



**Environmental
Protection Agency**

John R. Kasich, Governor

Mary Taylor, Lt. Governor

Scott J. Nally, Director

July 10, 2012

RE: CUYAHOGA COUNTY
CITY OF LAKEWOOD
NOTIFICATION OF MUNICIPAL STORM
WATER PROGRAM INSPECTION

Joe Beno
Storm Water Program Coordinator
City of Lakewood
12650 Detroit Ave.
Lakewood, OH 44107

Dear Mr. Beno:

Ohio EPA has completed an audit for a portion of your municipal storm water program. Our audit primarily focused on implementation of minimum control measure (MCM) #6: Pollution Prevention and Good Housekeeping for Municipal Operations. This program is a requirement of the Ohio EPA General Storm Water National Pollutant Discharge Elimination System (NPDES) Permit for Small Municipal Separate Storm Sewers Systems (MS4s) #OHQ000002 and Ohio Administrative Code (OAC) 3745-39.

On May 30, 2012, Ohio EPA met with you to determine compliance with the NPDES permit and the Storm Water Management Plan (SWMP) submitted by the City in March 2003. In performing this audit, Ohio EPA implemented the Municipal Storm Water Program Evaluation Guide developed by the United States Environmental Protection Agency.

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

Violations

- **Failure to develop a storm water pollution prevention plan (SWP3) for the Lakewood wastewater treatment plant (WWTP).** This is a violation of Part IV of the City's NPDES Permit #3PE00004*ND for the Lakewood WWTP. The City was required to complete this SWP3 no later than February 1, 2008. Develop and implement an SWP3 per the requirements of Parts IV, V and VI of the NPDES permit. Ensure you are conducting routine facility inspections and documenting the annual Comprehensive Site Compliance Evaluations required by the permit. If inspections reveal that additional BMPs are needed to address pollutant sources or there are deficiencies in BMP implementation, appropriate changes must be made to the SWP3. Staff, at all levels, involved in SWP3 development or implementation must receive periodic pollution prevention training. Please review the attached Facility Inspection Worksheet for the WWTP for specific deficiencies noted during our inspection.

- **Failure to develop SWP3s for the Service Garage, Utilities Garage, Refuse & Recycling Facility, Sign & Signal Shop, and applicable Fire Stations.** This is a violation of Part III.B.6.c of the NPDES permit and Ohio Revised Code (ORC) 6111.04 and 6111.07. These facilities conduct operations described in 40 Code of Federal Regulations (CFR) Part 122.26(b)(14), and as such, must have an SWP3. The City of Lakewood has not developed an SWP3 for these municipal facilities. The NPDES permit #OHQ000002 required SWP3s to be developed and implemented at these facilities within two years of NPDES permit renewal, i.e., June 3, 2011.

- **Failure to provide controls (BMPs) for reducing or eliminating the discharge of pollutants from municipal facilities.** This is a violation of Part III.B.6.d.iii.2 of the Small MS4 NPDES Permit #OHQ000002 and ORC 6111.04 and 6111.07. This violation was noted for the following operations at your facilities:
 - Failure to verify whether floor drains go to sanitary, storm, or combined sewer at the Service Garage, Refuse & Recycling Facility, Sign & Signal Shop, and Utilities Garage.
 - Failure to prevent the discharge of pollutants from leaking equipment staged outside of the Refuse & Recycling Facility.
 - Failure to provide containment or labeling for two drums of material behind the drop off facility at the Refuse & Recycling Facility and three drums near the roofed material storage area at the Utilities Garage.
 - Failure to keep construction and demolition debris dumpster at the Refuse & Recycling Facility and the animal carcass dumpster at the Utilities Garage covered to prevent the discharge of wastewater to the City's MS4.
 - Failure to keep salt piles in containment and out of storm drains at the Refuse & Recycling Facility and the Municipal Utilities Garage.
 - Failure to prevent the discharge of paint from outdoor paint testing or spray outs at the Sign & Signal Shop.
 - Failure to prevent the discharge of sediment-laden runoff to a drain in the Utilities Garage yard area.

The MS4 permit does not authorize the City to discharge leachate or wastewater, thus controls for these unauthorized discharges must be implemented immediately. Further, measures must be taken to minimize the potential for discharges of pollutants to the MS4. Implementing practices such as secondary containment, inlet protection, lidded dumpsters and capping floor drains achieves this goal. Please review the comments within the attached *Municipal Storm Water Program Evaluation and Maintenance Facility Field Inspection Worksheets* regarding these operations.

- **Failure to compile an inventory of all MS4 facilities subject to pollution prevention and good housekeeping requirements, i.e. the Utilities Garage, WWTP, Fire Stations, parks and cemeteries, and parking lots.** This is a violation of Part III.B.6.c of NPDES Permit #OHQ000002 and ORC 6111.04 and 6111.07. This inventory was required in the NPDES permit #OHQ000001 and must be in the City's SWMP. The inventory should be kept up to date in the SWMP and easily accessed to comply with the NPDES Permit #OHQ000002.

- **Failure to develop an employee-training program on how to reduce the discharge of pollutants from municipal operations to the MS4.** This is a violation of Part III.B.6.e of the NPDES permit #OHQ000002 and Ohio Revised Code (ORC) 6111.04 and 6111.07. The NPDES permit #OHQ000002 requires your training program to provide at least one training event per year. Although the City states that some training events have been offered to building managers, no documentation of training events could be produced. Further, the City could not document that information has been effectively relayed to staff at all levels. Thus, the City has not developed an employee-training program for storm water pollution prevention as expected under the MS4 program. Training opportunities involving Ohio EPA can be found at www.epa.ohio.gov/ocapp/storm_water.aspx. Training events provided by Ohio EPA and the materials used at those events are archived at this site and can be used by MS4s to train their staff. US EPA has an archive of MS4-related training at www.epa.gov/npdes/training. Be sure to include storm water pollution prevention training in any new employee-training program, where appropriate.
- **Failure to ensure adequate long-term operation and maintenance (O&M) of public/private stormwater management facilities.** This is a violation of Part III.B.5.d of the Ohio EPA General Storm Water NPDES permit and ORC 6111.04 and 6111.07. The City is required to have an inventory of all privately-owned post-construction BMPs installed since April 21, 2003 and public stormwater management facilities. The City must develop a program to ensure the long-term maintenance of these structures. Ohio EPA recommends that each facility be inspected at least once a year either by the City or the party responsible for long-term maintenance. We recommend the City develop checklists or adopt checklists as your standard for conducting these inspections. This will ensure that all facilities are inspected and that all BMPs are constructed and maintained according to the City's adopted standards. The City must establish standards for these maintenance tasks. Most communities reference standards contained in *Rainwater and Land Development* (ODNR, 2006) or the United States Environmental Protection Agency's Menu of BMPs rather than establish their own. Additional information can be found in the Center for Watershed Protection manual titled *Managing Stormwater in Your Community: A Guide for Building an Effective Post-Construction Program*. This manual can be downloaded at http://www.cwp.org/index.php?option=com_docman&task=cat_view&gid=76&Itemid=118

A program to ensure long term maintenance of post-construction BMPs typically includes (a) maintaining an inventory of all public and those private post-construction BMPs installed since April 21, 2003, (b) maintaining a copy of the long-term maintenance plan for each BMP, (c) establishing a system to track maintenance activities by the responsible party, and (d) taking enforcement action if maintenance is not performed by the responsible party as required by the maintenance plan.

Deficiencies

- The City has not included the Refuse & Recycling Center, Sign & Signal Shop, or the Fire Stations on its inventory of municipal operations. As long as fueling, vehicle maintenance, or vehicle or equipment washing activities are occurring on these sites, they must be included in your inventory of municipal operations.

- The City has not clearly defined the extent of its MS4. The maps shown to us during this audit do not clearly identify which sewers are municipal separate storm sewers and which are combined or sanitary sewers. The City indicated that they are seeking guidance from US EPA and the wastewater section of Ohio EPA to determine how to classify the various sewer systems. To meet the mapping obligations of NPDES Permit #OHQ000002, the map must show catch basins and publicly-owned storm sewers, ditches 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. To avoid an additional violation of your MS4 NPDES permit, please ensure that a map of the MS4 is produced no later than June 3, 2014.
- The City has not developed checklists to inspect any of their municipal facilities. We strongly recommend the creation of storm water inspection checklists for these facilities to standardize inspections and remind inspectors of the critical areas that must be reviewed during an inspection. Checklists should be included in the SWP3s for facilities that require one.
- The City had not been tracking the total amount of catch basin cleanings and street sweepings removed from the MS4. Please be sure to track this amount as it is required to be reported on the Annual Report form that must be submitted to Ohio EPA by April 1st each year. In addition, the City needs to track salt usage, catch basin cleaning, and street sweeping on a January-to-December calendar basis rather than a seasonal total as stated in Part IV.C of the Small MS4 NPDES Permit #OHQ000002 for reporting with the new Annual Report form.
- The City has not developed contract language to require storm water BMP implementation when a third-party provides municipal operations on behalf of the City. Contract language must be added to all contracts with such parties, e.g., operators that provide herbicide/fertilizer application, roadwork, etc., as well as road maintenance activities and emergency repairs. Further, we recommend periodic inspection of their operations to assure that they are implementing BMPs.
- The City did not provide me with a copy of a pesticide, herbicide and fertilizer application plan. The development of a formal application plan is an important tool in minimizing the application of these storm water pollutants. Please provide me with an application plan.
- The City has not provided any storm water pollution prevention guidance materials to field staff that they can take out with them in the field or have at their workstations. By making materials available to staff at the field level, implementation of storm water BMPs should improve.

