Environmental
Protection Agency

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

F

August 6, 2010

RE: CUYAHOGA COUNTY
CITY OF STRONGSVILLE
MS4 INSPECTION FINDINGS
MCM#6-POLLUTION PREVENTION
FOR MUNICIPAL OPERATIONS

Mr. Ken Mikula
City Engineer
City of Strongsville
16099 Foltz Parkway
Strongsville, OH 44149

Dear Mr. Mikula:

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 Sewer Systems (MS4s) 3GQ00033*BG and Ohio Administrative Code 3745-39.

On July 27, 2010, Ohio EPA met with you and other representatives of the City of Strongsville 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 Worksheets 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 submit a Notice of Termination within 45 days of reaching final stabilization on municipal construction projects.** This is a violation of Part IV.A of NPDES permit #OHC000003. Our records show that the City of Strongsville has 6 active projects permitted under the Ohio EPA General Storm Water NPDES Permit for Construction Activities but indicated during the interview that 4 of the projects were completed and have reached final stabilization. Please submit an NOT for all 4 projects that are complete or no longer viable (see attachments for list).

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- **Failure to compile an inventory of all MS4 facilities, i.e. the Service Center, the Transfer Station, the WWTPs, salt storage areas, parks and cemeteries, and parking lots.** 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.

- **Failure to obtain NPDES permit coverage for storm water discharges associated with industrial activity from the WWTPs "B" and "C."** This is a violation of Ohio Revised Code 6111.04 and Ohio Administrative Code 3745-38-09. The City has coverage under the Ohio EPA NPDES Permit #3PB00047*ED Parts I, II, and III for "B" Plant and #3PB00048*FD Parts I, II, and III for "C" Plant. Both permits do not have the language required for storm water related to industrial activity, i.e., Parts IV, V, and VI as a part of their NPDES Permits. The City has two options, the first of which is to add storm water language to the existing permits, i.e., Parts IV, V, and VI, requiring the City to seek a permit modification and submit Form 2F. If the City opts to go this route, please contact Erm Gomes of our office at (330) 963-1196. The second is to submit Notices of Intent (NOIs), one for each WWTP, for coverage under the Ohio EPA General Storm Water NPDES Permit for Industrial Activities #OHR000004.

  *Regardless of the option chosen, a **Storm Water Pollution Prevention Plan (SWP3)** will need to be developed and implemented for this facility within 180 days of submitting the permit modification or NOI.*

  Facilities that discharge storm water associated with industrial activity may qualify for an exemption from the storm water permitting if they can certify a condition of "No Exposure". However, my inspection revealed that there were many points of exposure found at Plants "B" and "C" that the City must first eliminate before a condition of no exposure can be achieved. Although a condition of no exposure was discussed during the inspections, it is reasonably difficult for municipalities to receive a No Exposure Certification for their WWTPs. ***It is my recommendation that the City first add the storm water language Parts IV, V, and VI to their NPDES Permits and develop SWP3s for both plants, and then work towards a condition of no exposure.*** Once a condition of no exposure is achieved, the City can then submit a No Exposure Certification and eliminate Parts IV, V and VI from the NPDES permit for its WWTPs. Please review the comments within the attached *Municipal Storm Water Program Evaluation* and *Maintenance Facility Field Inspection Worksheets for WWTP "B" and "C"* regarding this topic.

- **Failure to provide controls for reducing or eliminating the discharge of pollutants from maintenance and storage yards at the Service Center and WWTPs.** This is a violation of Part III.B.6.d.iii.2 of the Small MS4 NPDES Permit #OHQ000002 and Ohio Revised Code (ORC) 6111.04 and 6111.07. This violation was noted for the following operations at the maintenance and storage yards:

    - Failure to implement controls to prevent the discharge of leachate associated with yard waste and leaf collection operations at the transfer station. Please review the *Service Center Field Inspection Worksheet* for more on this topic.
    - Failure to implement the proper best management practices (BMPs) to prevent the discharge of salt residue to the City's MS4 from the salt storage building A.
    - Failure to provide secondary containment for the used oil drum stored outside at the back of the service yard. This drum should be stored indoors if feasible and away from contact with storm water.
    - Failure to implement sediment, erosion and runoff controls to prevent the formation of a gully at the service yard. The City must take all steps necessary to prevent the formation of erosion gullies. Steps may include re-grading, installation of additional drainage structures, rip-rap, rock check dams and permanent stabilization.
    - Failure to provide a cover for the street sweepings dumpster, which allows for the re-saturation of the spoils and the illegal discharge of leachate to the City's MS4.
    - Failure to implement sediment controls to prevent the discharge of sediment laden runoff from stockpiles of fines throughout the service yard.
    - Failure to implement BMPs such as staff education on illicit discharges to prevent employees from rinsing a white paint substance down the two catch basins on the north side of the Service Garage.
    - Failure to provide drip pans, absorbents and other containment for leaks from vehicles stored outside and the asphalt truck that is stored near the used oil inlets outside the Service Garage.
    - Failure to implement BMPs to prevent the discharge of solid waste leachate to the catch basin outside the transfer station.
    - Failure to implement the proper BMPs such as keeping dumpsters lidded and drain holes plugged to prevent the discharge of solid waste leachate from entering the City's MS4 at the WWTP "C."

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.

Deficiencies:

- A storm water pollution prevention plan (SWP3) has not yet been developed for the City Service Center. Per Part III.B.6.c of the NPDES permit, this plan must be developed and implemented by **June 2011**. Because the waste transfer station and leaf collection yard are a part of the service complex, these facilities will be included in the SWP3 for the Strongsville Service Center. Also, the City must include the 3 salt storage buildings in this SWP3, and create a site map for each location indicating the BMPs to be implemented. BMPs must be provided to minimize or eliminate the discharge of storm water pollutants to the MS4 and waters of the State. The SWP3 for this facility should include a checklist by which to conduct the inspections. This will standardize inspections and remind inspectors of the critical areas that must be reviewed during an inspection. Ohio EPA's inspection of this facility revealed several deficiencies in storm water BMP implementation. For details, please refer to the Facility Inspection Worksheet for this site.

- The SWP3 for municipal facilities subject to this program must provide a storm water contact or pollution prevention team. At a minimum, we recommend that a storm water contact be designated for the Service Center that will have the authority and knowledge to ensure implementation of the SWP3 associated with the facility. Please be aware that Part IV.C.1 of the NPDES permit requires that a Table of Organization naming points of contact be submitted with your annual report.

- The City does not appear to track the total amount of catch basin cleanings removed from the MS4. Please be sure to track this amount, if you have not yet begun to do so, as it is required to be reported on the new Annual Report form. 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 provided any storm water pollution prevention guidance materials to field staff that they can take out with them in the field. By making materials available to staff at the field level, implementation of storm water BMPs should improve.

- 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 solid waste collection and disposal services, street sweeping, some sewer maintenance and repair, WWTP operation, long line street painting, and some vehicle maintenance services. Further, we recommend periodic inspection of their operations to assure that they are implementing BMPs.

Please review my comments and provide me with a letter of response indicating the actions you will take to address my concerns and the time frame in which you plan to implement your corrections. **Your response should be received no later than September 7, 2010.** Please note that this response does not replace the requirement to submit an Annual Report. Your annual report for 2010 will be due on April 1, 2011.

If you have any questions, please contact me at (330) 963-1164 or via e-mail at lindsie.macpherson@epa.state.oh.us. **Please send your response to Dan Bogoevski**, District Engineer, Ohio EPA NEDO, DSW. His contact information is (330) 963-1145 or dan.bogoevski@eap.state.oh.us.

