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LAKE

WILLOUGHBY

CITY OF WILLOUGHBY

3GQ00003 2010/01/06

BOGOEVSKI,
DANIEL

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State of Ohio Environmental Protection Agency

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

January 6, 2010

RE: LAKE COUNTY
CHAGRIN RIVER WATERSHED
CITY OF WILLOUGHBY
FINDINGS OF MUNICIPAL STORM WATER
PROGRAM INSPECTION – MCM #6

NOTICE OF VIOLATION

Mr. Angelo Tomaselli
Service Director
City of Willoughby
One Public Square
Willoughby, OH 44094

Dear Mr. Tomaselli:

Ohio EPA has completed an audit for a portion of your municipal storm water program. Our audit primarily focused on implementation of minimum control measure (MCM) #6: Pollution Prevention and Good Housekeeping for Municipal Operations. This program is a requirement of the Ohio EPA General Storm Water National Pollutant Discharge Elimination System (NPDES) Permit for Small Municipal Separate Storm Sewers Systems (MS4s) #3GQ00003*BG and Ohio Administrative Code 3745-39.

On December 8, 2009, Ohio EPA met with you and other representatives of the City of Willoughby to determine compliance with the NPDES permit and the Storm Water Management Plan (SWMP) submitted by the City in March 2003. In performing this audit, Ohio EPA implemented the Municipal Storm Water Program Evaluation Guide developed by the United States Environmental Protection Agency.

Attached are the Municipal Storm Water Program Evaluation and Field Inspection Worksheet(s) completed for your community. Please review these documents in detail to determine specific elements where your pollution prevention and good housekeeping program needs improvement and for suggestions on ways to improve your MS4 program. The following is a summary of our audit findings:

Violations

- **Failure to implement BMPs to prevent the discharge of leachate from the leaf collection yard.** This constitutes an unauthorized discharge of wastewater from a municipal operation and is a violation of Ohio Revised Code (ORC) 6111.04. To address this violation, the City must install containment or cover measures at the leaf collection yard to prevent the creation of leachate or the ability of runoff from leaf stockpiles to enter the Chagrin River, any adjacent wetlands, and/or the MS4 along St. Clair St.
- **Failure to obtain NPDES permit coverage for storm water discharges from the Willoughby-Eastlake Water Pollution Control Center (WPCC).** This is a violation of ORC 6111.04 and Ohio Administrative Code (OAC) 3745-39-04. Although the

City had submitted a No Exposure Certification, our review of the WPCC facility indicated that exposure exists during material transfer processes at the plant (see Facility Inspection Worksheet). 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 #3PD00024*ND. Either NPDES permit will require the WPCC to develop and implement a Storm Water Pollution Prevention Plan (SWP3).

Deficiencies and Areas for Improvement

- Language on pollution controls included in contracts for municipal construction projects and other municipal services operated by contractors, e.g., impound lot services, should be updated to reflect standards and specifications of the City of Willoughby sediment and erosion control ordinance (Chapter 1351), Ohio EPA General Storm Water NPDES Permit for Construction Activities, the ***Rainwater and Land Development*** manual and/or other storm water standards adopted by the City.
- The City has not yet completed the SWP3 for the Service Garage Complex, 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.
- Although the City inspects the WPCC and Service Garage Complex for storm water BMP implementation, they do not inspect the Pelton Road Landfill aka "Shredder Plant", Lost Nation Airport, the Leaf Collection Yard, Lost Nation Golf Course or other park operations. Facilities that require an SWP3 must be inspected at least once per year and a checklist by which to conduct the facility inspections is a required piece of the SWP3. All other facilities where municipal operations occur should be inspected at least once per year to assure best management practices (BMPs) are being implemented. We strongly recommend that the City develop checklists by which to conduct these inspections as well.
- Storm water discharges from the Lost Nation Airport require authorization under a separate NPDES permit. To authorize discharges, the City must develop an SWP3 and submit a Notice of Intent (NOI) to Ohio EPA for coverage under the Ohio EPA General Storm Water NPDES Permit for Industrial Activities #OHR000004. The use of urea to deice runways is a major environmental concern. The use of urea should be phased out and an alternative deicer with less environmental impact should be used instead.
- The City has not developed checklists by which to conduct inspections of stormwater management facilities and has no written standards or procedures for facility management. Establishing written standards and using checklists will standardize inspection procedures, document maintenance activities and should lead to greater consistency between inspectors and more thorough inspections. Checklists also provide documentation that maintenance is occurring on schedule.

- The City does not have a system in place to track the amount and type of deicer applied during road and parking lot deicing operations. Please be aware that this information must be reported on the Annual Report Form starting with the report due April 1, 2010, for the operating year 2009. As a result of this inspection, the City did develop spreadsheets to collect and summarize this information and provided Ohio EPA with a copy of them prior to the issuance of this letter. Thus, it appears that this deficiency has been addressed.
- The City needs to update its list of parks to include cemeteries and its list of municipal operations to include the Leaf Collection Yard. The list of municipal operations should include an address and/or site location map for each facility.
- Although the golf course did provide me with the quantities of fertilizer, pesticide and herbicide used, the City did not provide me with a fertilizer/pesticide/herbicide application plan. The development and implementation of an application plan may reduce the quantities of fertilizer, pesticide and herbicide used.
- The City needs to improve how it documents training events. Please be sure to keep the date of training, copy of the agenda, copy of the training materials provided and an attendance list with signatures of all attendees for each event.
- Although the City has provided some training to service department staff on storm water pollution prevention, the City does not have a procedural manual and does not provide any field guidance such as flip books or posters to reinforce the training. Adopting a procedural manual is critical should disciplinary action need to be taken against employees that do not follow requirements. Reinforcing the training at the job site through the use of in-field BMP guidance and discussion of storm water BMPs at pre-construction meetings will increase the implementation of BMPs. Materials should also be provided to contractors that provide municipal operations on behalf of the City through contract.
- Although the City has implemented an inspection and maintenance program for some post-construction best management practices (BMPs), the City's program to ensure long-term maintenance of post-construction BMPs is not as comprehensive as required by Part III.B.5.d of the NPDES permit. The City does not track the installation of all private post-construction BMPs and does not yet have a program to ensure that the long-term maintenance plan approved during the post-construction plan review process is being implemented by the responsible parties named in those plans. Be aware that the City must map the location of all privately-owned post-construction BMPs installed since April 21, 2003, and all public post-construction BMPs and ensure that they are being maintained per the long-term maintenance plan required under Chapter 1352 of the City of Willoughby Codified Ordinances.
- Although the City is obtaining coverage under the Ohio EPA General Storm Water NPDES Permit for Construction Activities #OHC00003 when municipal construction projects disturb 1 or more acre of land, the City is not terminating NPDES permit

Mr. Angelo Tomaselli
City of Willoughby
January 6, 2010
Page 4

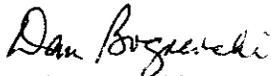
coverage once a municipal construction project reaches final stabilization. Please be aware that NPDES permits for storm water discharges from construction activities must be terminated by submitting a Notice of Termination (NOT) within 45 days of reaching final stabilization. The NOT and instructions can be downloaded from the Ohio EPA Web site at www.epa.ohio.gov/dsw/storm/stormform.aspx.

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 February 5, 2010.** Please note that this response does not replace the requirement to submit an Annual Report. Your annual report for 2009 will be due on April 1, 2010.

Finally, I have enclosed information about the Surface Water Improvement Fund grants available through Ohio EPA. These grants can be used to fund the design and construction of innovative storm water BMPs on public property in your community such as adding bioretention cells to the parking lot in front of City Hall. Grant applications are due by February 15, 2010, so please be sure to review this information and take advantage of this opportunity.

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: Marie Underwood, Ohio EPA, DSW, NEDO
David E. Anderson, Mayor, City of Willoughby
Jim Sayles, City Engineer, CT Consultants
Rachel Webb, Chagrin River Watershed Partners

Municipal Storm Water Program Evaluation

MS4 Maintenance Component Worksheet

Date of Evaluation	December 8, 2009
Evaluator Name, Title	Dan Bogoevski, DSW-NEDO
MS4 Permittee	City of Willoughby/Lake County

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

Staff Interviewed		
Name	Department/Agency	Phone Number/Email
Jim Sayles CT Consultants	City Engineer	(440) 530-2348 jsayles@ctconsultants.com
Angelo Tomaselli Service Director	Service Dept. City of Willoughby	(440) 953-4110 atomaselli@willoughbyohio.com
Ken Wetzel Engineering Technician	Service Dept. City of Willoughby	(440) 953-4110 kwetzel@willoughbyohio.com
Rich Palmisano Supervisor, Streets and Sewers	Service Dept. City of Willoughby	(440) 953-4110 rpalmisano@willoughbyohio.com

MS4 Mapping		
Interview Questions	Response	
Outfalls and receiving waters mapped?	YES	
Catch basins?	YES	
Pipes, ditches, other conduits?	PARTIAL	
Public stormwater facilities (BMPs)?	PARTIAL	
Private stormwater facilities (BMPs)?	NO	
How are maps used (i.e. tracking illicit discharges)?	Map has been useful when performing illicit discharge investigations. Numbering the manholes is a particularly useful feature of the map.	
Applicable Documents	Reviewed	Obtained
Map(s) of MS4 system	YES	YES

Notes
<p>MS4 Map A map of the MS4 was posted on the wall of the conference room where the interview was conducted.</p>

Notes

There are approximately 110 outfalls from the City of Willoughby MS4. The City believes this number includes outfalls from open ditch systems, but the map does not include these outfalls. Please be aware that until the map is updated to show outfalls from open ditch systems, the mapping requirements of NPDES permit #OHQ000001 have only partially been met. **Please update the map to include all outfalls from the MS4 system.** The City states that outfalls from open ditch systems make up only a small percentage of total outfalls (< 5%). The map was produced by the City Engineer (CT Consultants) with the help of the Service Dept.