Please review my comments and provide me with a letter of response indicating the actions you will take to address my concerns. **Your response should be received no later than August 10, 2012.** Please note that this response does not replace the requirement to submit an Annual Report. Your annual report for 2012 will be due on April 1, 2013.

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

Sincerely,

A handwritten signature in black ink that reads "Kelly McVay". The signature is fluid and cursive, with the first name "Kelly" and last name "McVay" clearly legible.

Kelly McVay
Assistant to the District Engineer
Division of Surface Water

KM/cs

cc: Michael P. Summers, Mayor, City of Lakewood
Council, City of Lakewood

ec: Dan Bogoevski, Ohio EPA, DSW, NEDO
Erm Gomes, Ohio EPA, DSW, NEDO

Municipal Storm Water Program Evaluation

MS4 Maintenance Component Worksheet

Date of Evaluation May 30, 2012
Evaluator Name, Title Kelly McVay, DSW, NEDO
MS4 Permittee City of Lakewood 3GQ00073*BG

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

Staff Interviewed		
Name	Department/Agency	Phone Number/Email
Joe Beno Director of Public Works	City of Lakewood	(216) 529-6804 Joe.beno@lakewoodoh.net

MS4 Mapping		
Interview Questions	Response	
Outfalls and receiving waters mapped?	YES	
Catch basins?	NO	
Pipes, ditches, other conduits?	NO	
Public stormwater facilities (BMPs)?	NO	
Private stormwater facilities (BMPs)?	NO	
How are maps used (i.e. tracking illicit discharges)?	The basic map which shows sewer lines (one in combined sewer area, two in over-under areas) is sometimes used to find what pipe goes where and to solve problems as they occur.	
Applicable Documents	Reviewed	Obtained
Map(s) of MS4 system	YES	YES

Notes
<p>MS4 Mapping The City did send us a map of their labeled outfalls. No other storm water structures were indicated on this map. Be aware, to meet the mapping obligations of NPDES Permit #OHQ000002, i.e., the MS4 permit in effect from 2009-2014, the map must show <i>catch basins</i> and <i>publicly-owned storm sewers, ditches, conduits</i> and storm water management facilities (including <i>publicly-owned post-construction BMPs and underground retention</i>). In addition, the map must show <i>privately-owned storm water management facilities</i> constructed as post-construction BMPs for new development or redevelopment which has occurred since April 21, 2003. Please ensure that you complete these additional mapping requirements by the end of the current permit term, i.e., January 29, 2014.</p>

Catch Basin Cleaning		
Interview Question	Response	
Schedule established for inspections and cleaning?	YES The City generally cleans each basin 1 time per year.	
Is cleaning and maintenance of catch basins tracked:	YES The crews mark which streets they have covered each time they sweep.	
How are spoils materials disposed of?	Spoils go to utilities garage facility. Here they are placed on a concrete pad with catch basin in the middle that goes to the wastewater treatment plant. Once dried they are placed in a dumpster and taken to the sanitary landfill.	
Are storm drain pipes inspected? Proactive or only in response to blockage event?	YES Pipes are inspected in response to problems or issues. The City uses camera and cleaning trucks on nearly daily basis and tries to fix issues they may find while on other missions.	
Applicable Documents	Reviewed	Obtained
List of active municipal construction projects	N/A	N/A
List of municipal projects covered under the Ohio EPA general storm water NPDES permit for construction activities	N/A	N/A
NONE		
NOTE: Permit is only required if project disturbs 1 or more acre (5 or more acres for "routine maintenance")		

Notes

MS4 System Repair and Maintenance
 The majority of the City of Lakewood's MS4 is an "over-under" system, i.e., storm sewers and sanitary sewers are separate, but run in a common trench. Separator plates at each manhole provide access to the sanitary sewer which lies underneath the storm sewer. Maintenance of these separator plates is critical to ensuring that sanitary wastewater and storm water do not comeingle. Proactive inspection may prevent certain problems from occurring. Ohio EPA would like to see a more proactive inspection of the storm pipes and separator plates in the coming years of the new permit term to help improve your MS4 program and reduce pollutants.

Stormwater Management Facilities Operation and Maintenance	
Interview Questions	Response
Public facilities inspected?	NO
Frequency:	The City does not own any public stormwater management facilities.

Stormwater Management Facilities Operation and Maintenance		
Interview Questions	Response	
Private facilities inspected?	NO	
Frequency:	Mr. Beno was unaware that developers are required to create a long-term maintenance plan for private stormwater management facilities.	
Checklist used for inspections?	NO	
Have maintenance standards and procedures been established for these facilities?	NO	
How is maintenance prioritized? Is data evaluated to target maintenance resources?	N/A The City has not implemented a program to ensure long-term maintenance of private stormwater management facilities.	
Applicable Documents	Reviewed	Obtained
Inspection checklist	NONE	NONE

Notes

Inspections of Stormwater Management Facilities

The City of Lakewood has not inspected any stormwater management facilities. 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. Stormwater 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).

A complete post-construction BMP program includes the following:

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
5. *A checklist is recommended to perform inspections and should be reflective of the operation and maintenance standards established by the City.* As discussed, a City official does not necessarily have to physically conduct these inspections. Property owners can do these inspections and report findings to the City. Regardless of the option chosen, a standardized checklist would be very helpful to ensure thorough and consistent inspections.
6. Taking enforcement action against the responsible party if they fail to install the BMP per the approved plan or fail to maintain the BMP as required

The City has not yet developed a long-term maintenance program for post-construction BMPs, which is a violation under Part III.B.5 of NPDES Permit #OHQ000002. Information on developing an effective long-term maintenance program for post-construction BMPs can be found from the Center for Watershed Protection at http://www.cwp.org/Resource_Library/Controlling_Runoff_and_Discharges/sm.htm. (**Tool 6: Plan Review, BMP Construction, and Maintenance Checklists)

The Ohio EPA General NPDES Permit for Storm Water Associated with Construction Activities has required the installation of post-construction BMPs on all new development and redevelopment, where the larger common plan of development or sale disturbs one or more acre of land, since April 21, 2003. The developer of the project is required to produce a stand-alone long-term maintenance plan for all post-construction BMPs and provide a copy to the party responsible for conducting the maintenance. Under your municipal storm water program, the goal is to ensure the plan exists and complies with your maintenance standards (as part of the storm water pollution prevention plan review and approval process). It is important that the City department tasked with ensuring that the long-term maintenance plan is being implemented receive a copy of the approved plan.

Long-term maintenance plans are required to name the party responsible for conducting long-term maintenance tasks, include a list of routine and non-routine maintenance tasks, provide a schedule for conducting those tasks, and show the location of any maintenance or access easements. Ohio EPA recommends these plans also include: a detail drawing of the post-construction BMP, a map showing the location and identifying the type (dry extended detention basin, bioretention cell, etc.), and a standardized checklist by which to conduct an inspection. Many communities are requiring developers to sign a long-term maintenance agreement. An example agreement can be found on the Chagrin River Watershed Partners website at http://crwp.org/pdf_files/model_im_agree_sw_bmp_10_29_2008.pdf.

Road Maintenance	
Interview Questions	Response
Streets regularly swept? Frequency:	YES The City runs two street sweepers. As long as both operators are at the facility, both sweepers are running when the weather is not below freezing (typically run 9 months out of the year). They sweep the main streets about once a week and usually sweep every street at least once per year.
Frequency based on water quality factors (e.g. proximity to streams)?	NO
How are spoils disposed of?	Street sweeping spoils are disposed with catch basin cleanings. They are kept separate on the dewatering pad since street sweepings are typically not as wet and can dry faster. They are then put in the same dumpster as the catch basin cleanings for disposal at a landfill. NOTE: Please ensure that these wastes are disposed at a solid waste landfill and not a construction and demolition debris landfill.

Road Maintenance	
Interview Questions	Response
<p>Does the community collect road kill?</p> <p>What do they do with the carcasses?</p> <p>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.</p>	<p>YES</p> <p>Carcasses are put in a dumpster at the Municipal Utilities Garage and taken to a landfill.</p>
<p>Does the community have a leaf collection program?</p> <p>What do they do with the collected leaves?</p> <p>NOTE: Landfills have been banned from accepting yard waste, so MS4 cannot place leaves and yard waste in dumpster. Must be composted at a licensed Class IV composting facility. Communities may temporarily store leaves awaiting transport to a composting facility but leachate must be prevented from discharging.</p>	<p>YES</p> <p>Over the last few years, leaves have been taken by Urban Organics (to make sweet peat) or by Madden Brothers (to make compost). Leaves are temporarily stored in an open area at the Municipal Utilities Garage. They are usually kept here for no more than a week or so.</p>
<p>BMPs used during road maintenance activities?</p> <p>Describe types of road maintenance conducted by community staff and the BMPs used</p>	<p>YES</p> <p>The City does pothole repairs, excavation, catch basin repairs, and casting readjustments. They contract out large jobs and do not do large paving jobs themselves. Patching crews sweep the street where work was occurring within a day or two of being patched. BMPs may not be followed in emergency situations. Excavated material is stored in the yard at the Utilities Facility.</p>
<p>BMP guidance available to field staff?</p>	<p>YES</p> <p>Facility managers (usually 2 in each department) are in charge of conveying BMP knowledge to their staff. There is no written guidance material; all guidance is through verbal information the managers should pass on to workers.</p>
<p>Deicers used by MS4?</p>	<p>YES</p>
<p>Type and amount of deicer and additives tracked?</p>	<p>YES</p> <p>The City used salt to deice roadways. When it is below 20 degrees out, calcium chloride is sprayed on the salt. The annual report from 2011 reported 5,812 tons of salt was used. Mr. Beno believes this is what was purchased not what was actually used. As discussed, salt records should record the amount of salt USED per calendar year (not deicing season).</p>