Sincerely,

Lindsie MacPherson
Assistant to the District Engineer
Division of Surface Water

LM/mt

cc: Thomas P. Perciak, City of Strongsville Mayor
Joseph Walker, City of Strongsville Service Director (w/ enclosures)
Erm Gomes, Ohio EPA, DSW, NEDO

ec: Dan Bogoevski, Ohio EPA, DSW, NEDO

Municipal Storm Water Program Evaluation
MS4 Maintenance Component Worksheet

Date of Evaluation	July 27, 2010
Evaluator Name, Title	Lindsie MacPherson, DSW, NEDO
MS4 Permittee	City of Strongsville

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**
Ken Mikula City Engineer	City of Strongsville	440.580.3120 ken.mikula@strongsville.org
Joseph Walker Service Director	City of Strongsville	440.580.3170 joe.walker@strongsville.org
Lori Daley Design Engineer	City Engineer	440.580.3120 lori.daley@strongsville.org

MS4 Mapping	
Interview Questions	**Response**
Outfalls and receiving waters mapped? *(210 total)* Catch basins? Pipes, ditches, other conduits? Public stormwater facilities (BMPs)? Private stormwater facilities (BMPs)?	**YES** **NO** **YES** - but not ditches **NO** **YES** – privately owned residential detention basins. Working on industrial and commercial detention basins
How maps are used (i.e. tracking illicit discharges)?	The storm sewer map is used to aid the City in tracking illicit discharges and correcting them. The detention basin map is used for follow up on maintenance and the storm sewer map is used to identify flooding issues and maintenance records.

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

Notes

MS4 Mapping

The City of Strongsville Engineering Department maintains a storm sewer map in digital format that has been updated to show the locations of all outfalls and names and location of all surface waters of the state that receive discharges from these outfalls. The City will update the storm sewer map as new systems are constructed. The Cuyahoga County Board of Health has mapped the City's outfalls and receiving waters. The City has a copy of this map as well as a map developed internally with storm sewer piping and detention basins and outfall locations.

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

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

The Cuyahoga County Board of Health has provided the City with a map detailing all HSTSs and their discharging points. This map has been used to plan sanitary sewer projects. The City has constructed a sanitary sewer that will eliminate 120 HSTSs. To date, 35 have already been eliminated. There is a Capital improvement plan to bring a lot of the existing septic systems online with the City's Sanitary System in 10 years. Year one was 2008. Received map.

Please be aware that these discharging systems are considered illicit discharges to the MS4. Permit #OHQ000002 requires the City to work with the Board of Health to determine which of these systems are not operating as designed and intended. For systems not operating as designed and intended, the CCBH must use the provisions in Ohio Revised Code 6117.51 to require connection to the sanitary sewer system where it is legal, feasible and economical to do so. For systems that cannot be eliminated through connection to sanitary sewers or the installation of a soil absorption system, the property owner must be notified to contact Ohio EPA and pursue coverage under an appropriate NPDES permit.

Illicit Discharge Detection

The City of Strongsville passed their IDDE ordinance which allows the City to carry out all inspections and monitoring procedures to eliminate existing illicit discharges. The City annually contracts with the CCBH to perform dry weather screening, sampling, and testing at various outfall locations. The CCBH will identify outfalls where an illicit discharge is noted and then it is up to the City to track the sources.

The City stated that most of the 22 identified illicit discharges are attributed to the proximity of the outfall to septic tanks; however, 8 require further investigation. These will be identified as the City goes through their sewer cleaning. When they get to a problem area the Service department will hone in on the area to track the discharge.

The City receives a letter from the Board of Health identifying the outfalls where an illicit discharge was identified, the City will then review the list and map the areas and send the information to the Service Department. The Service department will then go out and track the source of the discharge and eliminate the problem as necessary. The Service Department does in-house dye testing along with cameraing the system at the problem point. The problem is corrected in-house or letters are sent out for corrective actions. On Harper Road the sewer department found a sanitary lateral connected to a storm main. The problem was corrected in July of 2010 and records with photos were kept.

Please be aware that the NPDES permit #OHQ000002 requires the City to perform dry weather screening at all outfalls at least once by June 2014 and that a plan should be in place to do so. *If any*

Notes
illicit discharges are detected during this screening, the city must develop a plan to eliminate them. For more information on the illicit discharges from HSTSs please read Part III.B.3.e of the Ohio EPA General Storm Water NPDES Permit for small MS4s #OHQ000002 for expectations to address these sources.

Catch Basin Cleaning	
Interview Question	**Response**
Schedule established for inspections and cleaning?	**YES** The City alternates every 2 years between the storm sewer system and sanitary system. So every 2 years all catch basins and then some storm sewer piping, culverts and ditches are cleaned as needed. Last cleaning was in 2007/2008.
Is cleaning and maintenance of catch basins tracked:	**YES** There is map at the Service Department where the crews will highlight the areas as they have been cleaned per year. The amount is not tracked at this time. There was a discussion of the volume estimated but not the exact weight.
How are spoils materials disposed of?	There is a dewatering station at the Service department where any leachate runs back into sanitary, and once the materials are dried the City will dispose of the materials at the transfer station which is run by republic waste / allied waste services.
Are storm drain pipes inspected? Proactive or only in response to blockage event?	**NO** Currently the camera follows the cleaning crew. So the whole system is not inspected but there is cleaning and inspecting going on.

Applicable Documents	Reviewed	Obtained
List of active municipal construction projects	**YES**	**YES**
CHECK DATABASE BEFORE INSPECTION: List of municipal projects covered under the Ohio EPA general storm water NPDES permit for construction activities: **3GC01023*AG** – St Rte 82 (Royalton road)/ end: 10/15/2005 *NOT Note: **3GC04672*AG** – Pearl Road Widening Project/ end: 1/4/2012 Note: underground detention/retention – water quality		DONE - FILE NOT ACTIVE

3GC04110*AG – Strongsville Police Station/ end: end of 2010		ACTIVE
3GC04084*AG – Foltz Parkway South Phase II/ end: 10/16/2007 *NOT Note: was never done/ may resubmit		DONE - FILE NOT
3GC04249*AG – Lunn Road Football Fields/ end: 11/15/2008 *NOT Note: might be adding more		DONE - FILE NOT
3GC02406*AG – Strongsville Ward 4 Fire Station/ end: 2/1/2007 *NOT Note:		DONE - FILE NOT
NOTE: Permit is only required if project disturbs 1 or more acre (5 or more acres for "routine maintenance")		

Notes
Catch Basin Cleaning Schedule and Disposal The City needs to *track the amount of material removed from the catch basins and MS4 and have a running tally so the total amount can be placed in the City's annual report for 2010.* Please be sure to report the total per calendar year (January to December) in the annual report for 2010 as stated in Part IV.C.2 on reporting of the Ohio EPA General Storm Water NPDES Permit for small MS4s #OHQ000002. **MS4 System Repair and Maintenance** The EPA would like to see a more proactive inspection of the storm pipes in the coming years of the new permit term to help improve your MS4 program and reduce pollutants. **Municipal Construction Projects** If construction is complete or the project is no longer viable, please submit Notices of Termination (NOTs) for these projects to close out NPDES permit coverage. The NOT and instructions can be obtained on the Ohio EPA Storm Water Program webpage at www.epa.ohio.gov/dsw/storm/stormform.aspx. As a reminder, coverage under the Ohio EPA General Storm Water NPDES Permit for Construction Activities is to be terminated within 45 days of when the project reaches final stabilization. Please be sure to incorporate this requirement into your procedures on all future projects.