The City is in the process of expanding the map to meet the requirements of NPDES permit #OHQ000002, i.e., the permit in effect from 2009 to 2014. This permit requires that all catch basins and publicly-owned storm sewers, ditches and storm water management facilities be mapped. 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. The map reviewed during our interview included some of the storm water management facilities, but did not distinguish between public and private facilities. Catch basins and the storm sewer network are only partially completed. The expanded map must be completed by June 4, 2014. A review of the map as of December 29, 2009, indicates that the City is well on its way to meeting this deadline.

Mapping Outfalls from Discharging Home Sewage Treatment Systems (HSTs)

It was noted that no outfalls from HSTs were shown on the map as required by NPDES permit #OHQ000001. The City indicated that this is because there are no discharging HSTs within the City of Willoughby. This was determined through a review of records at the Lake County Health Dept. Please note that this does not necessarily mean that there are no illicit discharges to the MS4 from HSTs. Discharges from failing HSTs may be discovered during illicit discharge investigations or through Lake County Health Department records. Please consult with Laura Kuns at the Lake County Health Department to be sure that the City has performed a complete review of their records.

Catch Basin Cleaning		
Interview Question	Response	
Schedule established for inspections and cleaning?	YES	
Is cleaning and maintenance of catch basins tracked:	YES	
How are spoils materials disposed of?	All spoils are directly transported to Willoughby-Eastlake WPCC in Eastlake. Willoughby operates the facility, but it is a joint facility with Eastlake, Lakeline and Timberlake.	
Are storm drain pipes inspected?	YES	
Proactive or only in response to blockage event?	Pipes are cleaned and videoed when necessary due to complaints or catch basin back-ups. City crews respond when they see them while they are out. No proactive program at this point due to resource issues.	
Applicable Documents	Reviewed	Obtained
List of active municipal construction projects	N/A	
THERE ARE NO ACTIVE MUNICIPAL CONSTRUCTION PROJECTS AT THIS TIME.	See Notes	

Notes

Catch Basin Cleaning Schedule

The SWMP submitted by the City of Willoughby stated that catch basin cleaning will occur once every 5 years or as needed. The City met this obligation over the first NPDES permit term. All catch basins were cleaned at least once between 2003 and 2008. Catch cleaning is tracked on a wall map kept at the Service Garage. Please be sure to maintain the current schedule for catch basin cleaning to stay in compliance with the NPDES permit.

Disposal of catch basin cleanings is occurring in an appropriate manner. See Field Inspection Worksheet for the Willoughby-Eastlake Water Pollution Control Center (WPCC).

Municipal Construction Projects

The City indicates that there are no municipal construction projects occurring at this time. However, Ohio EPA records show that there are two active NPDES permits for municipal construction projects in Willoughby. These projects are:

- River Street Sanitary Sewer Improvements 3GC03729*AG
- Willoughby Lost Nation Municipal Golf Course 3GC04027*AG

Information contained on the Notices of Intent (NOIs) indicates that these projects should be completed at this time. If construction is complete, please submit Notices of Termination (NOTs) for these projects to close out NPDES permit coverage. The NOT and instructions can be obtained on the Ohio EPA Storm Water Program webpage at www.epa.ohio.gov/dsw/storm/stormform.aspx. As a reminder, coverage under the Ohio EPA General Storm Water NPDES Permit for Construction Activities is to be terminated within 45 days of when the project reaches final stabilization.

The City will soon start work on a storm sewer outfall project and two sanitary sewer line projects. Although these projects are not expected to disturb an acre or more, the contracts for these projects did include language requiring the use of pollution controls. Ohio EPA has reviewed the standard language contained in municipal construction contracts (Part 1.4: Pollution Control) and offers the following comments:

- Part 1.4.B references the Soil Erosion and Sedimentation Control Act, EPA 1972, as amended. Although this reference ultimately ties contractors to the current standards required under the NPDES permit program for storm water runoff from construction activities, the reference may be too general for most contractors to make a connection with the correct standards. It may be better to more explicitly reference standards and specifications contained in the latest version of the Ohio EPA General Storm Water NPDES Permit for Construction Activities and the Ohio Department of Natural Resource ***Rainwater and Land Development*** manual. Or, since the MS4 permit requires the City's sediment and erosion control ordinances to be updated to meet or exceed the standards contained in the NPDES permit for construction activities, it may be most appropriate to reference the standards in the City of Willoughby's local sediment and erosion control ordinance (Chapter 1351).
- Part 1.4.F establishes standards contained in ODOT Item 207 as the standards for temporary soil and erosion control. Please be aware that this may lead to inconsistencies as ODOT's standards for the construction of certain sediment and erosion controls differs from the standards contained in ODNR's ***Rainwater and Land Development*** manual referenced as the standards in Section 1351.08 of the City of Willoughby Erosion and Sediment Control Ordinance.
- There is a typo in Part 1.4.E. The word "filers" should be "filters". In addition, this language

should be expanded or a separate item be added to include pollution controls for non-sediment pollutants, e.g., cement truck washwater, trash and debris, off-site tracking, slurry from sawcutting operations, chemical and fuel spills, etc.

Please provide me with a copy of your revised standard language for pollution control if any revisions are made as a result of these comments.

Finally, please be aware that the City is required to obtain coverage under the Ohio EPA General Storm Water NPDES Permit for Construction Activities whenever the larger common plan of development or sale disturbs 1 or more acre of land. Certain road projects or ditch and pond cleaning operations are classified as "routine maintenance", if they disturb less than 5 acres, and are exempt from this requirement (see http://www.epa.ohio.gov/dsw/storm/routine_maint.aspx for further information).

Stormwater Management Facilities Operation and Maintenance		
Interview Questions	Response	
Public facilities inspected?	YES	
Frequency:	Facilities are inspected once every other week during spring, summer and fall.	
Private facilities inspected?	SOME (See Notes)	
Frequency:	Frequency for those inspected is same as for public facilities.	
Checklist used for inspections?	NO	
	But, inspection and maintenance is documented by keeping a list of when facilities are mowed, when they are cleaned and the dates of when a project starts and when a project finishes.	
Have maintenance standards and procedures been established for these facilities?	NO	
	No written standards or procedures other than the regular inspections and response to needs. Did discuss the value of this. See Notes.	
Is maintenance prioritized? How? Is data evaluated to target maintenance resources?	YES	
	Facilities whose discharge may cause a problem on adjacent property or where outlets are prone to blockage are prioritized for maintenance. Weather conditions may also dictate maintenance priority. See Notes.	
	Applicable Documents	Reviewed
	Inspection checklist	NONE EXISTS
		Obtained

Notes
Inventory of Stormwater Management Facilities
The City maintains a list of stormwater management facilities, but it is limited to detention and retention basins and does not include facilities in Osborne Park or underground systems. Please be aware that stormwater management is trending toward low-impact development practices and

green infrastructure. Thus, future stormwater management facilities will include practices such as bioretention cells, green roofs, enhanced swales, permeable pavement and rain barrels. In certain instances, it may include manufactured and underground systems too. Be sure that your inventory includes all of these practices as well as non-structural practices such as riparian and wetland setbacks. This information is required in order to properly implement Minimum Control Measure (MCM) #5: Post-Construction Runoff Control of the MS4 program.

Currently, there are only 6 storm water management ponds for which the City actually performs the maintenance activities. All facilities were built prior to 2003, so they are strictly flood-control facilities. Three are publicly-owned and 3 are privately-owned. The City takes over maintenance of private facilities only if 50% or more of the contributing runoff comes from off-site of the property. All other private facilities are the responsibility of the private landowner or homeowners' association. Under MCM #5, you must establish a program to verify that these landowners and homeowners' associations are implementing the long-term maintenance plans approved by the City during the plan review process for post-construction BMPs on new developments or redevelopments that disturb 1 or more acre of land. This matter will be audited in more detail when we return to review MCM #4 and #5.