Road Maintenance		
Interview Questions	Response	
<p>What measures are being taken to minimize the application of deicers?</p>	<p>The City has significantly cut back on salt usage in the past three years. They just salt main roads, intersections, and hills. They do not salt every mile of every street in the city unless a major freezing rain/ice event occurs. General residential side streets get plowed and salted only about 50ft before intersections. The Cuyahoga County "Sensible Salting Plan" is used by the City for guidance. The City of Lakewood has cut salt usage by nearly 25% in last 5 years or so. Most trucks are older, manual trucks and are not calibrated. They stop spreading salt when stopped. Mr. Beno was not sure how older trucks work with regards to variance of salt released with certain speeds.</p>	
<p>Sand/salt swept up after application?</p> <p>How soon?</p>	<p>NO</p> <p>Salt is not swept up on streets. We were told it was swept up after a busy salting day near the loading spots if any was spilled, but our inspection of the salt storage areas did not support this claim.</p>	
<p>Does your community operate a snow stockpile yard to store snow that has been removed from community streets and parking lots?</p> <p>If YES, location of the yards:</p> <p>Has your community considered implementing best management practices to control the discharge of pollutants from snowmelt associated with snow storage yards?</p> <p>If YES, what BMPs have you implemented?</p>	<p>YES</p> <p>Usually any stockpiled snow is stored in a parking lot. Usually the Madison Park Parking Lot is used.</p> <p>NO</p> <p>No BMPs have been implemented because this is a combined sewer area.</p>	
Applicable Documents	Reviewed	Obtained
BMP guidance	NO VERBAL	NO
Street sweeping records	YES	YES

Road Maintenance		
Interview Questions	Response	
Deicer application records	YES	NO, a summary will be made and provided to Ohio EPA.

Notes
<p><u>Street Sweeping Disposal</u> The City needs to <i>track the amount of material removed from the City's streets so the total amount can be placed in the City's annual report for 2012.</i> The City did send us a calculated total based off of dumpster pick up records from 11/30/10 to 7/31/11. Please be sure to report the total per calendar year (January to December) in the annual report for 2012 as stated in Part IV.C.2 on reporting of the Ohio EPA General Storm Water NPDES Permit for small MS4s #OHQ000002.</p> <p><u>Leaf Collection</u> Leaves are temporarily stored at the Utilities Garage before being hauled off-site. There are no controls to prevent the discharge of leachate to waters of the state or the MS4, but the area did not appear to have much leftover material or to be discharging any leachate. The Ohio EPA suggests that the City consider establishing berms around leaf storage areas to contain any leachate that may be released as a precautionary measure. If leachate must be disposed, it must be treated as wastewater.</p> <p><u>Deicer Usage</u> Tracking road salt usage is one BMP that can help reduce the use of deicers. By tracking this information more closely, you may spot abnormalities in salt usage that can indicate when equipment maintenance is needed, when staff may not be following salt application guidelines and when inventory loss occurs. Other practices that can reduce the use of road salt include regular calibration of salt spreaders and developing a deicer application policy that identifies the level of service to be provided, where "bare pavement" is desired, how quickly streets are to be cleared, what percentage of streets are to get priority and in what areas snow may be hauled away. Priority can be assigned based on the number of vehicles per day, traffic patterns, accident records, school zones, and commercial and industrial areas. The City indicates that it has adopted the sensible salting policies recommended by the Cuyahoga County Engineer. Additional guidance can be obtained from the Salt Institute. A wealth of information is available at www.saltinsitute.org on how to reduce pollution from road deicing activities.</p> <p>Finally, be aware that the Annual Report requires information to be reported on a January to December calendar year basis. This may require you to adjust how you summarize salt usage data, as most communities have typically been tracking usage on a winter season basis. Please keep in mind that the City is required to track salt usage as well as the use of additives, i.e., CaCl₂, beet juice.</p>

Flood Management			
Interview Questions	Response		
Inventory of flood management structures completed?	N/A		
Structures been assessed for stormwater retrofit?	N/A		
New structures include water quality considerations?	N/A		
Applicable Documents	Reviewed	Obtained	
Inventory	N/A	N/A	

Notes

Flood Management

The City does not have any flood management structures. There are only about 15 houses in the City that have had flooding issues every now and then. They are located by the river and caused by back-ups of ice. At the time, flood management is not a major problem for the City.

Facilities Operation & Maintenance

Interview Questions

Inventory of MS4 facilities complete (i.e. facilities owned and operated by the MS4)?

Types of facilities included

These need their own NPDES storm water permit for industrial activities, if there is a discharge of runoff from these operations:

- Landfills Type: _____
- Airports
- Shipping Ports or Marinas
- Steam Electric Power Plants
- Wastewater Treatment Plants \geq 1 MGD or with a pretreatment program

Lakewood WWTP (3PE00004*ND)
1699 Metropark Dr.
Lakewood, OH 44107

These do not need their own permit, but do have to develop an SWP3 unless noted as N/A:

- Impound Lots
- Leaf Collection Yards
 - ✓ No discharge of leafate permitted
- Maintenance Yards
 - How many do they operate? 4
 - List facility names/locations:

Municipal operations which typically occur at a maintenance yard are split amongst these four facilities:

Utilities Garage
1699 Metropark Dr.

Response

NO

Although the City does list three municipal facilities subject to the Pollution Prevention & Good Housekeeping MCM in their Annual Report, this list is not complete. A complete list must be developed and included in the SWMP.

<u>Response</u>	<u>SWP3 Developed?</u>
NO	N/A
YES	NO

Parts IV, V and VI of NPDES permit #3PE00004*ND requires you to develop and implement an SWP3 for the WWTP.

<u>Response</u>	<u>SWP3 Developed?</u>
NO	N/A
YES	N/A
YES	NO

Facilities Operation & Maintenance		
Interview Questions	Response	
<p>Service Garage 12650 Detroit Ave.</p> <p>Refuse & Recycling Facility 12920 Berea Road</p> <p>Sign & Signal Shop 1437 Wayne Ave.</p>	<p>An SWP3 has not been developed for any of these facilities. An SWP3 is required for facilities, which do not discharge to a combined sewer.</p>	
	<u>Response</u>	<u>SWP3 Developed?</u>
<ul style="list-style-type: none"> • Composting Operations <ul style="list-style-type: none"> ✓ No discharge of leachate permitted • Solid Waste Transfer Stations or Operations <ul style="list-style-type: none"> ✓ Under landfill permit if community owns the transfer station and the landfill where waste will be taken ✓ If not, then SWP3 is only needed if vehicle maintenance, equipment washing or fueling activities occur at the transfer station, or if a portion of the facility is involved with recycling or composting • Parks & Cemeteries <ul style="list-style-type: none"> ➤ How many in UA? <u>14</u> ➤ List facility names/locations: 	NO	N/A
	NO	N/A
	*See Facility Inspection worksheet for information regarding the Recycling & Refuse Facility's status.	
	YES	N/A
<p>Celeste Park (Clifton & W. Clifton Blvd's.)</p> <p>Cove Park (Cove Ave.)</p> <p>Edwards Park (16800 Detroit Ave.)</p> <p>Kaufamm Park (15450 Detroit Ave.)</p> <p>Lakewood Park (14532 Lake Ave.)</p> <p>Madison Park (13201 Madison Ave.)</p> <p>Merl Park (Bunts Rd. & Merl Ave.)</p> <p>Niagara Park (Niagara Dr. & South Marginal)</p>		

Facilities Operation & Maintenance	
Interview Questions	Response
<p>Park Row (1386 Park Row Ave.)</p> <p>Sinagra Park (14821 Detroit Ave.)</p> <p>Sloane Park (1355 Sloane Ave.)</p> <p>Wagar Park (15900 Madison Ave.)</p> <p>Warren Park (Warren Rd.)</p> <p>Webb Park (1303 Webb Rd.)</p> <ul style="list-style-type: none"> • Parking Lots <ul style="list-style-type: none"> ➤ How many do they operate? <u>13</u> ➤ List facility name/locations: <p>Lot #1 - Detroit north btwn Warren & Cook</p> <p>Lot #2 - City Center – 14815 Detroit Rd.</p> <p>Lot #3 - Madison btwn Marlowe & Belle</p> <p>Lot #4 - Detroit north btwn St. Charles & Warren</p> <p>Lot #5 - W. 117th St. & Detroit</p> <p>Lot #6 - Detroit south btwn Lakeland & Westwood</p> <p>Lot #8 - Detroit north btwn Cook & Gladys</p> <p>Lot #9 - Madison south btwn Carabel & Morrison</p> <p>Lot #11 - 11900 Detroit Drug Mart</p> <p>Lot #12 - 15538 Madison north</p> <p>Lot #13 - 17900 Detroit</p>	<p>YES</p> <p>N/A</p>

Facilities Operation & Maintenance	
Interview Questions	Response
<p>Staff which perform the inspections (department or agency):</p> <p>NOTE: Completed checklist should document name of inspector.</p>	<p>No formal inspections are done. Facility managers and Mr. Beno walk through facilities every once in a while and try to correct nay issues they may see.</p>
<p>Is there a designated stormwater contact person for each facility?</p> <p>NOTE: Name in SWP3 should match name given. If not, SWP3 must be updated.</p>	<p>NO</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>No formal enforcement procedures are really taken. If Joe or the managers see a problem, they ask that it is fixed and it usually is. Serious or repeat violations may have repercussions but there is no specific "if you do this, you get suspended, etc." policy. General work policy rules would be followed in this instance (HR procedures per union contract: written warning, verbal warning, etc.)</p>
<p>Parking lots owned/operated by the permittee swept?</p> <p>Frequency?</p> <p>Do you operate any asphalt parking lots?</p> <p>Do you use any coal tar-based sealants on those asphalt parking lots?</p> <p>NOTE: Some MS4s have banned the use of coal tar-based sealants in their communities. Research from the University of New Hampshire Stormwater Center and by the City of Austin, TX, has shown these sealants contaminate soil and runoff with PAHs and benzo(a)pyrene, a known carcinogen. If a sealant must be used, asphalt-based sealants are preferred.</p>	<p>YES</p> <p>One time each week.</p> <p>YES</p> <p>NO</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? <u>9</u> ➤ Do you track frequency and volume? 	<p>YES</p> <p>YES</p> <p>YES, all overflows have flow monitors and samplers in them.</p>