Stormwater Management Facilities Operation and Maintenance	
Interview Questions	**Response**
Public facilities inspected? Frequency:	**YES** Public facilities are inspected twice a year by the Engineering Department in the Spring and Fall using a checklist created from an online template. There are 3 public facilities that will now be inspected, and the post construction for the Pearl Road widening project will be added to this inventory once the project is complete.

Stormwater Management Facilities Operation and Maintenance	
Interview Questions	**Response**
Private facilities inspected? Frequency:	**YES** All property owners with BMPs must submit yearly inspection reports to the City performed by a certified inspector with the checklist that was given to them by the City. The Inspection report will be sent to the City with pictures. The City will also go out in the Spring and Fall to inspect the facilities using their checklist.
Checklist used for inspections?	**YES** A copy of the checklist was received during the interview and is on file.
Have maintenance standards and procedures been established for these facilities?	**YES** All BMPs must adhere to the Ohio Rainwater and Land Development manual and Ohio EPA requirements.
How is maintenance prioritized? Is data evaluated to target maintenance resources?	**YES** Based on the number of units (residential/ commercial) that would be affected.

Applicable Documents	Reviewed	Obtained
Inspection checklist	YES	YES

Notes

Maintenance Program for Public Storm Water Infrastructure

Part III.B.6.d.iii.1 of the NPDES permit requires the City of Strongsville to establish maintenance schedules, maintenance activities and long-term inspection procedures to reduce the discharge of floatables and other pollutants from the MS4. Regular inspections will help the City prioritize maintenance activities. Information to improve your program is available at http://cfpub.epa.gov/npdes/stormwater/menuofbmps/index.cfm?action=min_measure&min_measure_id=6.

Long-Term Maintenance of Post-Construction BMPs

At this time, the City's privately owned residential detention basins are all on board with the City's long-term operation and maintenance program. The City of Strongsville is working on bringing industrial and commercial detention basins into the program as well. When completing the inventory of all the stormwater management facilities, it may be helpful for the City to separate those that are publically and privately owned, as well as those that treat water quality from those that do not. As a companion to the inventory of stormwater management structures, the City also has a map illustrating the locations of all the facilities.

Part III.B.5.d of the NPDES permit requires the City to develop a program to ensure long-term maintenance of ***post-construction BMPs***. This program must encompass all public and privately-

owned post-construction water quality practices installed since April 21, 2003. Post-construction water quality practices are BMPs designed to treat the Water Quality Volume (WQv) and *include structures such as bioretention cells, permeable pavements, enhanced water quality swales, sand filters, extended detention ponds, constructed wetlands and proprietary devices (including underground structures).* They can also include non-structural BMPs such as riparian setback areas or conservation easements. An acceptable long-term maintenance program for post-construction BMPs consists of:

1. Ensuring that the SWP3 includes a long-term maintenance plan for all post-construction BMPs. The plan should identify the party responsible to conduct maintenance, the routine and non-routine maintenance activities for each practice with schedule, a blank inspection checklist for each practice, a site map showing the location of the practice(s) and the easements or agreements for access.
2. Periodically inspecting or otherwise verifying that the post-construction BMP is being maintained in a functional condition per the long-term maintenance plan, and
3. Taking enforcement action against the responsible party if they fail to maintain the BMP as required

Information on developing a long-term maintenance program for post-construction BMPs can be found in the Center for Watershed Protection document titled ***Managing Storm Water in Your Community:*** *A Guide for Building an Effective Post-Construction Program* downloadable at http://www.cwp.org/index.php?option=com_docman&task=cat_view&gid=76&Itemid=118. (**Tool 6: Plan Review, BMP Construction, and Maintenance Checklists) This resource includes inspection checklists to ensure the proper construction of post-construction BMPs as well as their long-term maintenance.

As a reminder, Ohio EPA has required a long-term maintenance plan for all post-construction BMPs since April 21, 2003. Although it must be a stand-alone document, it is part and parcel of the Storm Water Pollution Prevention Plan (SWP3) required by the Ohio EPA General Storm Water NPDES Permit for Construction Activities. The goal of the MS4 program is to develop a local review and approval program for the SWP3. *This includes post-construction BMPs and their long-term maintenance plans.* These plans are required to provide a schedule for routine and non-routine maintenance tasks to be undertaken.

Road Maintenance	
Interview Questions	**Response**
Streets regularly swept? Frequency:	**YES** The City of Strongsville has a contract with Reilly Street Sweeping to clean the City's curbed streets 2 to 3 times a year and then problem areas as needed (Spring, Summer, Fall and hourly rate). 900 tons of street sweepings were picked up in 2009. This is tracked through the waste manifests. A map is given to Reilly Sweeping to identify the streets to be swept.
Frequency based on water quality factors (e.g. proximity to streams)?	**NO**

Road Maintenance	
Interview Questions	**Response**
How are spoils disposed of?	Reilly dumps the spoils in a Republic waste services dumpster which is manifested and disposed of at the Lorain County Landfill. The dumpster is located at the Service Center and is uncovered. Please cover the dumpster when not in use to prevent the re-saturation of the spoils and the discharge of leachate.
Does the community collect road kill? What do they do with the carcasses?	**YES** The carcasses are taken directly to the transfer station when collected.
Does the community have a leaf collection program? What do they do with the collected leaves? **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 leafate must be prevented from discharging.	**YES** Residential leaf collection is done in-house. Starting in October, the City will get through the City about 5 times until the end of the season. Trucks drop off at the approved drop off sites; Landmark, JDS, Madden Brothers. There is a site at the Service facility where leaves are temporarily stored when needed. See notes. Yard waste is collected on site as a drop off station at the transfer station. The area is contained with concrete blocks and when the area is full Republic waste will take the yard waste to a state approved composting facility.
BMPs used during road maintenance activities? Describe types of road maintenance conducted by community staff and the BMPs used	**YES** The City conducts cold patch pothole repair, concrete street repair, asphalt street repair, catch basin reconstruction; crack sealing, short line painting is done in-house as well. All excess asphalt is taken back to the Service Center, concrete slurry is not washed into catch basins, and painting occurs when no threat of rain. Crews will follow up with a vactor if slurry does enter a catch basin.
BMP guidance available to field staff?	**YES** Posters are up in the Service Garage. The crews go through classes with the CCBH on PPGH, etc.

Road Maintenance	
Interview Questions	**Response**
Deicers used by MS4?	**YES** The City uses rock salt and at times they do pretreatment with beet juice. Previously the City used liquid calcium. 10,739 tons of salt was used in 2009.
Type and amount of deicer and additives tracked? What measures are being taken to minimize the application of deicers?	**YES** Each operator will track the amount of salt loads they have used in a shift and any liquid that was applied. *Please work on compiling this information into an end of the year summary verses using the City's purchase records for total salt usage. Make sure tracking is done from January to December.* The City only salts hills, curves, intersections, and major arteries as sensible salting practices that have been adopted back in 2008. Spreaders are calibrated at the beginning of the season at minimum. There are three structures where salt is stored, all under roof; (A) - Service center, (B) -82 and 71, (C)- Sprague and Pearl.
Sand/salt swept up after application? How soon?	**YES** Sites with salt storage are maintained as needed. Loaders are able to back up and unload into the storage area when there is excess salt.
Does your community operate a snow stockpile yard to store snow that has been removed from community streets and parking lots? If YES, location of the yards: Has your community considered implementing best management practices to control the discharge of pollutants from snowmelt associated with snow storage yards? If YES, what BMPs have you implemented?	**YES** Snow would be taken to a parking lot at the Senior Center. After the snow melts off the City will go and clean the basins. **YES** The lot is curbed and the catch basins are vactored out and cleaned as needed.