Facility Inspection Issues

The City has not developed or adopted any checklists or established written standards for post-construction best management practice (BMP) maintenance as required by Part 3.2.5.1.4 of NPDES permit #OHQ000001. Checklists and written maintenance standards are important to formalize a program to assure long-term maintenance of post-construction best management practices (BMPs). They will improve consistency between inspectors and should lead to a more thorough inspection. Many communities across the country have established checklists and maintenance standards as a result of municipal storm water regulations. These can be found by doing an internet search. Some that you may find useful include the Minnesota Local Road Research Board Stormwater Maintenance BMP Resource Guide at <http://www.lrrb.org/detail.aspx?productid=2301>, the checklists developed by Seattle Public Utilities at <http://www.mrsc.org/Subjects/Environment/water/SW-Ponds.aspx#Forms> and the Stormwater Treatment Practice (STP) Maintenance Resource page at www.stormwatercenter.net/Manual_Builder/Maintenance_Manual/introduction.htm. In addition, the Geauga Soil & Water Conservation District (SWCD) has developed a computer program to track plan review, approval, site inspections, long-term maintenance plans and enforcement activity for both MCM #4 and #5. For information on how to obtain a copy of this program, please contact Carmella Shale of the Geauga SWCD at (440) 834-1122.

That said, the City was able to describe the maintenance activities for the stormwater management ponds at the Meadowlands, one of the facilities under City maintenance. The facility was inspected the week prior to this interview. Staff from the Service Department looked for blockage at inlets and outlets and assessed the amount of debris that has washed in to determine if removal is necessary. The City further indicated that vegetation in larger, dry ponds gets cut several times a year. Wet ponds are mowed more frequently.

Facilities are visually inspected before a big forecasted rain event to ensure blockages are removed and spillways are cut down should they be needed. Service Department staff is aware of which ponds tend to need more frequent maintenance or are prone to clogging, e.g., the Meadowlands. Cutting of grass is timed to keep the facility trimmed to prevent clogging or for aesthetics. Structural repairs to stormwater management ponds are rare. The most common maintenance activity is cleaning (debris removal).

Road Maintenance	
Interview Questions	Response
Streets regularly swept? Frequency:	YES Streets with curbs are typically swept weekly in summer and the few streets on the north end of town without curbs are swept more than once per year.
Frequency based on water quality factors (e.g. proximity to streams)?	NO The frequency was established to clean up behind garbage and leaf collection trucks because they tend to spill things. So, there is some tie-in to water quality, but that isn't the primary reason for establishing this frequency.
How are spoils disposed of?	Taken to the Willoughby-Eastlake WPCC.
Does the community collect road kill? What do they do with the carcasses?	YES Road kill is stored in a dumpster located at the "shredder plant", i.e., the closed Pelton Road Landfill, and then subsequently disposed at the Lake County Solid Waste Facility landfill.
Does the community have a leaf collection program? What do they do with the collected leaves?	YES Private company (JB Recycling) picks up leaves and mulches them. Leaves are temporarily stored on an open lot located on city-owned property at St. Clair and Lost Nation Rd. Mulching does not occur on City property. The lot only operates about 6 to 8 weeks in the Fall. This operation creates an unauthorized discharge of wastewater to the Chagrin River. Control measures must be implemented to eliminate this discharge.
BMPs used during road maintenance activities? Describe types of road maintenance conducted by community staff and the BMPs used	YES Road (cold) patch, crack sealing, minor asphalt paving, sanitary and storm line repair
BMP guidance available to field staff?	NO
Deicers used by MS4?	YES
Type and amount of deicer and additives tracked?	NO But, City provided Ohio EPA with a tracking plan after this interview was conducted and

Road Maintenance		
Interview Questions	Response	
What measures are being taken to minimize the application of deicers?	prior to the issuance of this report. See Notes.	
Sand/salt swept up after application? How soon?	YES Clean up occurs right away.	
Applicable Documents	Reviewed	Obtained
BMP guidance	NOTHING WRITTEN	
Street sweeping records	YES	YES
Deicer application records	YES	YES

Notes
<p>Street Sweeping</p> <p>The SWMP submitted to Ohio EPA in 2003 stated that the City would sweep streets at least once per year. The City has met and exceeded this obligation. However, street sweeping is primarily performed to pick up what spills out of garbage and leaf collection trucks. This is desirable, but Ohio EPA strongly recommends that at least one sweeping be performed after snowmelt in the early Spring to collect and remove road grit and other materials which accumulate in snowbanks over the winter.</p> <p>The City has implemented an acceptable program for street sweepings disposal. In 2008, approximately 325 tons of street sweepings and catch basin cleanings were removed from the system. The cost to dispose at landfill was \$584. See Field Inspection Worksheet for the Willoughby-Eastlake WPCC or further information.</p> <p>Road Kill</p> <p>The City has implemented an acceptable program to collect, store and dispose of road kill. However, the dumpster in which road kill is placed must be covered when there are carcasses in it. Please either cover the dumpster with a tarp or use a lidded dumpster. Also, inspect the dumpster periodically to make sure it is in good condition and that no fluids from decomposing animals are being discharged from it.</p> <p>Leaf Collection Yard</p> <p>Our inspection of this facility revealed that no controls have been implemented to prevent the discharge of leachate created by the leaf decomposition process. Storm water that comes in contact with the leaf piles becomes leachate as well. Leachate is a wastewater. The MS4 permit does not authorize the discharge of wastewater from municipal operations. Measures must be taken to eliminate this discharge. We discussed several options during our inspection of the site (see Field Inspection Worksheet for the Leaf Collection Yard). Since leaf collection is a contracted service, please be sure that appropriate language for controls at the Leaf Collection Yard are provided in future contracts.</p> <p>Further, please provide me with information regarding where leaves are taken for composting once they are removed from the Leaf Collection Yard. Be aware that solid waste regulations require leaves to be composted at a Class IV licensed composting facility. A review of the list of licensed facilities in Lake County does not reveal any in the name of JB Recycling, but there are a number of licensed</p>

Notes

facilities in proximity to your community.

Road Maintenance

The City does not see these activities as a significant source of storm water pollution. The crack sealer sets up immediately, the patch is rolled and the asphalt is purchased pre-mixed and placed in a self-contained truck. Spoils excavated during sanitary and storm sewer line repairs are taken directly to a landfill. Crews are trained to install sock-type inlet protection on storm drains. All other road maintenance work is contracted out and contracts contain standard language for pollution controls (see prior comments on how this language can be improved).

Even so, there may be some benefit in providing guidance at the field level to remind field staff of the BMPs they are to employ. A discussion of storm water BMPs should occur during the pre-construction meeting. Please add this discussion as a standard agenda item to the pre-construction meeting.

Deicing Operations

The main deicer is standard road salt (sodium chloride, NaCl). The City has taken several measures to decrease the use of deicers. Last year, the City began using beet juice (Ice Bite) as an additive to the salt. During our interview, Mr. Tomaselli indicated that approximately 4000 gallons of beet juice and 6000 tons of NaCl were used during the 2008-2009 winter season. Beet juice reduces the amount of NaCl that must be used. Approximately 3070 tons of NaCl were used during the 2008-2009 season. The City expects even less NaCl usage this year because they purchased additional beet juice trucks. The beet juice is stored in a tank on the side of the truck and mixes with the salt as it is dispensed. Further, the City has adopted a policy to only salt intersections, bridges and hills due to cost of salt. They intend to stick to this limited salting policy this year too in order to save money.

The City did not keep detailed deicer application records, but was able to estimate usage by looking at purchases and starting and ending inventories and provided those numbers to Ohio EPA after the date of this MS4 inspection. Using this method, NaCl usage during the 2008-2009 winter season was only 3070 tons. Note that this number is only half of what Mr. Tomaselli indicated during our interview (6000 tons) and different from the usage estimated using salt budget and price per ton (4,900 tons). This highlights the need for more accurate deicer application tracking. Be aware that the new Annual Report form requires the City to report the types and amounts of deicer used each year. More accurate deicer application tracking may also lead to savings as you begin to notice patterns in usage. You may even be able to identify drivers that are over-applying or spreaders that need calibrating. In response to this inspection, the City developed a spreadsheet to more accurately track salt application and plans to use that new system beginning with the 2009-2010 winter season.

Even so, it does appear that the City has reduced salt usage with time. Mr. Tomaselli indicated that over the past 10 years, the budget for salt has dropped from \$350,000 (at \$19/ton) to \$275,000 (at \$56/ton). If this method is used to estimate usage, this correlates to a 74% drop.

Salt is stored at the maintenance garage (see Field Inspection Worksheet for the Maintenance Facility). The City has the salt blown into the dome to allow a larger amount of salt to be stored inside it and never stores salt outside the dome. When salt is loaded into trucks for road salting, if a truck is overloaded, there will be spill. Staff is trained to watch for this and notify the supervisor to get it cleaned up. No salt was observed outside the salt dome at the time of our inspection and the area around it appeared to be well-maintained.