Facilities Operation & Maintenance	
Interview Questions	Response
<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>YES</p> <p>Some invert plates in the "over-under" sewers are missing. There is no comprehensive list; the City is starting to document comprehensive locations of illicit connections on maps in past year and a half. The system is unclear in many places making it hard to track and identify the many problem areas.</p> <p>The City is working on redirecting pipes to resolve problems in some over-under areas.</p> <p>The NPDES permit requires the City to eliminate all illicit cross-connections to the MS4 when they are discovered. Any known illicit cross-connections that are not eliminated by year's end are to be reported in the Annual Report and you must include a plan for their elimination (course of action and timeframe to complete).</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>YES</p> <p>Over last few years, the City has done flow monitoring at the top and bottom of similar streets with various degrees of separation (lot sizes) in 2010. They compared benefits of manhole separation vs. no separation and only evaluated 5-6 streets to compare to each other.</p> <p>Lakewood does not see I&I from sanitary to storm very often. They usually see I&I going the other way since sanitary is below storm in "over-under" areas. There probably are areas of I&I out there, but this hasn't been investigated much, as they mainly focus on the other direction. The City does not feel it is a huge issue unless it is raining, that is when problems occur.</p>
<p>Sewer spill and cleanup procedures in place?</p>	<p>NO</p> <p>The City does have separate sewer overflows (SSOs) but does not specifically have sewer spill and cleanup procedures in place. They usually find overflows because of some kind of blockage (pipe breaks, clogged) and would perform an</p>

Facilities Operation & Maintenance		
Interview Questions	Response	
	<p>emergency procedure to fix the blockage and make a phone call to alert officials of situation.</p> <p>SSOs may also be a source of illicit discharge to your MS4. The City is required to take action to identify and eliminate those that are sources of illicit discharge.</p>	
Applicable Documents	Reviewed	Obtained
Facility inventory	No comprehensive inventory	NO
Facility SWPPP	DO NOT EXIST	NONE

Notes
<p>Facility Inventory</p> <p>The City has not compiled a comprehensive inventory of all MS4 facilities. This inventory was required in the NPDES permit #OHQ000001 and should be in the City's SWMP. The inventory should be kept up to date in the SWMP and easily accessed to comply with the NPDES Permit #OHQ000002. The Refuse & Recycling Facility should be added to this list since fueling occurs here, the Sign & Signal Shop added because parts washing occurs here, and any or all of the three Fire Stations added if they conduct vehicle maintenance, fueling, or washing activities. It was indicated that the Service Garage was connected entirely to the combined sewer at the time of inspection. The City must produce documentation to verify. If this is the case, this facility, and others that also discharge only to the combined sewer, is not technically subject to the NPDES permit program for small MS4s and would not be required to develop SWP3s. However, do include these facilities in the inventory, but state that they are not subject to the small MS4 program and why. Documentation to back your assertion should be kept with the SWMP.</p> <p>Storm Water Pollution Prevention Plans (SWP3s)</p> <p>A SWP3 must be developed and implemented for the following facilities:</p> <ul style="list-style-type: none"> • Utilities Garage • WWTP • Refuse & Recycling Facility • Sign & Signal Shop • Any fire station which conducts vehicle maintenance, fueling, or washing activities on site

Notes

The Ohio EPA General Storm Water NPDES Permit for Small MS4s #OHQ000002 required the City of Lakewood to develop and begin implementing the SWP3 for the above facilities within two years of permit renewal, i.e., by June 2011. The City did not meet this deadline and, thus, is in violation of the NPDES permit. The City will remain in violation of this condition of the NPDES permit until the SWP3s are developed and implemented.

The above facilities must be inspected at a frequency specified in the SWP3. Ohio EPA recommends that facilities be inspected monthly. A comprehensive site evaluation must be conducted at least once per year and a record of that inspection and its findings must be kept with the SWP3. If this annual inspection reveals deficiencies in the SWP3 or BMPs that are ineffective, the SWP3 must be revised to correct the problems. The SWP3 should contain a checklist by which to conduct these inspections to provide consistency to facility inspections. The SWP3 should also identify who is responsible for facility inspections as well as a storm water contact person for the facility. 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 *site map* for the SWP3s (**NOTE:** This permit was renewed on January 1, 2012. The requirements for site maps can be found in Part 5.1.2 of the NPDES permit #OHR000005, i.e., the successor permit). Also refer to the following website for information on developing SWP3s for these facilities:

http://www.epa.ohio.gov/dsw/permits/GP_IndustrialStormWater.aspx.

Pesticides, Herbicides & Fertilizers	
Interview Questions	Response
Certified applicators used?	YES The City had people recertified in the last couple of months from the Parks Department. They did not spray when no one was certified. The City mainly does non-selective herbicide type spray on small scale as maintenance measure (fence lines, around edge of buildings). Fertilizer and weed control is applied to baseball and soccer fields, City Hall property. City hires TruGreen for large scale spraying for the City but there is no contract.
Integrated Pest Management (IPM) practices used?	YES There is limited use of pesticides. It is not used on all properties but Mr. Beno is not sure what applicators do since they are paid to do this.
Storage location of pesticides, herbicides, and fertilizers:	Stored in locked room above parks section of service garage.
BMPs used during application:	YES Sweep up after activities and try to keep mess to a minimum.

Fertilizer/pesticide application plan utilized?	NO		
Applicable Documents	Reviewed	Obtained	
Fertilizer/pesticide application plan	NONE	NONE	

Notes
<p><u>Application Plan</u></p> <p>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 and weather conditions. If a contractor is being used as well, the <i>City needs to include language into the contract that requires the contractor to consider pollution controls where the activities undertaken are a potential source of storm water pollution.</i> In lieu of a contract, Ohio EPA recommended that the City develop BMP guidance for pesticide, herbicide and fertilizer application and require contractors to sign a statement acknowledging that they will abide by this guidance. Further, the City should verify that contractors have an applicator license.</p> <p>Please develop and provide me with a copy of the City's pesticide, herbicide and fertilizer application plan.</p> <p><u>NPDES Permits for Pesticide Application In, Over, Near Waters of the State</u></p> <p>On October 31, 2011, Ohio EPA issued a general NPDES permit for the discharge of biological pesticides and those chemical pesticides that leave a residue (NPDES permit #OHG870001). MS4s that apply such pesticides in, over or near waterways, e.g., as part of golf course or green space management, are subject to the requirements of this NPDES permit. Most situations are covered by rule meaning submittal of an NOI (permit application) is typically not required. However, an NOI is required if pesticides are applied:</p> <ul style="list-style-type: none"> • Directly to public water supply reservoirs; • To very high quality waters (outstanding national resource waters, outstanding state waters or superior high quality waters other than Lake Erie); • To waters to control non-native fish populations; • To more than 80 acres of wetlands per year; and • To forests, or applied aurally to Lake Erie. <p>The best way for MS4s to avoid a permit violation is to leave a buffer around surface waters (lakes, ponds, wetlands, rivers, streams and ditches that connect to surface waters or ground water) when applying pesticides. Ohio EPA has not set technical criteria for the term "near water" because doing so would not limit an applicator's liability under the federal Clean Water Act. If you must apply pesticides to surface waters, e.g., mosquito control, it must occur in compliance with the NPDES permit. If the treatment area exceeds certain thresholds, there are additional documentation and reporting requirements. Those thresholds are:</p> <ul style="list-style-type: none"> • 6400 acres for mosquito/insect control; • 80 acres for wetland and lake application; and • 20 linear miles for stream/ditch bank application or intrusive vegetation control.

Notes

Communities must still submit the annual report required by NPDES permit #OHG870001 to Ohio EPA.

All applications of pesticides and herbicides “in, over or near” surface waters are covered, including small-scale uses. A fact sheet on the new permit can be found on the Ohio EPA website at http://www.epa.ohio.gov/portals/35/permits/Pesticide_Final_FS_oct11.pdf. If you need more information about this program, please contact Eric Nygaard in our Central Office at (614) 644-2024.

Standards, BMPs, & Outreach

Interview Questions	Response
BMP technical guidance document available to maintenance staff?	NO
MS4 use contractual staff to complete MS4 maintenance activities?	YES TruGreen, paving contractors, crack sealing contractors, sewer and water contractors used. They are hired on a project by project basis. We suggested adding storm water BMP standards to contracts.
BMP guidance materials provided to contracted staff?	NO
Requirement to consider stormwater impacts and utilize appropriate BMPs in contracts?	NO
Materials used to educate the public regarding stormwater impacts on MS4 property (if applicable, i.e. public spaces):	<u>Pet waste:</u> NONE. Ordinances are in place that say clean up after your dog, but citizens have only been allowed to bring their dogs into certain parks for about a year now. There are bag stations around parks where dogs are allowed (only three parks). We suggested the City add signage to relate this issue to storm water pollution. <u>Litter reduction:</u> NONE. We suggested signage be added to trash bins to tie the problem into water quality.
Applicable Documents	Reviewed Obtained
BMP manual or guidance document	NONE NONE
Contract language for MS4 operation and maintenance activities	No contract language No contract language

Notes

Technical Guidance and Specifications for Maintenance Staff

The City needs to improve the dissemination of technical guidance to its maintenance staff on storm water pollution prevention matters. The City should look for posters that can be hung in work areas or lunchrooms, or guidebooks that can be taken out into the field with maintenance crews. This will help reinforce employee training. Once prepared, the City will need to train staff on the SWP3 for each facility and should look to adopt standards and specifications for storm water pollution prevention

Notes

implementation in all its municipal operations with the potential to create pollutants in storm water runoff. Existing guidance manuals you may find useful to meet this goal include the *Rainwater and Land Development* manual Ohio Department of Natural Resources (ODNR) 2006, and the *Municipal Pollution Prevention/Good Housekeeping Manual #9* (Center for Watershed Protection, September 2008). This manual is available as a free download on their website at http://www.cwp.org/formmaker/Download-Form_RedirectFormPage.html.