Applicable Documents	Reviewed	Obtained
BMP guidance	YES	NO
Street sweeping records	YES	YES
Deicer application records	YES	YES

Notes
Street Sweeping The City of Strongsville has a contract with Reilly Sweeping to clean the City's curbed streets 2 to 3 times a year. Reilly dumps the spoils in a Republic Waste services dumpster which is manifested and disposed of at the Lorain County Landfill. The dumpster is located at the Service Center and is uncovered. *Please cover the dumpster when not in use to protect the spoils from run-on and to prevent the discharge of leachate to the catch basin adjacent to the dumpster.* **Yard Waste Drop off Area** The City runs a yard waste drop off site located at the transfer station. The area is contained with concrete blocks and when the area is full Republic waste will take the yard waste to a state approved composting facility. Unfortunately, the containment that has been provided to the yard waste pile is not sufficient and still allows for the illegal discharge of leachate. The City must develop a system to keep rain water from contacting the pile or collecting the leachate from the pile and disposing of the leachate in the proper manner. One solution mentioned during the inspection was to provide a "cover-all" hoop structure over the yard waste pile, since the concrete blocks are already in place. Please respond in the letter to the EPA how the City plans to address this source of pollution.

Flood Management	
Interview Questions	**Response**
Inventory of flood management structures completed?	YES The City has an inventory of all residential retention and detention basins. *This list needs to be expanded to include all commercial and industrial facilities, post-construction BMPs, as well as all public stormwater management facilities.*
Structures been assessed for stormwater retrofit?	YES The detention basin behind the post office on Pearl road is being assessed for water quality retrofit for the Pearl Road Widening project (underground storage).
New structures include water quality considerations?	YES

Applicable Documents	Reviewed	Obtained
Inventory	YES	YES

Notes
Inventory An inventory of *public/privately-owned stormwater management facilities* built since April 21, 2003 is part of the new mapping requirements of NPDES permit #OHQ000002. This inventory must be completed by the end of your next permit term, i.e., June 2014. **Stormwater Retrofits** The City's public stormwater management facilities should be looked at for possible retrofit opportunities so that they treat the Water Quality Volume (WQv). The current MS4 permit (OHQ000002) does not require the City to implement retrofit projects, but they are an important

Notes
piece of the storm water management puzzle for older, developed parts of the community. Current post-construction requirements only affect areas where new development or redevelopment disturbs 1 or more acre of land. This program will not create BMPs in previously-developed areas unless they are being redeveloped and the 1-acre threshold is met. As such, US EPA is evaluating whether retrofits should be required in future generations of the MS4 permit. It is important to look for retrofit opportunities by making a list of potential water quality enhancement projects and focusing on the implementation of green infrastructure. Typically, retrofitting the outlet structures of existing detention and retention basins to provide extended detention of the WQv is the easiest and most feasible type of retrofit project. However, **preferred retrofit projects include installing bioretention cells in existing parking lots or along residential streets, resurfacing with permeable pavement and establishing incentive programs for rain gardens, rain barrels and other forms of downspout disconnection in residential neighborhoods.**

Facilities Operation & Maintenance		
Interview Questions	**Response**	
Inventory of MS4 facilities complete (i.e. facilities owned and operated by the MS4)?	YES – will be provided	
Types of facilities included *These need their own NPDES storm water permit for industrial activities, if there is a discharge of runoff from these operations:*	**Response**	**SWP3 Developed?**
• Landfills: not active (20 yr post-closure 2012)	**NO**	N/A since do not operate
• Airports	**NO**	N/A since do not operate
• Shipping Ports or Marinas	**NO**	N/A since do not operate
• Steam Electric Power Plants	**NO**	N/A since do not operate
• Wastewater Treatment Plants ≥ 1 MGD or with a pretreatment program **Strongsville "B" WWTP** **14600 Mill Hollow Lane** **Strongsville, OH 44136** **Strongsville "C" WWTP** **17449 Sprague Road** **Strongsville, OH 44149**	**YES**	**NO**
These do not need their own permit, but do have to develop an SWP3 unless noted as N/A:		
• Impound Lots	**NO**	N/A since do not operate
• Leaf Collection Yards ✓ No discharge of leafate permitted	**YES**	Service Center

Facilities Operation & Maintenance		
Interview Questions	**Response**	
	Response	**SWP3 Developed?**
• Maintenance Yards ➢ How many do they operate? 1 ➢ List facility names/locations: **Strongsville Service Center** **16099 Foltz Parkway** **Strongsville, OH 44149**	**YES**	**NO** – In progress
• Composting Operations ✓ No discharge of leachate permitted	**NO**	N/A since do not operate
• Solid Waste Transfer Stations or Operations ✓ 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.	**YES**	Included in Service Center
• Parks & Cemeteries ➢ How many in UA? o 1 Cemetery and 5 Parks ➢ List facility names/locations:	**YES**	**N/A**
• Parking Lots ➢ How many do they operate? 13 ➢ List facility name/locations:	**YES**	**N/A**
• Bus Terminals	**NO**	N/A since do not operate
• Vehicle Maintenance Garages ➢ How many do they operate? ➢ List facility name/locations: **Strongsville Service Center** **16099 Foltz Parkway** **Strongsville, OH 44149**	**YES**	**NO** - In progress
Facilities inspected? Frequency:	**NO** At this time, the City conducts informal inspections. There is no formal inspection for *stormwater*. These inspections will be included in the SWP3 for the facility, indicating when the inspections and site evaluations will occur, who is to perform them, and how they will be documented.	

Facilities Operation & Maintenance	
Interview Questions	**Response**
Checklist used?	**NO** Checklists should be developed to guide inspections and site evaluations of all facilities with potential for storm water pollutant runoff. This will help assure that each facility is inspected thoroughly and that there is consistency between inspectors
Staff which perform the inspections (department or agency:	Joe Walker and Ray Jarrett
Is there a designated stormwater contact person for each facility?	**YES** - Joe Walker
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?	All crews are under a Union Contract. The City must follow disciplinary procedures in the contract. First offense is a verbal warning, then a written notice and finally termination. These procedures are applicable to stormwater related issues.
Parking lots owned/operated by the permitee swept? Frequency?	**YES** Hard surface parking lots are swept twice a year under the contract with Reilly Sweeping.
Do you have any combined sewer systems? If yes, do you have any combined sewer overflows? ➢ How many? ➢ Do you track frequency and volume? Are you aware of any illicit cross connections between your sanitary sewer and MS4? If so, what is your plan to eliminate this illicit discharge?	**NO** **NO** **NO** Any illicit cross connections are handled immediately by the Service Department. Harper road cross-connection example was provided at the interview.
Have you investigated the extent of infiltration and inflow into storm sewer system? What methods have been used to conduct this investigation? What are your plans to repair and eliminate this source of illicit discharge?	**NO** Cleaning of the City's MS4 is done once every 2 years and any problems that are revealed are repaired along the way. There is no comprehensive program to determine the extent of inflow and infiltration (I/I) to the MS4 and to eliminate those sources that would