Flood Management			
Interview Questions		Response	
Inventory of flood management structures completed?		YES, but not complete	
Structures been assessed for stormwater retrofit?		NO	
New structures include water quality considerations?		YES Chapter 1352 passed on September 4, 2007, requires the installation of post-construction water quality BMPs on all new development and redevelopment sites that disturb 1 or more acre of land.	
Applicable Documents		Reviewed	Obtained
Inventory		YES	YES

Notes
<p>Inventory See Notes under section titled <i>Stormwater Facilities Management & Operations</i> in this report for comments on flood management structure inventory. It needs to be expanded to include underground systems, manufactured systems and the systems at Osborne Park. Please be sure that Mr. Wetzel works with Mr. Sayles to develop a more comprehensive inventory.</p> <p>Look for Retrofit Opportunities Although the City has passed a post-construction BMP ordinance and reviews plans to be sure BMPs are provided, this only applies to projects where 1 or more acre of land is disturbed. This program will not create BMPs in previously-developed areas unless they are being redeveloped and the 1-acre threshold is met. As the City of Willoughby is largely built-out, this limits the opportunities to implement post-construction BMPs as part of the development/redevelopment process.</p> <p>For this reason, it is important to look for retrofit opportunities by making a list of potential water quality enhancement projects and focusing on the implementation of green infrastructure. Typically, retrofitting the outlet structures of existing detention and retention basins to provide extended detention of the Water Quality Volume (WQv) is the easiest and most feasible type of retrofit project. However, preferred retrofit projects include installing bioretention cells in existing parking lots or along residential streets, resurfacing with permeable pavement and establishing incentive programs for rain gardens, rain barrels and other forms of downspout disconnection in residential neighborhoods.</p> <p>Ohio EPA currently has grant money available to implement green infrastructure projects on publicly-owned property. Grant applications are due by February 15, 2009, and have a cap of \$150,000. Projects that are shovel-ready and can be completed within 12 months of grant award will be prioritized for funding. We discussed the possibility of using this grant to incorporate bioretention and permeable pavement in the planned parking lot improvements in front of City Hall. For more information about the Surface Water Improvement Fund (SWIF), please contact Russ Gibson of Ohio EPA at (614) 644-2020 and review the attached information.</p>

Facilities Operation & Maintenance	
Interview Questions	Response
Inventory of MS4 facilities complete (i.e. facilities owned and operated by the MS4)?	YES

Facilities Operation & Maintenance																											
Interview Questions	Response																										
<p><u>Types of facilities included</u> <i>These need their own NPDES storm water permit for industrial activities, if there is a discharge of runoff from these operations:</i></p> <ul style="list-style-type: none"> • Landfills <ul style="list-style-type: none"> ➤ Pelton Road Landfill Pelton Road Willoughby, OH 44094 • Airports <ul style="list-style-type: none"> ➤ Lost Nation Airport 1969 Lost Nation Rd. Willoughby, OH 44094 • Shipping Ports • Steam Electric Power Plants • Wastewater Treatment Plants ≥1 MGD or with a pretreatment program <ul style="list-style-type: none"> ➤ Willoughby-Eastlake WPCC 221 Erie Rd. Eastlake, OH 44095 <p><i>These do not need their own permit:</i></p> <ul style="list-style-type: none"> • Impound Lots • Leaf Collection Yards included in SWMP Corner of St. Clair and Lost Nation Rd. • Solid Waste Transfer Station • Composting Operations • Maintenance Yards <ul style="list-style-type: none"> ➤ How many do they operate? <u> 1 </u> ➤ List facility names/locations: Service Garage Complex 37450 North Industrial Parkway Willoughby, OH 44094 • Parks and Cemeteries <ul style="list-style-type: none"> ➤ How many in UA? <u> 17 </u> ➤ List facility names/locations: See list in file. 	<p>But incomplete. Need to add leaf collection yard to list of facilities and include addresses.</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; border-bottom: 1px solid black;">Response</th> <th style="text-align: center; border-bottom: 1px solid black;">SWP3 Developed?</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">YES</td> <td style="text-align: center;">NO, but not required. See Notes.</td> </tr> <tr> <td style="text-align: center;">YES</td> <td style="text-align: center;">NO See Notes.</td> </tr> <tr> <td style="text-align: center;">NO</td> <td style="text-align: center;">N/A since do not operate</td> </tr> <tr> <td style="text-align: center;">NO</td> <td style="text-align: center;">N/A since do not operate</td> </tr> <tr> <td style="text-align: center;">YES</td> <td style="text-align: center;">NO. See Notes.</td> </tr> <tr> <td style="text-align: center;">Contracted Out</td> <td style="text-align: center;">N/A, but need contract language</td> </tr> <tr> <td style="text-align: center;">YES</td> <td style="text-align: center;">NO</td> </tr> <tr> <td style="text-align: center;">NO</td> <td style="text-align: center;">N/A, since do not operate</td> </tr> <tr> <td style="text-align: center;">NO</td> <td style="text-align: center;">N/A, since do not operate</td> </tr> <tr> <td style="text-align: center;">YES</td> <td style="text-align: center;">NO, but working on it.</td> </tr> <tr> <td colspan="2" style="text-align: center;">SWP3 must be complete and implemented by June 4, 2011.</td> </tr> <tr> <td style="text-align: center;">YES</td> <td style="text-align: center;">N/A, but BMPs must be implemented</td> </tr> </tbody> </table>	Response	SWP3 Developed?	YES	NO, but not required. See Notes.	YES	NO See Notes.	NO	N/A since do not operate	NO	N/A since do not operate	YES	NO. See Notes.	Contracted Out	N/A, but need contract language	YES	NO	NO	N/A, since do not operate	NO	N/A, since do not operate	YES	NO, but working on it.	SWP3 must be complete and implemented by June 4, 2011.		YES	N/A, but BMPs must be implemented
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Facilities Operation & Maintenance	
Interview Questions	Response
<p>Facilities inspected for storm water BMPs?</p> <p>Frequency:</p>	<p style="text-align: center;">Some facilities are and some are not.</p> <p>Pelton Road Landfill is inspected quarterly by the Lake Co Health Dept. Please verify that this inspection includes storm water matters such as maintaining vegetative cover, repairing erosion rills and gullies that may form, maintaining tarp or lid over road kill dumpsters, addressing leachate outbreaks, etc.</p> <p>Lost Nation Airport is not inspected for storm water practices. The SWP3 must establish the frequency for routine inspections and at least one comprehensive site review is required each year.</p> <p>Willoughby Eastlake WPCC is inspected by John Gorka, the superintendent. He has developed guidance to prevent storm water pollution. However, our inspection of the facility revealed the presence of automotive fluid leaks near a storm drain that had been there for more than a month and was still not cleaned up. This suggests storm water inspections at the WPCC do not occur at sufficient frequency.</p> <p>The Leaf Collection Yard is not inspected. Our inspection revealed that controls are needed to prevent leachate from discharging into the Chagrin River.</p> <p>The Service Garage Complex is inspected daily by the Streets and Sewers Superintendent, but no checklists have been developed by which to conduct inspections. The City will develop and use an inspection checklist once the SWP3 is complete. A union rep and service department staff do a once per year safety inspection that does catch drums, rags, etc that may be left out.</p>
<p>Checklist used?</p>	<p style="text-align: center;">NO</p> <p>The value of checklists was discussed with the City and they were instructed to develop inspection checklists for their facilities. See previous notes about this matter.</p>
<p>Staff which perform the inspections (department or agency):</p>	<p>Various. See answers above. Be sure that SWP3s identify parties responsible for facility storm water inspection and that the name of the inspector is recorded on inspection checklists.</p>

Facilities Operation & Maintenance	
Interview Questions	Response
Is there a designated stormwater contact person for each facility?	NO A key component of the SWP3 is identification of the Pollution Prevention Team, i.e., the parties that will be responsible for implementation of the plan at the facility. Be sure that you provide specific names, position descriptions and the specific duties of each individual in regards to plan implementation. Be sure to keep this information updated as personnel or duties are changed.
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?:	Employees of the City are under union contract that mandates disciplinary procedures that can be used. It calls for an escalation process from verbal to written warnings to suspension. No actions have been taken for non-compliance with storm water matters so far.
Parking lots owned/operated by the permittee swept? Frequency?	YES Weekly from April to November.
Do you have any combined sewer systems? If yes, do you have any combined sewer overflows? <ul style="list-style-type: none"> ➤ How many? _____ ➤ Do you track frequency and volume? Are you aware of any illicit cross connections between your sanitary sewer and MS4? If so, what is your plan to eliminate this illicit discharge?	NO The City did have combined manholes, but have separated them all out now. Spent \$20 M over 20 years to do it. N/A YES A review of the NPDES permit for the WPCC indicates that there is a bypass of wastewater at the plant when inflow rates exceed 20 MGD. The City is required to perform a study to determine possible alternatives and their cost and submit a report to Ohio EPA no later than December 19, 2010, with their chosen course of action to eliminate bypasses.