Contracted Staff

Contracted staff includes fertilizing, paving, crack sealing, sewer and water, etc. The City currently has contracts for larger operations but only purchase orders for smaller operations such as fertilizing. 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. As suggested during our meeting, for operations that do not have contracts, a separate form could be signed by the outside entity agreeing to practices relevant to storm water pollution prevention. The operations of third party service providers should be reviewed periodically by the City to ensure that the required pollution controls are being implemented.

Public Education and Outreach

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

Staff Education and Training

Interview Questions	Response	
Staff trained to identify potential storm water pollution sources, which would result in an illicit discharges? Frequency:	YES The City generally has 1-2 meetings a month where storm water topics will come up if something had been spotted at a facility that was not correct. Overall, it is usually discussed a few times a year.	
Materials used to train staff:	They had a video refresher about a month ago. About a year and a half ago they had a larger session with a video and speaker. Managers are the only ones formally trained. They are expected to verbally pass this information on to their employees.	
Applicable Documents	Reviewed	Obtained
Training materials	NO	NO

Notes

MS4 Staff Training

The NPDES permit #OHQ000002 requires the City to conduct at least one employee training event on these topics per year. The City did not provide documentation for any training events on storm water pollution prevention matters. This is a violation of Part III.B.6.e of the Ohio EPA General Storm Water NPDES Permit for Small MS4s #OHQ000002. If key management staff attends a storm water education event, it is expected that the information learned will be shared with the appropriate staff so that they can conduct their job duties without causing storm water pollution. The City should also look to incorporate training on storm water pollution prevention in any new employee-training program that may exist if that employee's job duties have the potential to create storm water pollution or include illicit discharge identification and elimination.

For training that the City organizes for its staff, please retain: (1) the agenda for the training session, including the date that training was provided and names/organizations of the speakers, (2) an attendance list with the signatures of attendees and (3) one copy of the materials used for training. For outside training attended, include an agenda (if available) or a list of topics, the names of attendees, date attended and a copy of any attendance certificate issued by the training organization.

The following materials may help with developing a training program:

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

ODOT's Local Technical Assistance Program (LTAP) maintains a library of training videos, including videos on storm water pollution prevention that can be borrowed at no cost. These videos and several others are also available from Ohio EPA at no cost. Please contact Adrienne LaFavre at (330) 963-1250 for further information.

United States Environmental Protection Agency (US EPA) has two to three webcasts per minimum control measure that can be viewed at any time over the internet at www.epa.gov/npdes/training.

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

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

FIELD INSPECTION WORKSHEET
 CITY OF LAKEWOOD SERVICE GARAGE
 MS4 Program Evaluation

Permittee: City of Lakewood (3GQ00073*BG)	
Address of facility: 12650 Detroit Ave	Size of facility: 3 acres
Date of visit: 5/30/12	Time of visit: 10:55 AM
Provide the name(s) and title(s) of permittee staff present during inspection	
Name	Title
Joe Beno	Director of Public Works
Joe Saad	Fleet Manager
Evaluator Observations:	
SWPPP or stormwater plan	
Has the maintenance facility developed a SWPPP or stormwater plan?	NO. The City believes this facility discharges storm water to a combined sewer, but did not provide documentation to that effect. A SWPPP was required by June 3, 2011, unless the City can provide the aforementioned documentation.
Does the plan include a site map, list of pollutant sources, BMPs, and maintenance procedures?	NO – Because there is no SWPPP. These are required components of an SWPPP.
Does the permittee conduct and document periodic inspections of the facility?	NO. Inspections of storm water pollutant sources and control measures is to occur periodically, per the schedule contained in the SWPPP.
Are storm drains labeled and free of debris?	Not labeled.
Vehicle maintenance, fueling and washing	
Are vehicle maintenance activities conducted in a designated place not exposed to stormwater?	Most activities are done inside. These drains all go to a skimmer device (oil and water separator) which collects the oils in a 2000 gallon tank. Filtered water was said to go to the combined sewer and the tank is sucked out periodically and disposed of properly. If these drains do not go to the combined sewer in the end, they must be redirected to sanitary or permanently capped.
Are fueling stations properly designed with spill kits nearby?	Both the gas and diesel stations had emergency shutoff buttons and an automatic shutoff valve. There was staining around both pumps. Spill kits should be located at these stations so that spills and drips may be cleaned up immediately.
Are vehicles washed on-site? Is wash water discharged to the MS4 or sanitary sewer?	Sweeper trucks are washed on an outdoor wash pad behind the fleet garage since there is no water line near the dewatering pad at the Utilities Garage. The drain in the wash pad was said to go to the combined sewer. If this is not true and it goes to the storm sewer, it must be capped permanently or can no longer be used as a wash pad.

Material storage	
Are all materials that are potential stormwater contaminants stored under cover or in secondary containment?	The plow storage area could be tarped or moved under the cover of the roof because they tend to leak from the hydraulic fittings. Fittings should also be bagged to prevent spills onto the ground.
Hazardous waste management	
Are all hazardous materials properly labeled and stored to prevent exposure to stormwater runoff?	Used oil is stored in the underground 2000 gallon tank. Trolley totes, drip pans, and any other containers which hold used oil must also be labeled "Used Oil". Herbicides used by the Parks Department were kept upstairs in a locked room. There was an unlabeled drum by the Streets Department Garage. All containers should be labeled of their contents to ensure proper handling and disposal of materials.
Waste management	
Are waste bins covered with waste properly disposed in containers?	YES
How is landscape waste stored?	N/A – No landscape waste is kept at this facility.
Spill response	
Does the facility have a spill response plan, and are spill kits readily available?	Spill kits are located in smaller buckets in the fleet garage near areas where they are commonly needed. Larger bags of Oil Dri are kept near the back garage where larger spills requiring a whole bag may occur.
Employee training	
What type of stormwater training do maintenance staff receive?	No formal training. Only managers are trained and are expected to verbally pass this information on to their 40-50 employees. Training sessions related to storm water issues need to be conducted at least annually and documentation of the agenda, schedule, attendance, etc. must be kept with the SWP3.
Notes or additional information:	
<p><u>MS4 Permit</u> At the time of inspection we were told that all of the drainage from this facility went to the City's combined sewer. However, in looking at the maps provided, this did not seem to be clear and no documentation or verification records could be provided. Be aware that if records can be provided showing that this facility does drain to the combined sewer, it is not technically a part of the MS4 permit program and would not require a SWP3. If this area does not drain to the combined sewer, then the appropriate changes must be made to procedures, material storage, and drain connections in order to comply with the MS4 permit requirements.</p>	
<p><u>Storm Water Pollution Prevention Plan (SWP3)</u> The City of Lakewood is required to develop a SWP3 for this facility if it does not drain to combined sewer. Regardless, the City may still wish to impose equivalent practices to develop good habits amongst employees which can result in cost savings. If you must develop an SWP3, it must contain a map indicating the location of potential pollutant sources, the control measures (best management practices) implemented to minimize or eliminate the discharge of pollutants, and the drainage systems and patterns. The City should show all catch basins, storm sewers and points of discharge for storm water from this facility and delineate drainage areas to each outfall. Refer to Part 5.1 of</p>	

the Ohio EPA General NPDES Permit for Industrial Activities #OHR000005 to determine other required content of the SWP3. This permit can be downloaded from our website at http://www.epa.ohio.gov/dsw/permits/GP_IndustrialStormWater.aspx. In developing the SWP3, the City must evaluate where all water is draining throughout the facility, including an assessment of non-storm water discharges. The goal is to certify that there are no illicit discharges from the facility to the MS4.

Staging Area

The staging area near the side of the fleet garage is where vehicles are stored that are not in use or in need of repair. This area has some staining. One truck, which was thought to have carried dirt or yard waste, was dripping liquid on the ground. Although it is preferred that leaky vehicles be stored inside, drip pans should be used to catch any drips or leaks while they are outdoors. Any leaks that are not caught by a drip pan should be cleaned up with Oil Dri and the contaminated soils then disposed of in a dumpster. More staining was seen just outside of the fleet garage door in the back and the same prevention methods should be used to keep this area clean.

INSPECTION PHOTOS
Service Garage
City of Lakewood
Photos Taken: May 30, 2012



Fig. 1: Stains were evident near the diesel station. A spill kit should be kept nearby and any drips or spills should be cleaned up immediately.



Fig. 2: Staining was apparent in the vehicle staging area where garbage trucks and other vehicles are stored waiting for repairs. It is preferable that these leaky vehicles be stored inside or pans should be used to catch any leaks and spills should be cleaned up with oil dry.



Fig. 3: A truck which Joe thought may have carried dirt or yard waste was leaking in the staging area.



Fig. 4: This is the wash pad where the sweeper trucks are washed out on occasion. This drain goes to the combined sewer.



