days or longer. Otherwise, silt fence or other sediment control should be used to prevent sediment-laden runoff.

FIELD INSPECTION WORKSHEET

PQM Wastewater Treatment Plant MS4 Facility Worksheet

Permittee: City of Lorain	
Address of facility: 6301 West Erie Ave	Size of facility: 20 acres w/Sewer Dept. Facility
Date of visit: May 27, 2010	Time of visit: 2:00 pm
Provide the name(s) and title(s) of permittee staff present during inspection	
Name	Title
Doug Brown	Superintendent
Dale Vandersommen	Storm Water Program Manager
Mary Ivan-Garza	Environmental & Safety Coordinator
Evaluator Observations:	
SWPPP or stormwater plan	
Has the maintenance facility developed a SWPPP or stormwater plan?	NO. This facility has filed a No Exposure Certification with Ohio EPA, but does not qualify for this exemption from storm water permitting due to exposure at the loading areas for bulk storage tanks. This facility must either eliminate these points of exposure or obtain an NPDES permit to discharge storm water associated with industrial activities. See Notes.
Does the plan include a site map, list of pollutant sources, BMPs, and maintenance procedures?	A Storm Water Pollution Prevention Plan (SWPPP) must be developed if exposure cannot be eliminated. These items are essential components of an SWPPP. Guidance specific to wastewater treatment plants can be found at the US EPA's website on industrial storm water at www.epa.gov/npdes/stormwater/indust .
Does the permittee conduct and document periodic inspections of the facility?	Facility is not regularly inspected for storm water issues. The SWP3 must set a schedule for routine facility inspection. Ohio EPA recommends inspections be conducted on a monthly basis. In addition, a Comprehensive Site Evaluation is required once per year.
Are storm drains labeled and free of debris?	Drains are not labeled, but were free of debris.
Vehicle maintenance, fueling and washing	
Are vehicle maintenance activities conducted in a designated place not exposed to stormwater?	N/A. No vehicle maintenance occurs at this facility.
Are fueling stations properly designed with spill kits nearby?	N/A. There is no fueling station at this facility.
Are vehicles washed on-site? Is wash water discharged to the MS4 or sanitary sewer?	YES. All vehicle washing occurs indoors where floor drains are connected to the sanitary sewer system. Please verify the connection to sanitary sewers.
Material storage	
Are all materials that are potential stormwater contaminants stored under cover or in secondary containment?	NO. See points of exposure in Notes below. Bulk storage tanks should be inspected regularly for leaks.

Hazardous waste management	
Are all hazardous materials properly labeled and stored to prevent exposure to stormwater runoff?	NO. Used oil is stored on the former sludge drying beds in the "greenhouse". These containers are not properly labeled. Used oil must be labeled "Used Oil".
Waste management	
Are waste bins covered with waste properly disposed in containers?	NO. The main solid waste dumpster was lidded and in good condition, but a dumpster containing construction debris was not tarped. All dumpsters should remain tarped or lidded when not in use.
How is landscape waste stored?	N/A. There is no landscape waste at this facility.
Spill response	
Does the facility have a spill response plan, and are spill kits readily available?	NO. A spill response plan is a key component of the Storm Water Pollution Prevention Plan (SWP3). If your facility is required to have a Spill Prevention Control and Countermeasures (SPCC) plan, you may reference it in the SWP3 as long as it is kept with the SWP3 at the facility. No spill kits were observed at the bulk storage tank areas. Spill kits should be available here. Be sure that the spill response materials are compatible with the chemical stored in each tank.
Employee training	
What type of stormwater training do maintenance staff receive?	Excal Video (StormWatch) training video in 2009. Please be sure to implement a regular program of employee training on storm water pollution prevention. The NPDES permit requires the City to provide training to municipal staff at least once per year. This training does not have to encompass all municipal employees each year. Storm water pollution prevention training should be incorporated into new employee training materials.
Notes or additional information:	
<p>Points of Exposure Our inspection revealed that connection points for hoses between chemical delivery trucks and the bulk storage tanks that store chemicals used at the WWTP are exposed to precipitation. In particular, exposure was noted at the Bisulfite and Ferric Chloride storage tanks. Although the use of drip pans and absorbent pads are good best management practices to control spills, these will not eliminate exposure.</p> <p>To qualify for a No Exposure Certification, you must create a condition of "no exposure". No exposure means all industrial materials and activities are protected by a storm resistant shelter to prevent exposure to rain, snow, snowmelt and/or runoff. Industrial materials and activities include, but are not limited to, material handling equipment or activities; industrial machinery; raw materials, intermediate products, by-products, and final products; or waste products. Material handling activities include storage, loading and unloading,</p>	

transportation or conveyance, of any raw material, intermediate product, by-product, final product or waste product. Storm-resistant shelters include completely roofed and walled buildings or structures, as well as structures with only a top cover but no side coverings, provided material under the structure is not otherwise subject to any run-on and subsequent runoff of storm water.