Facilities Operation & Maintenance		
Interview Questions	Response	
	<p>In addition, the NPDES permit for the WPCC indicates the possibility of separate sewer overflows (SSOs), but does not indicate if these SSOs are strictly the bypass at the plant or somewhere else in the collection system. A review of monthly operating reports (MORs) submitted to Ohio EPA does not indicate that an overflow has occurred since the effective date of the NPDES permit and Mr. Tomaselli stated that none has occurred since 2006. Be sure that the WPCC understands that an SSO to the MS4 is an illicit discharge and actions to eliminate it should be coordinated with the MS4 program. Be sure that you consider "non-traditional" solutions such as green infrastructure that can reduce the runoff volumes, e.g., green roofs, bioretention cells, permeable pavements, cisterns and rain barrels.</p>	
<p>Have you investigated the extent of infiltration and inflow (I/I) 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;">YES</p> <p>The City targeted areas where sanitary sewers were constructed above storm sewers. Where I/I was a problem, the storm sewers were lined to repair them. But, there is still one neighborhood (Moreland – St. Clair) that still has to be done. Will be addressed through the I/I analysis required by the NPDES permit for the WPCC.</p> <p>The City also uses a Point-of-Sale method to identify I/I or illicit cross connections. See notes below.</p>	
<p>Sewer spill and cleanup procedures in place?</p>	<p style="text-align: center;">YES</p> <p>The WPCC reports incidents to Ohio EPA at the end of each year as required by their NPDES permit.</p>	
Applicable Documents	Reviewed	Obtained
Facility inventory	YES	YES
Facility SWPPP	Does not exist yet.	

Notes
<p>Storm Water Pollution Prevention Plans</p> <p>A Storm Water Pollution Prevention Plan (SWP3) must be developed and implemented for the following facilities:</p>

Notes

Lost Nation Airport
1969 Lost Nation Rd.
Willoughby, OH 44094

Willoughby-Eastlake Water Pollution Control Center (WPCC)*
221 Erie Rd.
Eastlake, OH 44095

Willoughby Service Garage Complex
37450 North Industrial Parkway
Willoughby, OH 44094

The Ohio EPA General Storm Water NPDES Permit for Small MS4s #OHQ000002 requires you to develop and begin implementing the SWP3 for the Service Garage Complex within 2 years of permit renewal, i.e., by June 4, 2011. Facilities must be inspected at least once per year and a record of the inspection and its findings must be kept with the SWP3. If this annual inspection reveals deficiencies in the SWP3 or BMPs that are ineffective, the SWP3 must be revised to correct the problems. SWP3s must contain a checklist by which to conduct the facility inspection.

The SWP3 for Lost Nation Airport will be due within 180 days of obtaining coverage under the Ohio EPA General Storm Water NPDES Permit for Industrial Activities #OHR000004. Coverage under this permit is obtained by submitting a Notice of Intent (NOI) to: Ohio EPA Office of Fiscal Administration, P.O. Box 1049, Columbus, OH 43216-1049. The permit fee of \$350 should be made payable to the Treasurer of the State of Ohio.

*An SWP3 will be required for the Willoughby-Eastlake WPCC if you cannot eliminate the points of exposure identified during our inspection of the facility (See Facility Inspection Worksheet for Willoughby-Eastlake WPCC).

Pelton Road Landfill

The City refers to this facility as the "Shredder Plant". The facility is a municipal solid waste landfill that closed in the mid 1990's. The facility does not have an NPDES permit for storm water runoff associated with industrial activity. Be aware that Ohio EPA may require an NPDES permit for storm water associated with industrial activity if the facility is not maintained in good condition and leachate outbreaks are not controlled. However, to date, Ohio EPA has not deemed this to be necessary. Thus, an NPDES permit and Storm Water Pollution Prevention Plan (SWP3) will not be required for this facility at this time.

Lost Nation Airport

The City of Willoughby sought NPDES permit coverage for storm water discharges associated with industrial activity at the Lost Nation Airport under the group applicant option that was available in 1992 when storm water permits were first issued. However, Ohio EPA did not act upon the City's application and the group applicant option is no longer available. As such, the City will need to seek coverage under the Ohio EPA General Storm Water NPDES Permit for Industrial Activities #OHR000004 and develop an SWP3 in the time frames specified in the permit. See Notes above about Storm Water Pollution Prevention Plans (SWP3s) and the Facility Inspection Worksheet for Lost Nation Airport for more information.

Willoughby-Eastlake Water Pollution Control Center (WPCC)

The City submitted a No Exposure Certification for this facility on , 2009. If exposure cannot be

Notes

eliminated, you will need to either modify your existing NPDES permit for this facility to include storm water language or seek general permit coverage for storm water discharges associated with industrial activity from the facility (information on where to submit the NOI and associated fee are the same as for Lost Nation Airport). Please inform me which course of action you are taking in your response to this MS4 inspection. If you are seeking a permit modification, please contact Marie Underwood at the Ohio EPA Northeast District Office at (330) 963-1183 to start the process.

Auto Impoundment

The City does not operate its own impound lot. Rather, they contract this service out to a private contractor. Please be aware that the City must include language in the contract with the impound lot operator to require the use of storm water best management practices (BMPs). Typical BMPs may include draining fluids from vehicles before storing them in the yard, placing drip pans under leaks, daily inspections to identify potential storm water pollution sources, etc. Ohio EPA recommends that the City of Willoughby review the operations of the impound lot operator from time to time to make sure that BMPs are being implemented.

Park Operations

Although a formal SWP3 is not required for park operations, the City is required to implement BMPs at park operations. Potential sources of storm water pollution associated with park operations include, but are not limited to: trash and debris, grass clippings and yard waste, vehicle and lawnmower maintenance activities, fertilizer and pesticide application, chlorine management at swimming pool operations, and earth disturbing activities. Please review your operations and implement controls as appropriate.

The City recently rebuilt the parking lot at Gilson Park and installed a dry extended detention basin to provide water quality control for the runoff. Other BMPs the City has implemented for park operations include daily trash pick-up and installation of signs and/or bags to encourage proper disposal of trash and pet waste. The City does not operate any maintenance facilities at parks or cemeteries. Be sure to add cemeteries to your park list.

Parking Lots

Most municipal facilities have a parking lot associated with them. Only 5 parks have paved parking areas. The City does not operate any stand-alone parking lots. Parking lots are swept every Friday during summer months (April – Nov), but usually not at other times of the year.

Illicit Cross-Connections of Sanitary Flows

In addition to the bypass that occurs at the WPCC when inflow rates exceed 20 MGD, Mr. Tomaselli indicated that the Timber Ridge pump station, if overloaded, will overflow to an unnamed tributary to the Chagrin River. However, this hasn't happened since an exceptionally large storm event in 2006. There is also an SSO at the St. Clair pump station, but the discharge is direct to the Chagrin River, so this is not an MS4 program issue.

Point-of-Sale Program: An inspection is conducted at the time of home purchase. If an I/I problem or illicit cross-connection is discovered, it must be eliminated before ownership of the home can transfer. The City finds about 20 illicit discharges per year using this method, so it appears to be effective. The majority of problems are due to I/I rather than a blatant cross-connection of sanitary flows to storm sewers. Is this program also used with commercial or industrial property sales?

Pesticides, Herbicides & Fertilizers			
Interview Questions	Response		
Certified applicators used?	YES The golf course applies its own pesticides, herbicides and fertilizers and does have a licensed applicator on staff.		
Integrated Pest Management (IPM) practices used?	NO		
Storage location of pesticides, herbicides, and fertilizers:	Mostly kept at golf course. However, the Service Department stores small quantities of pesticides and herbicides inside the Service Garage Complex. City also stores fertilizer for hanging baskets.		
BMPs used during application:	Mr. Tomaselli was not aware of practices used by the golf course. Golf course staff was unavailable during the MS4 inspection to answer questions. It does not appear that Service Department staff uses storm water BMPs.		
Fertilizer/pesticide application plan utilized?	Mr. Tomaselli believes the golf course does have an application plan, but he did not have this information.		
	Applicable Documents	Reviewed	Obtained
	Fertilizer/pesticide application plan	Not Available	Requested, but Not Provided

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

Notes

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 appear to have a pesticide, herbicide and fertilizer application plan. However, the golf course reports that greens and approaches are treated on a preventative basis, which is bi-weekly during the growing season. All other areas are treated on a curative basis with the threshold of disease present relatively high. The golf course reports the following materials and quantities were applied in 2009:

<u>Active Ingredient</u>	<u>Amount Used (gallons, unless otherwise specified)</u>
Trinexapac-ethyl	1
Ethephon	10
Iprodione	9
Imidicloprid	2 lbs 2oz
Propiconazole	8
PCNB	30
2,4d, Dicamba, clopyralid	1
Thiophanate-methyl	8.5

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?	NO
MS4 use contractual staff to complete MS4 maintenance activities?	YES Contractual staff is used for road striping, garbage collection, impound lot services, road resurfacing and sewer projects that are large or deeper than 8 feet.
BMP guidance materials provided to contracted staff?	NO However, the City does discuss storm water BMPs with contractors at pre-construction meetings.