Fig. 5: One of the interior floor drains in the fleet garage. This drain goes to an oil water separator then the water goes to combined sewer.



Fig. 6: Erodible material was stored in a covered area behind the garage. This is a good sediment and erosion control practice.

filtered

control

FIELD INSPECTION WORKSHEET
 CITY OF LAKEWOOD REFUSE & RECYCLING FACILITY
 MS4 Program Evaluation

Permittee: City of Lakewood (3GQ00073*BG)	
Address of facility: 1437 Wayne Ave.	Size of facility: 2 acres
Date of visit: 5/30/12	Time of visit: 1:15 PM
Provide the name(s) and title(s) of permittee staff present during inspection	
Name	Title
Joe Beno	Director of Public Works
Glenn Blake	Facility Manager
Evaluator Observations:	
SWPPP or stormwater plan	
Has the maintenance facility developed a SWPPP or stormwater plan?	NO. The City believes this facility discharges storm water to a combined sewer. If subject to the MS4 program, a plan for this facility was required by June 3, 2011.
Does the plan include a site map, list of pollutant sources, BMPs, and maintenance procedures?	NO – Because there is no plan. However, these are required components of an SWPPP.
Does the permittee conduct and document periodic inspections of the facility?	NO. Periodic inspections of storm water pollution prevention practices and storm water pollutant sources must be provided per a schedule contained in the SWPPP.
Are storm drains labeled and free of debris?	Not clearly labeled.
Vehicle maintenance, fueling and washing	
Are vehicle maintenance activities conducted in a designated place not exposed to stormwater?	No vehicle maintenance is conducted at this facility. All maintenance is done at the Service Garage.
Are fueling stations properly designed with spill kits nearby?	The fuel station did have an emergency shut off valve. No spill kit was within sight so one should be moved nearby.
Are vehicles washed on-site? Is wash water discharged to the MS4 or sanitary sewer?	No vehicles are washed on site.
Material storage	
Are all materials that are potential stormwater contaminants stored under cover or in secondary containment?	Some yard waste was piled behind the drop off facility and was probably dumped there. This pile should be composted as soon as possible. If yard wastes are to remain on site for extended periods of time, they should be tarped and contained so no leachate escapes to your MS4. Cooking oil was stored on a flat behind the drop off facility. This material is usually stored inside but has been outside due to the renovations being done in the drop off facility. This material should be kept within secondary containment or indoors.
Hazardous waste management	
Are all hazardous materials properly labeled and stored to prevent exposure to stormwater runoff?	Two unlabeled drums were found behind the drop off facility. One was open with a dirty funnel sitting on top.

	<p>All containers must be labeled so their contents can be properly handled. Drums may be stored outside only if they are closed and in good condition. The drums observed here must be stored indoors or within secondary containment and under cover.</p> <p>Trucks which were out of service for repairs were stored outside. Staining on the ground showed that they had been leaking. Leaky vehicles should be the priority vehicles to be kept indoors if possible. If left outside, they must have drip pans or other containment methods in place to prevent leaking onto the ground. Clean up procedures should take place immediately after a spill is observed.</p> <p>Light bulbs stored in the parking garage must be kept in the box the City was given, closed, and must be labeled with the date the first bulb was collected. They are currently in open, unlabeled boxes.</p>
Waste management	
<p>Are waste bins covered with waste properly disposed in containers?</p>	<p>Construction and demolition debris was stored in an uncovered dumpster outside. This dumpster should be covered or tarped to ensure no formation and release of leachate to your City's MS4.</p>
<p>How is landscape waste stored?</p>	<p>Landscape waste was stored in garbage trucks outside where residents could drop items into at the time of inspection since the drop off facility was being renovated. In the future, the City plans to store this waste in a bin inside of the drop off facility.</p>
Spill response	
<p>Does the facility have a spill response plan, and are spill kits readily available?</p>	<p>No spill kits near fuel pump. Were told one was located somewhere inside.</p>
Employee training	
<p>What type of stormwater training do maintenance staff receive?</p>	<p>None. Employee training on storm water pollution prevention practices and identifying pollution sources must be provided.</p>
<p>Notes or additional information:</p> <p><u>Facility Overview & Applicability of Industrial Storm Water Permitting</u></p> <p>The drop off facility is currently under construction. As a temporary measure, recyclables and other materials are currently being dropped off directly into a designated garbage truck for each material before being transported off site. In the future, the plan is to have bins for each material located inside of the drop off facility. People can drop off their items in these bins and the material will then be put into a garbage truck and hauled off site for disposal.</p> <p>According to Part V of guidance document number 0035 from our Division of Materials and Waste Management, previously Division of Solid and Infectious Waste Management, the Refuse and Recycling Facility is not considered a transfer facility and would not need its own general Industrial NPDES permit if the facility is operated in the manner described in the preceding paragraph. Specifically, this document states that sites are not regulated as transfer stations</p>	

if they use "Portable containers that have an aggregate volume of fifty cubic yards or less". Based on the containers we were shown on site and the current amount of materials being held at the facility, it appears that the facility would not be considered a transfer facility. "Aggregate volume" means the **total volume of all portable containers** at the facility designated for receiving solid wastes. Further, your facility may obtain exempt status as a Legitimate Recycling Facility if you document proof that the facility recovers for beneficial use no less than sixty percent of the volume of solid wastes brought to the facility each month for no less than eight months in each calendar year. If one or both of the aforementioned conditions cannot be met, then this facility must obtain a general NPDES permit for storm water discharges associated with industrial activity.

More guidance documents on this topic can be found at :
http://www.epa.ohio.gov/dsiwm/pages/transfer_docs.aspx

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

Interior Drains

Interior drains were located in both the parking garage, where garbage trucks are stored, and the drop off facility. The City was unsure as to whether the drains on this site went to sanitary, storm, or combined sewer. If these drains go to the storm sewer, they must be permanently capped or redirected to sanitary sewer immediately.

Salt Storage

The secondary salt storage dome was bulging due to the mild winter leaving the City with excess salt. Salt trailing was evident down the paved area in front of the dome and small remnant piles of salt were scattered about the area. There were still remnants of an outdoor salt pile just south of the dome. All salt must be swept up and removed from this area and placed in the dome or stored per the guidance provided at http://www.epa.ohio.gov/portals/35/storm/Interim_Salt_Storage_Guidance.pdf. Any spilled salt around the area must be swept up. Good housekeeping methods should be used to consistently clean up salt spills once they occur during the season to prevent buildup of salt around the dome.

The City is currently paying the salt manufacturer to store additional salt which cannot fit in the dome. However, the City must take delivery of that salt by a certain date. If you must store that salt outside the salt storage dome when it is delivered, please check our website at www.epa.ohio.gov/dsw/storm/index.aspx to see if the final salt storage guidance document has been released. If released, storage practices should be in accordance with the final guidance document rather than the interim document.

Storm Water Pollution Prevention Plan (SWP3)

The City of Lakewood is required to develop a SWP3 for this facility if storm water is not discharged to combined sewers. The SWP3 must contain a map indicating the location of potential pollutant sources, the control measures (best management practices) implemented to minimize or eliminate the discharge of pollutants, and the drainage systems and patterns. The City should show all catch basins, storm sewers and points of discharge for storm water from this facility and delineate drainage areas to each outfall. Refer to Part 5.1 of the Ohio EPA General NPDES Permit for Industrial Activities #OHR000005 to determine other required content of the SWP3. This permit can be downloaded from our website at http://www.epa.ohio.gov/dsw/permits/GP_IndustrialStormWater.aspx. In developing the SWP3, the City must evaluate where all water is draining throughout the facility, including an assessment of non-storm water discharges. The goal is to certify that there are no illicit discharges from the facility to the MS4.

INSPECTION PHOTOS
Refuse & Recycling Facility
City of Lakewood
Photos Taken: May 30, 2012



Fig. 1: This facility has a fueling station. Fueling is an activity which would require a facility to be a part of the City's MS4 program. The Refuse & Recycling Facility must be added to the list of the City's municipal facilities which are under the program and develop a SWP3.

Fig. 2: While the drop off facility is being renovated yard wastes, recycling, and garbage are being collected directly into garbage trucks outside. Frequent checks for leaks, sweeping, and other proactive measures should be used to ensure this area does not pose any storm water issues.



Fig. 3: Construction and demolition debris was stored in this dumpster. This dumpster should be covered or tarped to ensure no formation and release of leachate to your City's MS4.

Fig. 4: Land had been disturbed in front of the drop off facility and was still bare at the time of inspection. Erosion controls should be provided in this area by way of stoning and seeding. Sediment controls such as silt fence should be installed until the area is stabilized.



Fig. 5: The City was unsure of where the drains in the parking garage went. If these drains go to your City's MS4, they must be permanently capped or redirected to sanitary sewer immediately.

Fig. 6: Some yard waste was piled behind the drop off facility and was probably dumped there. This pile should be composted as soon as possible. If yard wastes are to remain on site for extended periods of time, they should be tarped and contained so no leachate escapes to your MS4.



Fig. 7: Cooking oil was stored on a flat behind the drop off facility. This material is usually stored inside but has been outside due to the renovations being done in the drop off facility. This material should be kept within secondary containment or indoors.

Fig. 8: A plow which was stored behind the drop off facility was leaking hydraulic fluids. Plows can be tarped or kept under cover to prevent this leakage from spreading. It was suggested that the hydraulic fittings be bagged in order to prevent future leakage onto the ground.



Fig. 9:Two unlabeled drums were outside. One was open with a dirty funnel sitting on top. All containers must be labeled so their contents can be properly handled. Drums may be stored outside only if they are closed and in good condition. Drums such as this must be stored indoors or within secondary containment and under cover.