Facilities Operation & Maintenance			
Interview Questions	**Response**		
	be considered illicit discharges. Please be sure that you are not overlooking a possible source of illicit discharge to the MS4. Your IDDE program should include a proactive I/I program.		
Sewer spill and cleanup procedures in place?	**YES** There is a plan in place for spills which is implemented between the Fire Department and Sewer Department.		
Applicable Documents		**Reviewed**	**Obtained**
Facility inventory		**NO**	**NO**
Facility SWPPP		**NO**	**NO**

Notes

Strongsville "B" and "C" WWTP

At this time the City has coverage under the Ohio EPA NPDES Permit #3PB00047*ED Parts I, II, and III for "B" plant and #3PB00048*FD Parts I, II, and III for "C" Plant. Both permits do not have the language required for storm water related to industrial activity, i.e., Parts IV, V, and VI as a part of their NPDES Permits. The City has two options, the first of which is to add storm water language to the existing permits, i.e., Parts IV, V, and VI, requiring the City to seek a permit modification and submit Form 2F. If the City opts to go this route, please contact Erm Gomes of our office at (330) 963-1196. The second is to submit Notices of Intent (NOIs), one for each WWTP, for coverage under the Ohio EPA General Storm Water NPDES Permit for Industrial Activities #OHR000004.

Regardless of the option chosen, a Storm Water Pollution Prevention Plan (SWP3) will need to be developed and implemented for this facility within 180 days of submitting the permit modification or NOI.

Facilities that discharge storm water associated with industrial activity may qualify for an exemption from the storm water permitting if they can certify a condition of "No Exposure". However, my inspection revealed that there were many points of exposure found at Plants "B" and "C" that the City must first eliminate before a condition of no exposure can be achieved. Although a condition of no exposure was discussed during the inspections, it is reasonably difficult for municipalities to receive a No Exposure Certification for their WWTPs. *It is my recommendation that the City first add the storm water language Parts IV, V, and VI to their NPDES Permits and develop SWP3s for both plants, and then work towards a condition of no exposure.* Once a condition of no exposure is achieved, the City can then submit a No Exposure Certification and eliminate Parts IV, V and VI from the NPDES permit for its WWTPs. Please review the *Field Inspection Worksheets* for Plants "B" and "C" for more information.

Storm Water Pollution Prevention Plans (SWP3s)

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

Strongsville Service Center
16099 Foltz Parkway
Strongsville, OH 44149

Notes
The Ohio EPA General Storm Water NPDES Permit for Small MS4s #OHQ000002 requires the City of Strongsville to develop and begin implementing the SWP3 for the above facility within 2 years of permit renewal, i.e., **by June 2011**. The above facility must be inspected at a frequency specified in the SWP3. Ohio EPA recommends that facility be inspected monthly. A comprehensive site evaluation must be conducted at least once per year and a record of that inspection and its findings must be kept with the SWP3. If this annual inspection reveals deficiencies in the SWP3 or BMPs that are ineffective, the SWP3 must be revised to correct the problems. The SWP3 should contain a checklist to provide consistency to facility inspections. The SWP3 should also identify who is responsible for facility inspections as well as a storm water contact person for the facility. Please reference Ohio EPA General Storm Water NPDES Permit for Industrial Activities #OHR000004 ***Part IV. D.2.a.i*** for more information on the development of a *site map* for the SWP3s. Also refer to the following website for information on developing a SWP3 for this facility: Developing your SWP3: http://www.epa.gov/npdes/pubs/industrial_swppp_guide.pdf *Because the waste transfer station and leaf collection yard are a part of the service complex, these facilities will be included in the SWP3 for the Strongsville Service Center. Also, the City should include all 3 salt storage buildings in this SWP3, and create a site map for each location indicating the BMPs to be implemented.* BMPs must be provided to minimize or eliminate the discharge of storm water pollutants to the MS4 and waters of the State. Storm water inspections for the Service Complex should include inspection of these facilities/ locations and their operations. In the case of the leaf collection area, as stated above for the section on yard waste, the City needs to either develop a system to keep rain water from contacting the pile or collecting the leachate from the pile and disposing of the leachate in the proper manner. One solution mentioned during the inspection was to provide a "cover-all" hoop structure over the yard waste pile, since the concrete blocks are already in place.

Pesticides, Herbicides & Fertilizers	
Interview Questions	**Response**
Certified applicators used?	**YES** The City has four certified applicators and all fertilization, herbicide and pesticide application is done in house. The City uses Lesco and Turf Grass as well as other more natural fertilizers such as leaf humus.
Integrated Pest Management (IPM) practices used?	**NO**
Storage location of pesticides, herbicides, and fertilizers:	Stored at the Service Center in two different buildings on pallets.
BMPs used during application:	The City of Strongsville practices plant health care. Inspections are done prior to usage of any pesticides to ensure the usage is required. In the records the City indicates weather and wind conditions as well.

Fertilizer/pesticide application plan utilized?	**YES** Plant Health Care Program reviewed during the interview. Plan is an interactive dry-erase board that indicates location, date, and what is being applied. All application records are kept in a binder at the facility for reference and inspections.

Applicable Documents	Reviewed	Obtained
Fertilizer/pesticide application plan	YES	NO

Notes

Certified Applicator Requirements

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

Pesticide, Herbicide and Fertilizer Storage Requirements

Pesticides cannot be stored above or against medicines, foods, feeds or toys. They cannot be stored in a room where a spill would result in a release to the environment (such as a room with a floor drain connected to the storm sewer...if you run across this, the floor drain should be capped or the pesticide should be in secondary containment). Containers must be labeled to identify the material they contain. Products with a skull and cross bones on the label cannot be stored in an area that can be accessed by children. The Department of Agriculture recommends these products be stored in a locked cabinet. Pesticides must be stored in a room (or cabinet) that is capable of being locked when not attended. The Dept of Agriculture also recommends that a spill kit and fire extinguisher be kept nearby and that personal protective equipment is available for use if necessary.

BMPs for Pesticide, Herbicide and Fertilizer Application

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

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

Notes
The application records should keep track of the name of the substance being applied and the type of chemical, amount used and time the material is being applied as well as who the applicator was. If a contractor is being used as well, the City needs to include language into the contract that requires the contractor to consider pollution controls where the activities undertaken are a potential source of storm water pollution.

Standards, BMPs, & Outreach	
Interview Questions	**Response**
BMP technical guidance document available to maintenance staff?	**YES** Posters are hanging in the garage and training is provided through the CCBH.
MS4 use contractual staff to complete MS4 maintenance activities?	**YES** The City contracts out solid waste collection and disposal, street sweeping, some sewer maintenance and repair, WWTP operation, long line street painting, some vehicle maintenance.
BMP guidance materials provided to contracted staff?	**NO** Only with large construction projects does the City conduct a full SWP3 review etc.
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):	Pet waste: No pet waste signs in the parks and common areas in the subdivisions. There is a section in the website indicating to clean up after pets. Litter reduction: Recycle news letter has information on littering. Stream clean-ups with the boy scouts and people from key bank help clean up.