Standards, BMPs, & Outreach		
Interview Questions	Response	
Requirement to consider stormwater impacts and utilize appropriate BMPs in contracts?	YES See comments under Municipal Construction Projects in the Notes under <i>Catch Basin Cleanings</i> section of this worksheet.	
Materials used to educate the public regarding stormwater impacts on MS4 property (if applicable, i.e. public spaces):	<p>Pet waste: YES. The City provides bags to pick up pet waste at parks.</p> <p>Litter reduction: YES. Leaf litter. On-hold system for City telephones has a number of messages with stormwater-friendly messages, e.g., "Don't rake leaves into street". The City also placed an article in the <i>Willoughby Times</i> on proper leaf management.</p> <p>Additional Efforts: Lake SWCD produced a poster that was displayed at City Hall, but was recently removed for the remodeling project. A pamphlet is available at City Hall on pollution prevention for homeowners. The City set up a display on storm water at the Farmers Market held in the parking lot in front of City Hall.</p>	
Applicable Documents	Reviewed	Obtained
BMP manual or guidance document	Does not Exist	
Contract language for MS4 operation and maintenance activities	YES	YES

Notes
<p><u>BMP Guidance</u></p> <p>The City did provide a staff training event on August 1, 2008, to cover good housekeeping and pollution prevention topics, however there are no guidance materials that municipal staff can reference on an on-going basis. The City should look to produce posters, signage or other printed material to hang in the lunchroom or near work areas that reinforce the training provided. New employee training should include a storm water BMP component. Flip-books, binders or a copy of the Rainwater and Land Development manual (ODNR, 2006) can be placed in vehicles or with field gear for reference. We also recommend you review 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>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><u>Education Materials on MS4 Property</u></p> <p>The City has provided a number of educational materials on pollution prevention on municipal properties. Be sure you are tracking the number of pamphlets picked up or doggy bags used for your Annual Report.</p>

Staff Education and Training		
Interview Questions	Response	
<p>Staff trained to identify potential storm water pollution sources which would result in an illicit discharge?</p> <p>Frequency:</p>	<p style="text-align: center;">YES</p> <p>Session on October 26, 2007, provided by Chagrin River Watershed Partners (CRWP) included information on illicit discharge program. About 20 employees attended.</p> <p>Session on MCM #6 on August 1, 2008 included BMPs on construction activities, grass cutting, sewer and stream maintenance and vehicle maintenance. About 65 employees attended.</p> <p>In addition, Mr. Wetzel has attended 5 training sessions provided by the NE Ohio Storm Water Education Council during 2009. See file for workshop topics.</p>	
<p>Materials used to train staff:</p>	<p>Presentations developed by CRWP, Lake SWCD and speakers at events sponsored by the NE Ohio Storm Water Education Council.</p>	
Applicable Documents	Reviewed	Obtained
<p>Training materials</p>	<p>YES</p>	<p>YES</p>

Notes
<p><u>Documentation of Training Events:</u></p> <p>The City needs to improve how it documents training events. 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, the table listing topic, attendees and date is acceptable, but also keep a copy of the attendance certificate(s) issued by the organization providing the training.</p>

FIELD INSPECTION WORKSHEET

Willoughby-Eastlake Water Pollution Control Center (WPCC)

MS4 Program Inspection

Permittee: City of Willoughby	
Address of facility: 221 Erie Rd., Eastlake, OH 44095	Size of facility: 4.9 acres
Date of visit: December 8, 2009	Time of visit: 1:30 pm
Provide the name(s) and title(s) of permittee staff present during inspection	
Name	Title
<i>Angelo Tomaselli</i>	<i>Service Director</i>
<i>Ken Wetzel</i>	<i>Engineering Technician, Service Dept</i>
<i>John Gorka</i>	<i>Superintendent, WPCC</i>
Evaluator Observations:	
SWPPP or stormwater plan	
Has the maintenance facility developed a SWP3 or stormwater plan?	NO. A full SWP3 has not been developed, but see Notes for explanation. Facility requires an NPDES permit for storm water discharges and an SWP3 if exposure cannot be eliminated.
Does the plan include a site map, list of pollutant sources, BMPs, and maintenance procedures?	N/A since SWP3 does not exist.
Does the permittee conduct and document periodic inspections of the facility?	Not for storm water pollutants. See Notes. If you obtain NPDES permit coverage, routine storm water inspections should occur at least once per quarter and a comprehensive site evaluation is required once per year. Inspection checklists should be included in the SWP3.
Are storm drains labeled and free of debris?	Drains are not labeled, but are free of debris. Because some drains lead to the treatment works and some do not, we recommend that drains connected directly to the environment be demarcated differently than those that go the treatment works, e.g., grates can be painted a different color or be labeled with a message such as "drains to stream".
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 are no fueling stations at this facility.
Are vehicles washed on-site? Is wash water discharged to the MS4 or sanitary sewer?	There is no vehicle washing at this facility, but industrial pretreatment equipment is washed inside the garage where drains are connected to the treatment works and the steer loader is hosed off on the dump pad after use.

Material storage	
Are all materials that are potential stormwater contaminants stored under cover or in secondary containment?	YES. Grit dump hoppers, 55 gallon drums and dirty pipes, valves and old pumps are not permitted to be stored outdoors. Chemical storage tanks are within structures and the dump pad for dewatering street sweepings and catch basin cleanings is well-designed and operated.
Hazardous waste management	
Are all hazardous materials properly labeled and stored to prevent exposure to stormwater runoff?	No hazardous wastes were observed at this facility.
Waste management	
Are waste bins covered with waste properly disposed in containers?	NO. Dumpster that stores catch basin cleanings and street sweepings is located in an area that drains to the treatment works, but it is not lidded or tarped.
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?	Appears to need improvement. See Notes regarding failure to clean up oil leak from contractor vehicle. However, guidance on maintaining no exposure does provide
Employee training	
What type of stormwater training do maintenance staff receive?	The Guidance for Maintaining No Exposure Certification for Storm Water Discharge is posted on a bulletin board in a prominent location at the plant, but be sure to provide training to the staff at least once per year to maintain awareness of storm water pollution issues.
Notes or additional information:	
<u>Storm Water Pollution Prevention Plan (SWP3)</u>	
An SWP3 has not been completed for this facility because the City was under the impression that a condition of no exposure exists. Our records indicate that a No Exposure Certification was submitted to Ohio EPA on January 28, 2008. However, our inspection of the facility revealed that there are several points of exposure where pollutants can enter the storm water drainage system. These areas include, but may not be limited to:	
<ul style="list-style-type: none"> (1) Ferrous chemical transfer area (2) Bisulfite chemical transfer area (3) Roadway where dewatered street sweepings are transferred to the dumpster 	
In addition, there is an indication that ash residue may get on pavements around the ash lagoon area. Mr. Gorka indicated that the storm drains in these areas are directly connected to the environment and are not routed to the head of the treatment works. As such, this constitutes exposure and triggers the requirement to obtain NPDES permit coverage for storm water discharges associated with industrial activity. The WPCC has the following options to correct this problem:	
<ul style="list-style-type: none"> • Submit a Notice of Intent (NOI) for coverage under the Ohio EPA General Storm Water NPDES 	

Permit for Industrial Activities #OHR000004 and develop and implement an SWP3, or

- Submit a modification request to add Parts IV, V and VI to the existing NPDES permit for the Willoughby-Eastlake WPCC and develop and implement an SWP3, or
- Eliminate exposure by providing a storm-resistant shelter around exposed areas or takes steps such as re-routing storm drains to the head of the WPCC treatment works, permanently capping exposed storm drains and/or regrading/berming areas of exposure to drain into the treatment works. Taking this option will allow you maintain your No Exposure Certification.

It was noted that Mr. Gorka has already provided the skeleton of an SWP3 in his Guidance for Maintaining No Exposure and that this guidance was posted in a visible location at the WPCC.

Facility Inspection

Even if steps are taken to achieve a condition of no exposure, Ohio EPA recommends that operations at the facility be reviewed at least once a year to assure that “no exposure” has been maintained. In addition, contract language with parties hired to perform work or maintenance at the WPCC should include requirements to implement storm water pollution controls. During our inspection of the WPCC, we noted the presence of leaked vehicles fluids near a storm drain by the ferrous delivery area. Mr. Gorka indicated the fluids were from vehicles used by a contractor performing maintenance at the plant and have been in place for about 1 month without being cleaned up.

INSPECTION PHOTOS

Willoughby-Eastlake WPCC

Photos Taken: December 8, 2009

By: Dan Bogoevski, DSW-NEDO



Fig 1 (LEFT). Drainage from the ferrous delivery area is directed to this storm drain. Note staining pattern.

Fig 2 (ABOVE). Leaks from contractor’s vehicles have not been cleaned up and are just upslope of a storm drain.

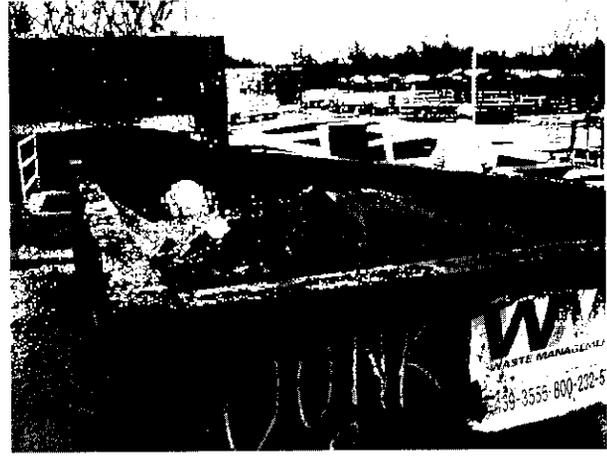


Fig 3 (LEFT). Dump pad for street sweepings and catch basin cleanings provides containment and directs leachate to the treatment works.