Fig. 10:The secondary salt storage dome was filled beyond capacity due to the mild winter leaving the City with excess salt. Salt trailing was evident down the paved area in front of the dome and small remnant piles of salt were scattered about the area.



Fig. 11:Salt spilling out from the salt dome.

Fig. 12:Salt that was delivered and could not fit in the dome was placed in this area until the company decided they would keep it until later in the year for the City. There was still a lot of salt left in this area and a storm drain was located just before the front cement barrier on the left of this image. All salt must be swept up and removed from this area and placed in the dome or under the cover or a supplementary tarp to cover excess salt.

FIELD INSPECTION WORKSHEET
 CITY OF LAKEWOOD TRAFFIC SIGN & SIGNALS SHOP
 MS4 Program Evaluation

Permittee: City of Lakewood (3GQ00073*BG)	
Address of facility: 12920 Berea Road	Size of facility: 1 acre
Date of visit: 5/30/12	Time of visit: 2:05 PM
Provide the name(s) and title(s) of permittee staff present during inspection	
Name	Title
Joe Beno	Director of Public Works
Evaluator Observations:	
SWPPP or stormwater plan	
Has the maintenance facility developed a SWPPP or stormwater plan?	NO. The City believes this facility discharges storm water to a combined sewer. If subject to the MS4 program, a plan for this facility was required by June 3, 2011.
Does the plan include a site map, list of pollutant sources, BMPs, and maintenance procedures?	NO – Because there is no plan. However, these are required components of an SWPPP.
Does the permittee conduct and document periodic inspections of the facility?	NO. Periodic inspections of storm water pollution prevention practices and storm water pollutant sources must be provided per a schedule contained in the SWPPP.
Are storm drains labeled and free of debris?	Storm drains are not labeled. Outdoor grates had road paint on them; one was obviously just sprayed over in the testing process, resulting in a discharge of paint to the storm water drainage system.
Vehicle maintenance, fueling and washing	
Are vehicle maintenance activities conducted in a designated place not exposed to stormwater?	No vehicle maintenance is conducted at this site.
Are fueling stations properly designed with spill kits nearby?	No fueling station at this site.
Are vehicles washed on-site? Is wash water discharged to the MS4 or sanitary sewer?	Vehicles are not washed on site, but equipment is. It is washed indoors but it was not certain whether this drain goes to sanitary, storm, or combined sewer. If this drain goes to storm it must be permanently capped or redirected to sanitary. We also noted that some equipment washing may occur outdoors (see Notes).
Material storage	
Are all materials that are potential stormwater contaminants stored under cover or in secondary containment?	Some paint was stored outside on a pallet. It would be better if this material were stored inside in case of any spills or punctures.
Hazardous waste management	
Are all hazardous materials properly labeled and stored to prevent exposure to stormwater runoff?	N/A
Waste management	
Are waste bins covered with waste properly disposed in containers?	YES
How is landscape waste stored?	N/A
Spill response	

Does the facility have a spill response plan, and are spill kits readily available?	No spill kits were easily observed during the inspection.
Employee training	
What type of stormwater training do maintenance staff receive?	None. Employee training on storm water pollution prevention practices and identifying pollution sources must be provided.
Notes or additional information:	
<p><u>Outdoor Paint Testing</u></p> <p>A bin behind the building is used to test the road paint sprayers in. Paint outside of the bin indicated that paint had missed the bin and was over and undershot. Further, there was a 2 inch hole in the bottom of the bin making it an unacceptable receptacle for this use. Overspray and leaks can enter storm water drainage systems.</p>	
<p><u>Storm Water Pollution Prevention Plan (SWP3)</u></p> <p>The City of Lakewood is required to develop a SWP3 for this facility if storm water is not discharged to combined sewers. The SWP3 must contain a map indicating the location of potential pollutant sources, the control measures (best management practices) implemented to minimize or eliminate the discharge of pollutants, and the drainage systems and patterns. The City should show all catch basins, storm sewers and points of discharge for storm water from this facility and delineate drainage areas to each outfall. Refer to Part 5.1 of the Ohio EPA General NPDES Permit for Industrial Activities #OHR000005 to determine other required content of the SWP3. This permit can be downloaded from our website at http://www.epa.ohio.gov/dsw/permits/GP_IndustrialStormWater.aspx. In developing the SWP3, the City must evaluate where all water is draining throughout the facility, including an assessment of non-storm water discharges. The goal is to certify that there are no illicit discharges from the facility to the MS4.</p>	

INSPECTION PHOTOS
Traffic Signs & Signals Shop
City of Lakewood
Photos Taken: May 30, 2012



Fig. 1: An interior drain near the front of the building. Verification that this drain goes to sanitary sewer should be provided.



Fig. 2: This storm drain just behind the building had spots of yellow paint on the grate indicating that paint may have been dumped or sprayed over the storm sewer. No paint should ever be put down a storm drain.



Fig. 3: Road paint sprayers are tested in this bin behind the building.



Fig. 4: A hole in the bottom of the bin in Figure 3 makes in an unacceptable place for paint to be sprayed, as it can leak out of the bottom and be released to your MS4.



Fig. 5: Paint covering some of the vegetation behind the spray bin indication that operators may overshoot the bin on occasion.



Fig. 6: Yellow paint stains on this storm drain indicated paint had entered the storm sewer system. This would be an illicit discharge. Paint cannot be put down the storm drain and testing activities should not be done near storm drains.



Fig. 7: This concentrated testing area runs right over a storm drain. This is not an acceptable practice.



Fig. 8: Some paint cans were stored outside. Moving these items inside could prevent any leaks from reaching the storm drains should a spill or puncture occur.

FIELD INSPECTION WORKSHEET
 CITY OF LAKEWOOD MUNICIPAL UTILITIES GARAGE
 MS4 Program Evaluation

Permittee: City of Lakewood (3GQ00073*BG)	
Address of facility: 1699 Metropark Dr.	Size of facility: 2 acres
Date of visit: 5/30/12	Time of visit: 2:30 PM
Provide the name(s) and title(s) of permittee staff present during inspection	
Name	Title
Joe Beno	Director of Public Works
Evaluator Observations:	
SWPPP or stormwater plan	
Has the maintenance facility developed a SWPPP or stormwater plan?	NO. Storm water from this facility discharges to the Rocky River. A plan for this facility was required by June 3, 2011. Failure to develop the SWPPP by this date is a violation of Part III.B.3.c of the NPDES permit for small MS4s.
Does the plan include a site map, list of pollutant sources, BMPs, and maintenance procedures?	NO – Because there is no plan. However, these are required components of an SWPPP.
Does the permittee conduct and document periodic inspections of the facility?	NO. Periodic inspections of storm water pollution prevention practices and storm water pollutant sources must be provided per a schedule contained in the SWPPP.
Are storm drains labeled and free of debris?	Not labeled. Storm drains near the garage doors are fitted with non-woven geotextile fabric. As suggested, a Silt Sack might be a better form of inlet protection since the non-woven material tends to stop too much water from passing and can get clogged easily. Inlet protection devices must be inspected and replaced on a routine basis. The storm drain in the yard was covered with sediment and debris due to a failed storm drain inlet protection. Please refer to Section 6.4 of the <i>Rainwater and Land Development</i> manual (ODNR, 2006) for the proper construction and maintenance of storm drain inlet protection. Disturbed areas should not remain bare if they are not being worked. Stabilize such areas with seed and mulch.
Vehicle maintenance, fueling and washing	
Are vehicle maintenance activities conducted in a designated place not exposed to stormwater?	YES. All maintenance occurs inside the garage.
Are fueling stations properly designed with spill kits nearby?	No fueling station.
Are vehicles washed on-site? Is wash water discharged to the MS4 or sanitary sewer?	All washing is done indoors. Mr. Beno believes floor drains connect to sanitary since the building is fairly new. Verification must be provided in the SWP3. If it goes to

	storm instead of sanitary, it must be permanently capped or redirected to sanitary.
Material storage	
Are all materials that are potential stormwater contaminants stored under cover or in secondary containment?	<p>Wood chips, stump grindings, and a little bit of yard waste were on site. The City must be careful to avoid composting in these areas or allowing materials to sit for a length of time sufficient to create leachate. A berm could be installed in the mulch storage area off of the entrance drive to prevent this material from leaving its designated site.</p> <p>The CaCl₂ container near the main salt dome should be stored within secondary containment.</p> <p>The earthen berm behind the facility should be vegetated, or some other form of sediment and erosion control applied, to prevent sediment-laden runoff from being released.</p> <p>Three unlabeled deteriorating drums were stored near the end of the roofed material storage area. Stains were apparent around these drums and a storm drain was inches away. All containers must be labeled of their contents to ensure proper handling. Spills should be cleaned up using oil dry and the contaminated soils disposed of in a dumpster. These drums should be stored further from the storm drain, perhaps indoors or under the roof.</p>
Hazardous waste management	
Are all hazardous materials properly labeled and stored to prevent exposure to stormwater runoff?	N/A
Waste management	
Are waste bins covered with waste properly disposed in containers?	The animal carcass dumpster's lid was not closed at the time of inspection. Make sure this dumpster is kept shut to prevent leachate formation.
How is landscape waste stored?	Collected leaves are temporarily stored in the back of the yard. This area should be bermed to contain any leachate that may be formed and to prevent material from being pushed too close to the edge of the yard. This area abuts the Rocky River. Leaves should not remain on site for a length of time sufficient to create leachate.
Spill response	
Does the facility have a spill response plan, and are spill kits readily available?	Spill materials kept in garage. A spill response plan is a required component of the SWPPP.
Employee training	
What type of stormwater training do maintenance staff receive?	None. Employee training on storm water pollution prevention practices and identifying pollution sources must be provided.