Applicable Documents	Reviewed	Obtained
BMP manual or guidance document	YES	NO
Contract language for MS4 operation and maintenance activities	NO	NO

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. An example poster developed by the Lake County (OH) Stormwater Management Department was given to Joe Walker at the time of the interview. This will help reinforce employee training. Once it is prepared, the City will need to train staff on the SWP3 for the Strongsville Service Center and should look to adopt standards and specifications for storm water pollution prevention

Notes
implementation in all its municipal operations with the potential to release pollutants in storm water runoff (e.g., prohibiting the Fire Department from washing vehicles outside and salt storage areas). Existing guidance manuals you may find useful to meet this goal include the ***Rainwater and Land Development*** manual (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** The City contracts out solid waste collection and disposal, street sweeping, some sewer maintenance and repair, WWTP operation, long line street painting, and some vehicle maintenance. Please be sure to include language requiring pollution controls in all contracts and requests for proposal (RFPs) where the activities are a potential source of storm water pollution. The operations of third party service providers should be reviewed periodically by the City to ensure that the required pollution controls are being implemented. **Public Education and Outreach** Please be aware that the performance standards established in NPDES permit #OHQ000002, i.e., the permit in effect for the next 5-year term, requires the City to use more than 1 mechanism and target at least 5 different storm water themes or messages over the permit term. In addition, you must provide at least 5 public involvement opportunities over the permit term. Certain activities, such as stream clean-ups or storm drain stenciling projects with local boy scout troops, can count toward both requirements because they involve the public as well as educate them on storm water pollution issues.

Staff Education and Training	
Interview Questions	**Response**
Staff trained to identify potential storm water pollution sources which would result in an illicit discharge? Frequency:	YES The City of Strongsville conducts 2 to 4 seminars and training sessions a year. Sessions are usually held by the CCBH and ODA. Department heads will also go to trainings once or twice a year for stormwater.
Materials used to train staff:	OEPA stormwater conference Lakeland training CCBH train

Applicable Documents	Reviewed	Obtained
Training materials	YES	YES

Notes
MS4 Staff Training The first generation of the MS4 permit required the City to develop an employee training program to prevent and reduce storm water pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances and storm water system maintenance. *Please note that NPDES permit #OHQ000002 requires the City to conduct at least one employee training event on these topics per year.* If key management staff attends a storm water education

Notes
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. US EPA has 2 to 3 webcasts per minimum control measure that can be viewed at any time over the internet at www.epa.gov/npdes/training. The Center for Watershed Protection also has information available for training in their Manual #9: Municipal Pollution Prevention/Good Housekeeping Practices. The Lake County (OH) Stormwater Management Department has developed a series of Toolbox Talks that can be used during staff meetings to train maintenance staff on a single storm water pollution prevention topic at a time. This tool is intended to provide training by eliciting discussion amongst the staff and can be completed in less than 15 minutes per topic. Please contact Tim Miller, Director of the LCSMD at (440) 350-5900 for further information.

FIELD INSPECTION WORKSHEET

MS4 SWMP Evaluation

MS4 Maintenance Facility Field Inspection Worksheet

Permittee: City of Strongsville Service Center	
Address of facility: 16099 Foltz Parkway, Strongsville 44149	**Size of facility:**
Date of visit: 7/27/2010	**Time of visit:** 1:20 p.m.

Provide the name(s) and title(s) of permittee staff present during inspection	
Name	**Title**
Joe Walker	***Service Director***
Ray Jarrett	***Sewer Crew Leader***
Ken Mikula	***City Engineer***
Lori Daley	***Design Engineer***

Evaluator Observations:	
SWPPP or stormwater plan	
Has the maintenance facility developed a SWPPP or stormwater plan?	**NO.** The City is required to develop a SWP3 for this facility similar to that of an Industrial SWP3. See Interview sheet for more information on this matter.
Does the plan include a site map, list of pollutant sources, BMPs, and maintenance procedures?	These are key components of the SWP3 and must be included in the document when it is produced.
Does the permittee conduct and document periodic inspections of the facility?	**NO.** The facility must be inspected for the implementation of storm water best management practices (BMPs) at a frequency specified in the SWP3. Ohio EPA recommends that the facility be inspected once per month. In addition, you must conduct a Comprehensive Site Evaluation annually.
Are storm drains labeled and free of debris?	Storm drains are labeled but not all clear of debris. During the inspection a white paint was noticed going into 2 catch basins on the north side of the Garage. See Notes.
Vehicle maintenance, fueling and washing	
Are vehicle maintenance activities conducted in a designated place not exposed to stormwater?	YES. All vehicle maintenance occurs inside the garage where the floor drains are connected to the sanitary sewer. Oil Dri and spill kits are available in mechanics' areas to protect sanitary drains from spills.
Are fueling stations properly designed with spill kits nearby?	YES. There is spill kit located next to the fueling station. There hoses are break away and the emergency shut off button is clearly labeled. ***Please make sure police are also trained on the location and use of the spill kit and emergency shut off button.***
Are vehicles washed on-site? Is wash water discharged to the MS4 or sanitary sewer?	YES. There is a wash bay inside the garage and outdoors where the floor drains are connected to the sanitary sewer. The wash bay outside does not appear to be in use at this time, but when the bay is used please be sure to keep all wash water contained and diverted to the sanitary sewer.

Material storage	
Are all materials that are potential stormwater contaminants stored under cover or in secondary containment?	Salt storage building A, located at the Service Center, has salt residue outside of the storage area and leaking into the adjacent catch basin. See Notes. The street sweepings dumpster needs a **cover** to prevent the discharge of leachate to the City's MS4. See Notes. The stockpiles of clean dirt, 304s, and asphalt grindings are surrounded by a silt fence border protecting the drainage ditch/stream along the east side of the yard. The silt fence at the drainage point of the yard needs to be **re-installed properly**. See Notes The area designated for Home Depot supplies needs to be cleaned up and the damaged bags need to be used, taken to a different location under cover, or disposed of properly. Vehicles stored outside on the service yard show signs of leaking, e.g., stains on the dirt where vehicles are parked. The City should implement an inspection process for vehicles before sending them out on City roads. The asphalt truck parked outside the service garage needs containment to prevent the truck from leaking on the pavement and discharging pollutants to the nearby catch basin.
Hazardous waste management	
Are all hazardous materials properly labeled and stored to prevent exposure to stormwater runoff?	The used oil tank connections are labeled "Used Oil" and the tank is located in an underground container. The outdoor inlets to the used oil tank are not contained. There was also a used oil drum found outside at the back of the yard. This drum needs to be transported into the garage, placed in secondary containment, and properly labeled "Used Oil."
Waste management	
Are waste bins covered with waste properly disposed in containers?	All dumpsters on site need to be *lidded*, *plugged*, and *inspected* for leaks on a regular basis. This inspection process should be included in the sites SWP3 so the dumpsters do not leak solid waste leachate on the yard and become a storm water pollutant source.

How is landscape waste stored?	There is a drop off site for landscape waste at the transfer station. The concrete blocks that contain the area are not sufficient and still allow for the illegal discharge of leachate to the adjacent catch basin. See Notes.
Spill response	
Does the facility have a spill response plan, and are spill kits readily available?	***A spill response plan is a required component of the SWP3.*** The City has spill kits located in various locations throughout the Service Garage. A spill kit should be available at the fueling area and include more than just Oil-Dri, e.g., mats or booms that can block flow to storm drains.
Employee training	
What type of stormwater training do maintenance staffs receive?	Training on storm water pollution prevention is required for the staff at this facility.

Notes or additional information:

Catch basins

There is evidence of some sort of white paint being rinsed into the 2 catch basins at the north side of the garage. The City needs to investigate into the source of this illicit discharge and properly train employees on the effects of discharging pollutants such as paint into the City's MS4. The basins need to be cleaned out and the waste water disposed of properly.

Salt Storage Areas

Salt storage building A is very full and there is a lot of residue in front of the storage building and into the adjacent catch basin. The City needs to tarp the excess salt or **move the excess** to the salt storage building-C near 82 and 71, where the material can be properly stored without overloading the storage buildings.