Fig 4 (RIGHT). Dumpster to store dewatered catch basin cleanings and street sweepings is not covered, but is stored in an area that drains to the treatment works.



Fig 5 (LEFT). In order to transfer solid waste from the dump pad to the dumpster, the steer loader must drive down this roadway where this storm drain is directly connected to the environment. Although housekeeping was very good, this still constitutes a point of exposure.

Fig 6 (RIGHT). Although the bisulfite transfer point is within containment that drains back to the treatment works, the truck containing the bisulfite is not. Regrading the area where the truck parks is one way to eliminate this point of exposure.

FIELD INSPECTION WORKSHEET

Willoughby Lost Nation Airport

MS4 Program Inspection

Permittee: The City of Willoughby	
Address of facility: 1969 Lost Nation Rd.	Size of facility: Did not determine
Date of visit: December 8, 2009	Time of visit: 2:30 pm
Provide the name(s) and title(s) of permittee staff present during inspection	
Name	Title
<i>Jeff Jukiewicz</i>	<i>Airport Technician</i>
<i>Angelo Tomaselli</i>	<i>Service Director</i>
<i>Ken Wetzel</i>	<i>Engineering Technician, Service Dept.</i>
Evaluator Observations:	
SWP3 or stormwater plan	
Has the maintenance facility developed a SWP3 or stormwater plan?	NO. This facility must obtain an NPDES permit for storm water discharges associated with industrial activity and develop and implement an SWP3.
Does the plan include a site map, list of pollutant sources, BMPs, and maintenance procedures?	N/A since SWP3 does not exist. However, these are required components of an SWP3.
Does the permittee conduct and document periodic inspections of the facility?	Not for storm water pollutants. Routine storm water inspections must be conducted at the interval specified in the SWP3. Ohio EPA recommends this inspection frequency to be no less than once per month during deicing season. A comprehensive site evaluation is required once per year and should be conducted during the deicing season. Inspection checklists should be included in the SWP3.
Are storm drains labeled and free of debris?	Did not observe.
Vehicle maintenance, fueling and washing	
Are vehicle maintenance activities conducted in a designated place not exposed to stormwater?	YES , but floor drains within the buildings must be evaluated to determine if they are connected to storm system.
Are fueling stations properly designed with spill kits nearby?	YES . There are several fuel tanks on the grounds of the airport, but spill kits are not kept outside by the tanks. However, they are available within 50 feet of the tanks.
Are vehicles washed on-site? Is wash water discharged to the MS4 or sanitary sewer?	YES . Some equipment washing occurs outdoors but most occurs indoors. Floor drains within the buildings where airplanes, vehicles and equipment are washed must be evaluated to determine if they are connected to the storm system. Mowers should be hosed off in grass areas.

Do aircraft and runway deicing activities occur at this facility?	YES. Runways are deiced with urea. See Notes.
Material storage	
Are all materials that are potential stormwater contaminants stored under cover or in secondary containment?	Please review areas where deicing chemicals are stored to assure they are covered and that good housekeeping measures are implemented to clean up spills.
Hazardous waste management	
Are all hazardous materials properly labeled and stored to prevent exposure to stormwater runoff?	Did not observe, but be sure that used oil, spent solvents and waste aircraft fuel is properly labeled and stored indoors away from floor drains with direct connections to the environment.
Waste management	
Are waste bins covered with waste properly disposed in containers?	YES.
How is landscape waste stored?	Did not observe. Landscape waste cannot be placed in dumpsters and must be taken to a Class IV licensed compost facility.
Spill response	
Does the facility have a spill response plan, and are spill kits readily available?	Mr. Jukiewicz believes that a spill response plan is located in the office, but the office was not accessible at the time of inspection. Spill kits are located in buildings near fuel tanks.
Employee training	
What type of stormwater training do maintenance staff receive?	NONE.
Notes or additional information:	
<p><u>NPDES Permitting</u></p> <p>Upon review of Ohio EPA records, it was determined that Lost Nation Airport submitted an application for an industrial storm water permit under the group option available at the inception of the NPDES permit program for storm water discharges. However, Ohio EPA never acted on the application. Unfortunately, the group option for NPDES permitting is no longer available. As such, the City of Willoughby will need to submit a Notice of Intent (NOI) for coverage under the Ohio EPA General Storm Water NPDES Permit for Industrial Activities #OHR000004 and develop and implement a Storm Water Pollution Prevention Plan (SWP3) per the requirements of that permit. The NOI should be submitted no later than January 15, 2010, and the SWP3 must be completed and implemented within 180 days of permit issuance. Guidance on how to develop an SWP3 and a fact sheet on best management practices (BMPs) appropriate for your sector is available from the US EPA at www.epa.gov/npdes/stormwater/indust.</p> <p>When developing the SWP3, be sure that you evaluate any floor drains within buildings where aircraft and equipment maintenance or washing occur to determine if they are connected to the storm sewer system. Connections to the storm sewer system may need to be eliminated to prevent the discharge of pollutants from these operations. Appropriate actions may include capping floor drains, connecting floor drains to sanitary sewers and/or oil water separators, relocating these activities to an area where connections to the sanitary sewer system already exist, using dry cleaning methods rather than hosing areas down, etc.</p>	

Deicing Operations

Mr. Jukiewicz stated that aircraft at the Lost Nation Airport are not deiced. Deicing is not necessary because the aircraft is stored indoors and flies at a lower altitude than commercial passenger jets at major airports such as Cleveland Hopkins International Airport. However, he did indicate that urea is used to deice runways. Urea and glycol-based deicers are harmful to the environment. Use of urea to deice runways should be discontinued and an alternative deicing materials such as potassium acetate, magnesium acetate, calcium acetate and anhydrous sodium acetate should be used instead. Also, track and evaluate the quantities of deicer applied to identify opportunities where deicer useage can be reduced without sacrificing safety.

Spill Response Plan

The spill response plan, as well as the SWP3, must be accessible at all times when the airport is in operation. The spill response plan was not accessible at the time of this inspection. As such, we were unable to review it. Please provide me with a copy of the plan with your response this MS4 inspection. Please note that the SWP3 must contain a section on spill response procedures. It is acceptable to simply reference the spill response plan in the SWP3 without repeating the information as long as you keep a copy of the spill response plan with the SWP3.

Employee/Tenant Training

Because airport operations are largely conducted by tenants rather than employees of the City of Willoughby, it is important to invite tenants in any storm water training provided to airport employees. The NPDES permit for industrial storm water discharges requires you to provide at least one employee training event per year. Further, language requiring the implementation of pollution controls for storm water concerns must be added to the contracts with airport tenants that conduct equipment or aircraft maintenance, fueling or washing activities, as well as those that conduct aircraft or runway deicing activities.

FIELD INSPECTION WORKSHEET

Leaf Collection Yard

MS4 Program Inspection

Permittee: The City of Willoughby	
Address of facility: St. Clair St. west of Lost Nation	Size of facility: less than 1 ac
Date of visit: December 8, 2009	Time of visit: 1:00 pm
Provide the name(s) and title(s) of permittee staff present during inspection	
Name	Title
Angelo Tomaselli	Service Director
Ken Wetzel	Engineering Technician, Service Dept
Evaluator Observations:	
SWPPP or stormwater plan	
Has the maintenance facility developed a SWPPP or stormwater plan?	N/A, but facility must implement BMPs to prevent the discharge of leachate to the Chagrin River.
Does the plan include a site map, list of pollutant sources, BMPs, and maintenance procedures?	N/A, since an SWP3 is not required for this facility.
Does the permittee conduct and document periodic inspections of the facility?	NO. Inspections should be conducted to assure that BMPs effectively contain leachate. Since the facility only operates seasonally for 6 to 8 weeks a year, inspections should be conducted at least weekly and within 24 hours of a 0.5-inch or greater rain event.
Are storm drains labeled and free of debris?	N/A. There are no storm drains on this property. Drainage is via natural topography. Drainage flows to the NE and SW corners of the site. The Chagrin River is located on the east side of the site.
Vehicle maintenance, fueling and washing	
Are vehicle maintenance activities conducted in a designated place not exposed to stormwater?	N/A. There are no vehicle maintenance activities at this site.
Are fueling stations properly designed with spill kits nearby?	A fuel tank was present, but this is not a regular feature of this site. The City is allowing Allega Construction to stage the tank here as part of the SR 2 road construction project.
Are vehicles washed on-site? Is wash water discharged to the MS4 or sanitary sewer?	N/A. There is no vehicle washing at this site.
Material storage	
Are all materials that are potential stormwater contaminants stored under cover or in secondary containment?	NO. The MS4 permit does not authorize the discharge of leachate or other wastewaters associated with municipal operations. A berm or other containment BMP is required to prevent leachate generated by leaf piles from discharging to the Chagrin River. The berm must be installed along all sides of the leaf stockpile area as needed to contain