Notes or additional information:

Salt Storage

Extra salt is stored under a tarp near the dewatering pad. White salt residue was seen all around this area showing that it was not being contained effectively. Trails of salt residue were heading into two storm drains located outside of the soil storage building. Better housekeeping measures are required to prevent salt discharge from the MS4.

The main salt dome at this facility had similar issues. Salt was bulging out from the building and trailing towards a storm drain. The dome itself is in need of repair and/or replacement. Further, it appeared that salt had once been stored outside next to the Loader Garage and was not removed entirely.

All salt that is not under cover of the tarp or inside the dome must be swept up and contained. All salt must be stored under cover of the dome or a tarp which is secured to properly ensure no runoff can carry salt to the storm drains.

Dewatering Pad

There is one drain in the dewatering pad and another under the dumpster containing spoils from the pad. Both go to the adjacent wastewater treatment plant. The drain in the dewatering pad is near the front of the pad where trucks enter. The grading of this pad slopes towards the drain and the pavement in front of the pad looks worn, which is causing some ponding of leachate. Because this is a high traffic area where cars can track this leachate, we suggested that this area be repaved to prevent this ponding and to possibly help direct leachate to the drain in the pad more effectively.

Storm Water Pollution Prevention Plan (SWP3)

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

INSPECTION PHOTOS
Municipal Utilities Garage
City of Lakewood
Photos Taken: May 30, 2012



Fig. 1 & 2: The dewatering pad for the street sweepings and catch basin cleanings has a drain near the cement block in the forefront of this picture, which is connected to the treatment plant.



Fig. 3: There is a drain under the dumpsters, which hold spoils from the dewatering pad, and it is also connected to the treatment plant.



Fig. 4: Excess salt is stored in this area. Trails of salt can be seen all around this pile showing that it requires better containment measures.



Fig. 5: Trails of salt can be seen heading into these storm drains. This is an unauthorized discharge of non-storm water to the MS4.

Fig. 6: A pile of what appeared to be street sweepings or some other form of waste was dumped on the mulched area on the way in. Make sure any dumped materials such as this are removed and disposed of properly.



Fig. 7 & 8: Mulch was beginning to get pushed over the edge of the storage area and into the wooded area below. Make mulch material is not kept too close to the edge to prevent more from being pushed off of the designated storage area.



Fig. 9 & 10: A storm drain in the middle of the yard near the pile of excavated material was covered with dirt and debris. Silt fencing was once in place but had since failed. A silt fence should be reinstated properly and the basin cleaned out. Sediment controls, such as grassing more around this area should be considered as a more reliable mechanism of keeping sediment from getting into this storm drain.



Fig. 11 & 12: The temporary leaf storage area should be bermed to contain any leachate that may be formed and to prevent material from being pushed to close to the edge of the yard causing it to fall down the slope and disturb more land.



Fig. 13: Salt in the primary salt dome was not contained adequately. Trails of salt could be seen entering the storm drain. Any spilled or uncontained salt should be swept up and a better way of keeping the salt contained, such as the addition of a berm, should be considered to address this issue.



Fig. 14: The roof of the salt dome was in poor condition. The dome should be inspected frequently to ensure that no storm water is entering and no salt is leaving the dome.



Fig. 15: CaCl tank



Fig. 16: A wash bay inside of the building. Joe believes this drain goes to sanitary since it is a newer building. Upon verification, if this is not the case and the drain goes to storm, it must be permanently capped or redirected to sanitary.



Fig. 17: The earthen berm behind the facility should be vegetated as an erosion control.



Fig. 18: sand, 304s, cold patch material, limestone, etc. was all kept under this roof. This is a great practice, just be sure to make sure all material is swept into its bay and not trailing out from under the roof.



Fig. 19: Three unlabeled drums were stored near the end of the roofed material storage area. Stains were apparent around these drums and a storm drain was inches away. All containers must be labeled of their contents to ensure proper handling. Spills should be cleaned up using oil dry and the contaminated soils disposed of in a dumpster. These drums should be stored further from the storm drain, perhaps indoors or under the roof.

FIELD INSPECTION WORKSHEET
 CITY OF LAKEWOOD WASTEWATER TREATMENT PLANT
 MS4 Program Evaluation

Permittee: City of Lakewood (3PE00004*ND – WWTP/3GQ00073*BG – MS4)	
Address of facility: 1699 Metropark Dr.	Size of facility: 4 acres
Date of visit: 5/30/12	Time of visit: 3:10 PM
Provide the name(s) and title(s) of permittee staff present during inspection	
Name	Title
Joe Beno	Director of Public Works
Richard Krumreig	WWTP Unit Manager
Evaluator Observations:	
SWPPP or stormwater plan	
Has the maintenance facility developed a SWPPP or stormwater plan?	NO. Plan was required by Feb 1, 2008, per NPDES permit #3PE00004*ND.
Does the plan include a site map, list of pollutant sources, BMPs, and maintenance procedures?	N/A – Since there is no plan. However, this information is required within the SWP3. Pollutant sources at WWTPs may include, but are not limited to: grit, screenings and other solids handling, storage and disposal areas; bulk chemical receiving stations; sludge drying beds; dried sludge piles; compost piles; septage or hauled waste receiving station; and access roads and rail lines, as applicable.
Does the permittee conduct and document periodic inspections of the facility?	NO. Routine facility inspections are to be conducted per the schedule established in the SWP3. A Comprehensive Site Compliance Evaluation must be conducted and results documented at least once a year. Inspections are to include all areas of the facility where industrial activities occur and potential pollutant sources are exposed to storm water drainage systems.
Are storm drains labeled and free of debris?	YES
Vehicle maintenance, fueling and washing	
Are vehicle maintenance activities conducted in a designated place not exposed to stormwater?	No vehicle maintenance activities occur at this facility.
Are fueling stations properly designed with spill kits nearby?	No fueling stations are present at this facility.
Are vehicles washed on-site? Is wash water discharged to the MS4 or sanitary sewer?	No vehicles are washed on site. Washing occurs inside the Utilities Garage facility.
Material storage	
Are all materials that are potential stormwater contaminants stored under cover or in secondary containment?	NO. Storage practices for the rag dumpster and sludge building must be improved to prevent unauthorized discharges to the MS4 (see photos).

Hazardous waste management	
Are all hazardous materials properly labeled and stored to prevent exposure to stormwater runoff?	Drip pans and used oil containers must all be labeled "Used Oil." Not all containers were properly labeled.
Waste management	
Are waste bins covered with waste properly disposed in containers?	YES
How is landscape waste stored?	N/A – No landscape waste at this facility.
Spill response	
Does the facility have a spill response plan, and are spill kits readily available?	No spill kits were observed during the inspection. They should be kept at locations where spills may occur.
Employee training	
What type of stormwater training do maintenance staff receive?	NONE. Language in NPDES permit #3PE00004*ND requires staff at all levels to receive periodic training on storm water pollution prevention.
Notes or additional information:	
<p><u>Storm Water Pollution Prevention Plan (SWP3)</u> The City of Lakewood is required to develop a SWP3 for this facility. The SWP3 must contain a map indicating the location of potential pollutant sources, the control measures (best management practices) implemented to minimize or eliminate the discharge of pollutants, and the drainage systems and patterns. The City should show all catch basins, storm sewers and points of discharge for storm water from this facility and delineate drainage areas to each outfall.</p> <p>We noted the following sources of potential storm water pollution at this facility:</p> <ul style="list-style-type: none"> • Leachate from Rag Dumpsters – Although dumpsters were stored inside a building, leachate was observed leaking to the outside where it would enter the storm sewer system. • Sludge Storage Building – Dark stains were observed on the floor both inside and outside the sludge storage building. This may be due to spilled sludge during the truck loading process or may be from leaking trucks and equipment. In either case, controls are needed to address spills, e.g., spill kits, good housekeeping, preventative maintenance programs and employee training. <p><u>Employee Training</u> Mr. Krumreig was unfamiliar with the NPDES storm water program and was not aware that the NPDES permit for this facility contains language requiring the development and implementation of an SWP3. This is an indication that employee training at this facility has not been occurring as required by the NPDES permit. Part IV.D.3.e of NPDES permit #3PE00004*ND requires employees at all levels be trained on the components and goals of the SWP3. Training should address topics such as spill response, good housekeeping and materials management practices. The SWP3 must contain a schedule for periodic employee training.</p> <p>Failure to comply with storm water conditions contained in NPDES permit #3PE00004*ND is a violation of Ohio Revised Code 6111.04 and 6111.07 and is punishable by fines of up to \$10,000 per day of violation.</p>	

INSPECTION PHOTOS
WASTEWATER TREATMENT PLANT

City of Lakewood Cuyahoga County

Photos Taken: May 30, 2012 By: Kelly McVay, DSW, NEDO



Fig. 1 & 2: The rag dumpster appeared to be leaking out of the building. This is an unauthorized non-storm water discharge and cannot be released to the City's MS4. A berm could be added or grading could be improved to direct leachate towards an interior drain that goes back to the plant.



Fig. 3 & 4: Some stains and drips were apparent outside of the sludge storage building. Mr. Krumreig believes this is not from the sludge, but rather from vehicles storing and transporting the sludge containers. Drip pans should be used and a spill kit should be kept nearby. Any spill or leaks should be cleaned up immediately with oil dry and the spoils disposed of in a dumpster.



Fig. 5: Used oil containers and drip pans must be labeled "Used Oil".



Fig. 6: The Sodium Chloride loading dock has a trench drain, which goes back to the treatment plant. At the time of inspection, the drain had water ponding on top because the valve was closed. This is a good practice to perform in a chemical loading area.