Street Sweepings Disposal

The City of Strongsville has a contract with Reilly Sweeping to clean the City's curbed streets 2 to 3 times a year. Reilly dumps the spoils in a Republic Waste services dumpster which is manifested and disposed of at the Lorain County Landfill. The dumpster is located at the Service Center and is uncovered, which allows for the illegal discharge of leachate into the adjacent catch basin. *Please **cover** the dumpster when not in use to protect the spoils from run-on and to prevent the discharge of leachate.*

Drainage for Service Yard

There is a silt fence border surrounding the east side and north edge of the service yard to protect the drainage ditch/ stream from sediment laden pollutants. The silt fence protecting the actual point of drainage needs to be reinstalled according to design specifications and more controls should be implemented to prevent the sediment from discharging off site. The City should be implementing sediment, erosion and runoff controls to prevent the formation of a gully at the service yard. The City must take all steps necessary to prevent the formation of erosion gullies. Steps may include re-grading, installation of additional drainage structures, rip-rap, rock check dams and permanent stabilization.
More information on properly installing silt fence can be found at http://www.cuyahogaswcd.org/PDFs/TechNote-Silt%20Fence.pdf.

Transfer Station

The catch basin outside the transfer station is accepting some highly polluted runoff. The City needs to evaluate whether this drain leads to the Sanitary or Storm Sewer. If the catch basin is connected to the storm sewer the City will need to reevaluate the BMPs being implemented on this site and execute BMPs to prevent the discharge of such putrid water into the City's MS4. It may be necessary for the City to just connect this basin to the Sanitary Sewer to fully eliminate the problem.

The scrap metal dumpster is exposed to storm water, which allows for the discharge of polluted runoff. The City stated during the inspection that it would be easier for them to use an open ended box from this point on for the disposal of scrap metal.

Yard Waste Drop Off Site

The City runs a yard waste drop off site located at the transfer station. The area is contained with concrete blocks and when the area is full Republic waste will take the yard waste to a state approved composting facility. Unfortunately, the containment that has been provided to the yard waste pile is not sufficient and still allows for the illegal discharge of leachate. The City must develop a system to keep rain water from contacting the pile or collecting the leachate from the pile and disposing of the leachate in the proper manner. One solution mentioned during the inspection was to provide a "cover-all" hoop structure over the yard waste pile, since the concrete blocks are already in place.

Storm Water Pollution Prevention Plan (SWP3)

The City of Strongsville is required to develop a SWP3 for this facility. The SWP3 for the Service Center should also include the locations of all 3 salt storage buildings (A, B, and C), the waste transfer station, and the leaf collection yard. In developing this SWP3, the City must evaluate where all water is draining to throughout the facility. The City should include all catch basins and their outfalls on the site map that is required to be developed. Potential pollution sources need to be identified e.g. salt storage, gas and diesel fueling tank, yard waste collection area, material stockpiles, catch basins, dumpsters, etc. and the City needs to state the BMPs they plan to enforce to ensure that water pollution does not occur. For more information of this matter please refer to the *Municipal Storm Water Program Evaluation Worksheet.*

INSPECTION PHOTOS
Service Center
City of Strongsville
Photos Taken: July 27, 2010

Fig 1: As a good housekeeping practice, sweep up all oil dri and dispose of it properly once it has done its job.

Fig 2: All empty drums that are to be stored outside need to be capped at all times.

Fig 3: The asphalt truck parks at this location and leaks asphalt onto the pavement. The City needs to provide containment for the piece of equipment if they plan to continue to use this location as a parking spot for the asphalt truck.

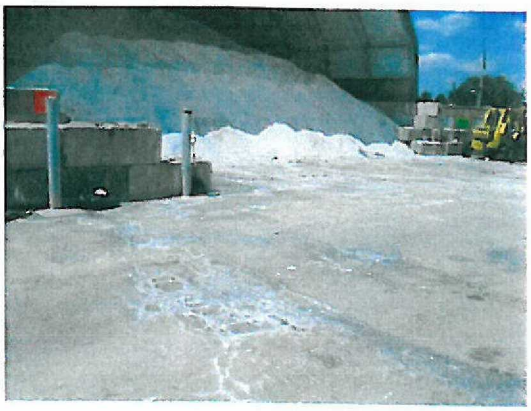

Fig 4: The empty barrels should be lidded and capped or flipped upside down to prevent the ponding of water. Any barrels used for the disposal of solid waste need to be **covered.**

Fig 5: The City needs to implement the proper BMPs to prevent the salt residue from entering the storm sewer. Some of the excess salt may be moved to storage building C.

Fig 6 & 7: The white residue is evidence of a crew member rinsing out a piece of equipment that handles some sort of white paint. There is also evidence of other leaks draining to the basin. See Notes.

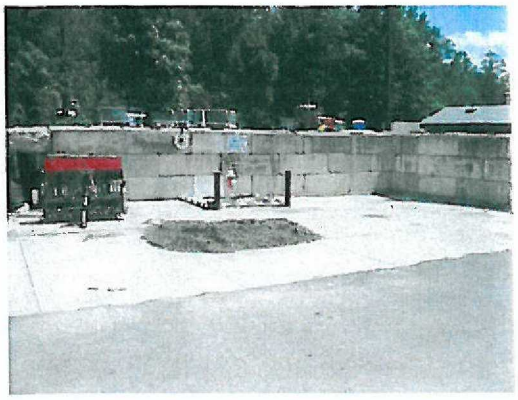

Fig 8: The City has halted the washing of mowers in the wash bay outside the garage. Mowers are now to be rinsed off in the decanting pit.

Fig 9: There is evidence of the same rinsing of white paint in the outside wash bay area. This polluter needs to be identified and eliminated.

Fig 10: Vehicles stored outside in the service yard are showing signs of leaking and need to be inspected for leaks. The stains in the dirt should be cleaned up before they are washed away with the storm water.

Fig 11: Cover the street sweepings dumpster to prevent the discharge of leachate.

Fig 12: Cover the pile of cold patch material.

Fig 13: The materials from Home Depot need to be organized, stored properly, used, or disposed of properly.

Fig 14: The drainage point for the back part of the service yard where the material stockpiles are located. The silt fence needs to be reinstalled as per the specifications.

Fig 15: The area should be reseeded to create a natural filter and instead of a second row of silt fence the City should consider installing a rock check dam to slow the flow of runoff.

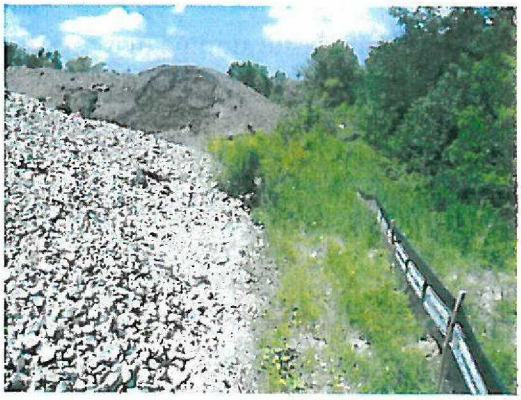

Fig 16: Silt fence and a grassy strip surround the material stockpiles on the Service yard.

Fig 17: Stockpiles of finer materials such as the one illustrated above should be tarped to prevent the discharge of sediment laden runoff.