A number of WWTPs have eliminated exposure by redirecting storm drainage in areas of exposure to the head of the wastewater treatment plant. Another option is to berm (curb) and roof the exposed portions of the bulk chemical delivery areas.

Other potential points of exposure are the waste dumpsters. Lidded dumpsters containing waste materials are not considered to be exposed as long as the containers are completely covered and nothing can drain out holes in the bottom, or is lost in loading onto a garbage truck. Industrial refuse and trash that is stored uncovered, however, is considered exposed. In the case of PQM, we observed an unlidded, dumpster with construction and demolition debris. The dumpster was stored out in the open and showed signs of leakage. Thus, this dumpster constitutes a point of exposure. However, the solid waste dumpster was lidded, closed, in good condition and there were no signs of leakage. Thus, the solid waste dumpster would not be considered a point of exposure.

PQM SITE INSPECTION PHOTOS

Photos Taken: May 27, 2010

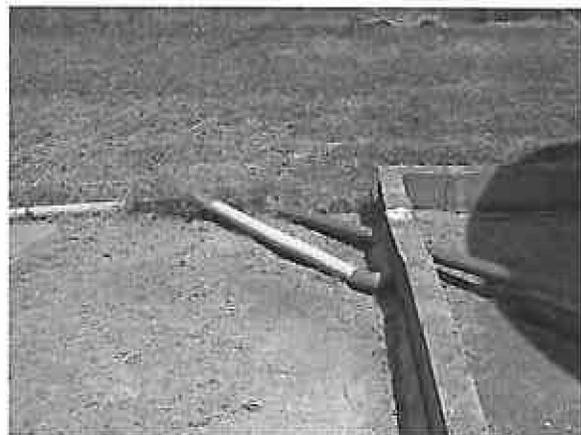


Fig 1 & 2. Bulk storage tanks are kept within secondary containment, but the connection points for hoses used to fill the tanks are not within the secondary containment structure. Further, there is evidence of spills or discharges outside the secondary containment structure of the ferric chloride tank.



Fig 3 & 4. A dumpster containing construction debris was not tarped or otherwise covered and appeared to be leaking. This dumpster constitutes a point of exposure.



Fig 5. Residual salt outside the salt dome even though it is well past the salting season. Sweep up this source of storm water pollution and place it back into the storage dome.

FIELD INSPECTION WORKSHEET

Black River Wastewater Treatment Plan MS4 Facility Worksheet

Permittee: City of Lorain	
Address of facility: 100 Alabama Ave.	Size of facility: 2 ac
Date of visit: May 27, 2010	Time of visit: 4:15 pm
Provide the name(s) and title(s) of permittee staff present during inspection	
Name	Title
Alex Berki	Maintenance Supervisor
Tony Dore	Superintendent
Dale Vandersommen	Storm Water Program Manager
Evaluator Observations:	
SWPPP or stormwater plan	
Has the maintenance facility developed a SWPPP or stormwater plan?	NO. This facility has filed a No Exposure Certification with Ohio EPA, but does not qualify for this exemption from storm water permitting due to exposure at waste dumpsters, the carport, ferric tank and sludge loading/unloading area. This facility must either eliminate these points of exposure or obtain an NPDES permit to discharge storm water associated with industrial activities. See Notes.
Does the plan include a site map, list of pollutant sources, BMPs, and maintenance procedures?	A Storm Water Pollution Prevention Plan (SWPPP) must be developed if exposure cannot be eliminated. These items are essential components of an SWPPP. Guidance specific to wastewater treatment plants can be found at the US EPA's website on industrial storm water at www.epa.gov/npdes/stormwater/indust .
Does the permittee conduct and document periodic inspections of the facility?	Facility is not regularly inspected for storm water issues. The SWP3 must set a schedule for routine facility inspection. Ohio EPA recommends inspections be conducted on a monthly basis. In addition, a Comprehensive Site Evaluation is required once per year.
Are storm drains labeled and free of debris?	Drains are not labeled, but were free of debris.
Vehicle maintenance, fueling and washing	
Are vehicle maintenance activities conducted in a designated place not exposed to stormwater?	N/A. No vehicle maintenance occurs at this facility.
Are fueling stations properly designed with spill kits nearby?	N/A. There is no fueling station at this facility.
Are vehicles washed on-site? Is wash water discharged to the MS4 or sanitary sewer?	N/A. Vehicles are not washed at this site.
Material storage	
Are all materials that are potential stormwater contaminants stored under cover or in secondary containment?	NO. See Points of Exposure in Notes section below.