	leachate and prevent it from leaving the site. You may also consider constructing a dump pad with connection to sanitary sewer as you have at the WPCC.
Hazardous waste management	
Are all hazardous materials properly labeled and stored to prevent exposure to stormwater runoff?	N/A. There are no hazardous materials on this site.
Waste management	
Are waste bins covered with waste properly disposed in containers?	N/A. There is no waste bin on this site.
How is landscape waste stored?	Open stockpiles of leaves that have been collected throughout the City. See notes about BMPs that must be implemented to prevent leachate discharges.
Spill response	
Does the facility have a spill response plan, and are spill kits readily available?	N/A. There are no materials on this site that a spill response plan would be needed.
Employee training	
What type of stormwater training do maintenance staff receive?	NONE. Language should be added to the contract with the contractor that operates the leaf collection program on behalf of the City. In addition, you should discuss the BMPs to be implemented with the contractor before the start of leaf collection season.
Notes or additional information:	
<p>Asphalt grindings are also stored on this site. It was suggested that perhaps the grindings could be used to construct a berm. Grindings along the west side of the site were ground so fine that it was difficult to distinguish them as asphalt grindings. Please identify the composition and source of the material immediately west of the loading/unloading area.</p> <p>Do not overlook the need for good housekeeping at the truck loading/unloading area. Leaves that spill during the transfer process must be picked up to prevent leachate from discharging to the drainage ditches along St. Clair St. These drainage ditches discharge to the Chagrin River.</p>	

INSPECTION PHOTOS Leaf Collection Yard

Photos Taken: December 8, 2009
By: Dan Bogoevski, DSW-NEDO



Fig 1. The leaf stockpile is in close proximity to the Chagrin River. A berm is required around the stockpile to prevent an unauthorized discharge of wastewater.



Fig 2 (LEFT). The leaf loading/unloading area slopes toward St. Clair St.



Fig 3 (RIGHT). Please identify the material pictured here and its source. Mr. Tomaselli indicated that these are asphalt grindings, but it was difficult to determine this with certainty since the grindings were so fine.

FIELD INSPECTION WORKSHEET

Willoughby Service Garage Complex

MS4 Program Inspection

Permittee: The City of Willoughby	
Address of facility: 37450 North Industrial Pkwy	Size of facility: 3 to 4 acres
Date of visit: December 8, 2009	Time of visit: 3:00 pm
Provide the name(s) and title(s) of permittee staff present during inspection	
Name	Title
Rich Palmisano	Supervisor, Streets and Sewers
Angelo Tomaselli	Service Director
Ken Wetzel	Engineering Technician, Service Dept
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?	Not labeled, but free of debris.
Vehicle maintenance, fueling and washing	
Are vehicle maintenance activities conducted in a designated place not exposed to stormwater?	YES. Vehicle maintenance activities occur inside the maintenance garage where floor drains are connected to sanitary sewer.
Are fueling stations properly designed with spill kits nearby?	NO. Spill kits are not stored outdoors because facility is not secured, but are available. Spill kits should be located near potential sources of spills and leaks, e.g., beet juice tank and fuel island.
Are vehicles washed on-site? Is wash water discharged to the MS4 or sanitary sewer?	YES. Vehicles are washed inside at wash stations where floor drains are connected to sanitary sewer.
Material storage	
Are all materials that are potential stormwater contaminants stored under cover or in secondary containment?	NO. See Notes.
Hazardous waste management	
Are all hazardous materials properly labeled and stored to prevent exposure to stormwater runoff?	YES, but see Notes.
Waste management	

<p>Are waste bins covered with waste properly disposed in containers?</p>	<p>NO. Solid waste dumpsters must be lidded or tarped and should be in good condition to prevent the discharge of leachate (“dumpster juices”). If needed, additional waste bins should be provided or waste pick-up should be scheduled more frequently to allow the dumpsters to remain shut when not adding or removing waste from them.</p>
<p>How is landscape waste stored?</p>	<p>No landscape waste is stored on site. Yard waste is taken to a composting facility operated by Lake County.</p>
<p>Spill response</p>	
<p>Does the facility have a spill response plan, and are spill kits readily available?</p>	<p>A spill response plan is a required component of the SWP3 and will be developed with the plan. Spill kits are available but not located in ideal spots. There are concerns with putting spill kits out in the yard due to vandalism. The yard is not secured.</p>
<p>Employee training</p>	
<p>What type of stormwater training do maintenance staff receive?</p>	<p>See Interview. The most recent training was provided on August 1, 2008. Please be aware that employee training on storm water issues is required at least once per year.</p>
<p>Notes or additional information:</p>	
<p><u>Interior Floor Drains</u> Please be sure that you have thoroughly evaluated where floor drains are connected. During our walk-through of the facility, we noted that floor drains exist in nearly every building at the Service Garage Complex. Mr. Palmisano indicated that all floor drains are connected to sanitary sewers rather than storm sewers. He indicated that floor drains have become clogged and the City has had to snake them out. In the process, the City determined that they were connected to sanitary sewers. Please be sure to review shop drawings, perform dye or smoke tests, and do dry weather screening of outfalls to assure that this is the case. The SWP3 must contain a signed certification statement regarding this matter.</p> <p><u>Fuel Station</u> The fuel station is not roofed. The City should consider installing a roof over the fuel island if this island is renovated. The area is sloped toward a curb drain. We recommend that the drain be temporarily plugged with a pig mat or similar device when fuel is being delivered to prevent migration of fuel to the MS4 in case of spill or other failure. There are two emergency shut-off buttons, one of which is well-labeled and easily identifiable. Pumps are outfitted with automatic shut off valves.</p> <p><u>Material Storage</u> There is a storage area where stockpiles of playground mulch, sand, cemetery soil and ODOT Spec 304 subbase material is stored. These materials are all erodible. Measures must be taken to prevent materials from eroding into storm drains or adjacent drainage ditches. Measures may include tarping stockpiles to provide cover, building a roof over the stockpile area, or installing and maintaining storm drain inlet protection, silt fence and other sediment controls. There are also some small piles of leftover ballfield dirt that needs to be removed from the property or placed within a protected stockpile area.</p>	

The area around the salt dome was swept and only a minimal amount of residual salt was noted on pavements. There are holes in the roof of the salt dome. The City states the holes are vents for salt dust created when salt is blown into the dome. Please note when salt that is vented or becomes dissolved in runoff when rain enters the dome and flows out of the dome, it is a pollution source. The City should consider closing off these vents to minimize this pollution source. Also, the City indicates that a curtain is placed over the door of the dome during the off-season, but is removed for easier access during deicing season. The City should consider leaving the curtain in place at all times except when salt is actually being delivered or loaded onto trucks. The City states that salt is never stored outside of the dome.

The City began mixing beet juice with road salt last year and expects to increase this practice this year. There is a storage tank containing beet juice in the maintenance yard. There is no containment around the tank, but it is protected with a guard rail and has manual shut-off valves at three points to control spills as well as an emergency shut-off button. Please be sure to label the emergency shut-off button so that it is easily identified. The City should consider installing secondary containment around the beet juice tank, keep a spill kit nearby or protect storm drains in the vicinity when the tank is in use.

Hazardous Waste Management

Used oil is stored in an underground tank that is pumped out outside. Storm drains that would receive runoff from this area should be protected when the tank is pumped out. Be sure that spill kits are handy as well. In addition, the dump drain to add materials to the tank is located inside, but next to a door. Spillage and residue around the dump drain were evident, but did not appear to migrate outside. However, this area should be inspected regularly to assure there is no release of used oil outside the door. Staff should be trained to clean up spills immediately. Be sure that a "Used Oil" sign is on the wall above the dump drain.

We also noted a locker inside the service garage near the dump drain with oil or other petroleum-based chemicals leaking from it. Although not a pollutant to the MS4, better housekeeping measures are needed.

INSPECTION PHOTOS

Willoughby Service Garage Complex

Photos Taken: December 8, 2009
By: Dan Bogoevski, DSW-NEDO



Fig 1 (LEFT). Housekeeping around the salt dome was generally acceptable. In the off-season, the door is covered with a curtain, but it was removed in anticipation of forecasted snow.

Fig 2 (RIGHT). The fuel island is not roofed and there is no Oil-Dri or other spill response materials nearby.



Fig 3 & 4. Stockpiles of erodible materials are exposed at the rear of the facility. Stockpiles should be tarped or under cover to prevent the discharge of sediments to the MS4.



Fig 5. Beet juice storage tank. There is no secondary containment or spill response equipment, but a guardrail has been provided to protect the tank from vehicular traffic. Tanks storing liquid materials should be diked for spill containment purposes.



Fig 6. The lid on the solid waste dumpster is open. It should be kept shut except for times when material is being added or removed. Also, note the "dumpster juice" staining on the cement pad next to the dumpster. Leachate from dumpsters must be prevented from discharging into the MS4.