Hazardous waste management	
Are all hazardous materials properly labeled and stored to prevent exposure to stormwater runoff?	NO. Used oil drum is properly stored, but is not properly labeled. Used oil containers must be labeled with the words "Used Oil" per Ohio hazardous waste regulations.
Waste management	
Are waste bins covered with waste properly disposed in containers?	NO. Although the main solid waste dumpster was lidded and in good condition, waste was spilled around the dumpster for "rags" removed during the primary treatment process. Spills must be cleaned up immediately and dumpsters should be replaced if they leak. Dumpster lids should remain shut when not in use.
How is landscape waste stored?	N/A. There is landscape waste at this site.
Spill response	
Does the facility have a spill response plan, and are spill kits readily available?	NO. A spill response plan is a key component of the Storm Water Pollution Prevention Plan (SWP3). If your facility is required to have a Spill Prevention Control and Countermeasures (SPCC) plan, you may reference it in the SWP3 as long as it is kept with the SWP3 at the facility. No spill kits were observed at the ferric bulk storage tank and sludge loading areas. Spill kits should be available in these locations. Be sure that the spill response materials are compatible with the chemical they will be used to control.
Employee training	
What type of stormwater training do maintenance staff receive?	Staff of the Black River WWTP viewed Excal Video StormWatch training video in 2009. Please be sure to implement a regular program of employee training on storm water pollution prevention. The NPDES permit requires the City to provide training to municipal staff at least once per year. This training does not have to encompass all municipal employees each year. Storm water pollution prevention training should be incorporated into new employee training materials.
Notes or additional information:	
Points of Exposure	
Our inspection revealed several points of exposure at this facility. These points included:	
<ol style="list-style-type: none"> 1. Rag Dumpster – waste materials were observed spilled near the rag dumpster outside the sheltered area. Storm water runoff can convey this material and pollutants attached to it to the storm sewer system. 2. Carport – oil or other automotive fluid was observed leaking from a cart parked outside the building. Storm water run-off and run-on can mobilize oil & grease and cause it to enter the storm sewer 	

system. **Spills must be cleaned up right away. Leaking vehicles should be moved indoors or under a storm-resistant shelter until they can be repaired.**

3. **Sludge Loading Area – sludge transfer between truck and building occurs outdoors. Spills can occur during the sludge transfer process that would allow sewage sludge to enter the storm sewer system.**
4. **Ferric Bulk Storage Tank – although the tank itself is within secondary containment, the area where the delivery truck parks is not within containment. Spills could occur during the chemical transfer process and enter the storm sewer system.**

To qualify for a No Exposure Certification, you must create a condition of “no exposure”. No exposure means all industrial materials and activities are protected by a storm resistant shelter to prevent exposure to rain, snow, snowmelt and/or runoff. Industrial materials and activities include, but are not limited to, material handling equipment or activities; industrial machinery; raw materials, intermediate products, by-products, and final products; or waste products. Material handling activities include storage, loading and unloading, transportation or conveyance, of any raw material, intermediate product, by-product, final product or waste product. Storm-resistant shelters include completely roofed and walled buildings or structures, as well as structures with only a top cover but no side coverings, provided material under the structure is not otherwise subject to any run-on and subsequent runoff of storm water.

A number of WWTPs have eliminated exposure by redirecting storm drainage in areas of exposure to the head of the wastewater treatment plant. Another option is to berm (curb) and roof the exposed portions of the bulk chemical/sludge delivery areas.

Lidded waste dumpsters containing waste materials are not considered to be exposed as long as the containers are completely covered and nothing can leak or drain out holes in the bottom, or is lost in loading onto a garbage truck. Industrial refuse and trash that is stored uncovered, however, is considered exposed. In the case of Black River WWTP, we observed spillage around the rag dumpster. This point of exposure could easily be eliminated by training employees to be more careful when transferring materials to the dumpster and immediately cleaning up any spills which may occur. The condition of the two solid waste dumpsters was acceptable and they do not constitute points of exposure.

The bulk storage tank for Sodium Bisulfite may also constitute a point of exposure, however based on the description of operations provided by the plant superintendent, would not be considered exposed at this time. The tank and hose connection point are within secondary containment. The superintendent states that there is no connection point at the delivery truck and thus a spill on that end of the material transfer chain is not possible.

We also noted an empty, old used oil tank near the carport that has no current use and is not likely to be used in the future. Obsolete materials should be taken to the salvage yard on a regular basis to prevent the accumulation of scrap materials on site.

BLACK RIVER WWTP INSPECTION PHOTOS

Photos Taken: May 27, 2010



Fig 1 (LEFT). Spillage was observed outside of the sheltered area where the rag dumpster is stored.



Fig 2 (RIGHT). Leaks and spills within the carport building are being tracked outside. By implementing good housekeeping practices inside the carport, you can eliminate this source of exposure.



Fig 3 (LEFT). Although there were no drums on the date of inspection, it appears this area is used to store drums and other containers that may be a source of storm water pollution if material is transferred to or from these containers outdoors. The SWP3 should include all outdoor storage areas.



Fig 4 (RIGHT). The storage yard should be reviewed regularly to ensure it is not a source of storm water pollution. Materials should be sent to scrap or be otherwise recycled or disposed if they are no longer of use to you.



Fig 5. The sludge loading/unloading area is outdoors. Material could be spilled during the transfer process and enter the storm sewer system.



Fig 6. Dumpsters and equipment parked at the facility should be inspected regularly to ensure that they are not leaking and to clean up any spills or leaks that may occur.