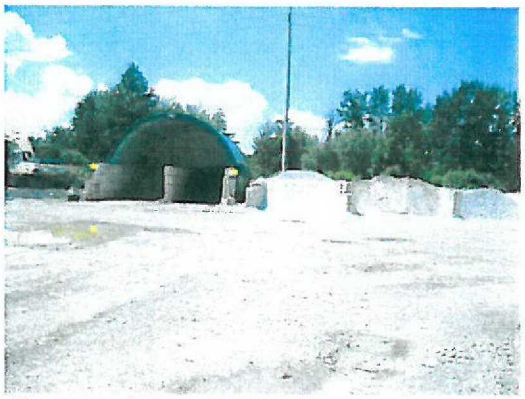

Fig 18: The City is in the process of providing "cover-alls" for all the material bins.

Fig 19: This drum of used oil needs to be taken into the garage under cover, placed in secondary containment and labeled "Used Oil."

Fig 20 & 21: The catch basin at the front of the transfer station is excepting a putrid runoff from the transfer station. The City needs to determine whether this drain is connected to the Sanitary or Storm Sewer and continue accordingly.

Fig 22: The yard waste storage area needs to be contained using a "cover-all" hoop structure or the City needs to contain the leachate that runs off as storm water leaches through the waste.

FIELD INSPECTION WORKSHEET

MS4 SWMP Evaluation

MS4 Maintenance Facility Field Inspection Worksheet

Permittee: City of Strongsville WWTP "B"	
Address of facility: 14600 Mill Hollow Lane, Strongsville 44136	**Size of facility:**
Date of visit: 7/27/2010	**Time of visit:** 3:00 p.m.

Provide the name(s) and title(s) of permittee staff present during inspection	
Name	**Title**
Joe Walker	***Service Director***
Ray Jarrett	***Sewer Crew Leader***

Evaluator Observations:	
SWPPP or stormwater plan	
Has the maintenance facility developed a SWPPP or stormwater plan?	NO. There is no SWP3 for this facility. The City will need to develop a SWP3 within 180 days of submitting the permit modification or NOI. See Notes.
Does the plan include a site map, list of pollutant sources, BMPs, and maintenance procedures?	These are key components of the SWP3 and must be included in the document when it is produced.
Does the permittee conduct and document periodic inspections of the facility?	NO. There are no inspections for storm water at this time. Periodic inspections are a part of the SWP3 the City is required to develop.
Are storm drains labeled and free of debris?	YES. Replaced storm grates are labeled "Do Not Dump, Drains To Waterway." All basins are free of debris.
Vehicle maintenance, fueling and washing	
Are vehicle maintenance activities conducted in a designated place not exposed to stormwater?	There is no service garage located at this facility. Any maintenance is taken to the City Service Center or to an outside business.
Are fueling stations properly designed with spill kits nearby?	N/A. There is no fueling station at this facility.
Are vehicles washed on-site? Is wash water discharged to the MS4 or sanitary sewer?	Vehicle are not washed onsite. Any vehicle washing is taken to the City Service Center or to an outside business.
Material storage	
Are all materials that are potential stormwater contaminants stored under cover or in secondary containment?	No materials are stored outside that would be a threat to storm water. All dumpsters are inside the buildings and scrap is taken directly to the Service Center.
Hazardous waste management	
Are all hazardous materials properly labeled and stored to prevent exposure to stormwater runoff?	The connection points for the ferrous chloride are points of exposure for this plant. See Notes.
Waste management	
Are waste bins covered with waste properly disposed in containers?	Any dumpsters on site are stored *indoors*, but if one were to be relocated outdoors all dumpsters need to be *lidded*, *plugged*, and *inspected* for leaks on a regular basis. This inspection process should be included in the sites SWP3 so the dumpsters do not leak solid waste

	leachate on the yard and become a storm water pollutant source.
How is landscape waste stored?	Landscape waste is not stored at this location.
Spill response	
Does the facility have a spill response plan, and are spill kits readily available?	***A spill response plan is a required component of the SWP3.*** Spill kits should be present in locations where a spill may occur.
Employee training	
What type of stormwater training do maintenance staffs receive?	Training on storm water pollution prevention is required for the staff at this facility.

Notes or additional information:

Strongsville "B" WWTP

At this time the City has coverage under the Ohio EPA NPDES Permit #3PB00047*ED Parts I, II, and III for "B" Plant. The permit does not have the language required for storm water related to industrial activity, i.e., Parts IV, V, and VI as a part of the NPDES Permit. The City has two options, first, to add storm water language to your existing permit, i.e., Parts IV, V, and VI, requiring the City to seek a permit modification and submit Form 2F. If you opt to go this route, please contact Erm Gomes of our office at (330) 963-1196. The second is to submit a Notice of Intent (NOI) for coverage under the Ohio EPA General Storm Water NPDES Permit for Industrial Activities #OHR000004.

Regardless of the option chosen, a **Storm Water Pollution Prevention Plan (SWP3)** will need to be developed and implemented for this facility within 180 days of submitting the permit modification or NOI.

Facilities that discharge storm water associated with industrial activity may qualify for an exemption from the storm water permitting if they can certify a condition of "No Exposure". However, my inspection revealed that there was one point of exposure at Plant "B" that the City must first eliminate before a condition of no exposure can be achieved. This point of exposure is the ***ferric chloride connection points*** from the tanks for loading and unloading the chemical. As discussed during the inspection, the Plant needs to create some type of containment for the connection points. This could include making sure the connection point on the tank is re-piped so that, if there was a spill at this connection, it would be contained within the tanks concrete secondary containment. Also, the connection point at the truck will need containment e.g. a concrete containment area that the truck can back into, etc.

Although a condition of no exposure was discussed during the inspections, it is reasonably difficult for municipalities to receive a No Exposure Certification for their WWTPs. ***It is my recommendation that the City first add the storm water language Parts IV, V, and VI to their NPDES Permits and develop SWP3s for both plants, and then work towards a condition of no exposure.*** Once a condition of no exposure is achieved, the City can then submit a No Exposure Certification and eliminate Parts IV, V and VI from the NPDES permit for its WWTPs.

INSPECTION PHOTOS
WWTP "B"
City of Strongsville
Photos Taken: July 27, 2010

Fig 1: The ferrous chloride connection points (tank and truck connection points) are considered points of exposure and must be corrected before a condition of no exposure can be achieved.

FIELD INSPECTION WORKSHEET

MS4 SWMP Evaluation

MS4 Maintenance Facility Field Inspection Worksheet

Permittee: City of Strongsville WWTP "C"	
Address of facility: 17449 Sprague Road, Strongsville 44149	**Size of facility:**
Date of visit: 7/27/2010	**Time of visit:** 3:45 p.m.

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

Name	Title
Joe Walker	***Service Director***
Ray Jarrett	***Sewer Crew Leader***

Evaluator Observations:	
SWPPP or stormwater plan	
Has the maintenance facility developed a SWPPP or stormwater plan?	NO. There is no SWP3 for this facility. The City will need to develop a SWP3 within 180 days of submitting the permit modification or NOI. See Notes.
Does the plan include a site map, list of pollutant sources, BMPs, and maintenance procedures?	These are key components of the SWP3 and must be included in the document when it is produced.
Does the permittee conduct and document periodic inspections of the facility?	NO. There are no inspections for storm water at this time. Periodic inspections are a part of the SWP3 the City is required to develop.
Are storm drains labeled and free of debris?	YES. Replaced storm grates are labeled "Do Not Dump, Drains To Waterway." All basins are free of debris.
Vehicle maintenance, fueling and washing	
Are vehicle maintenance activities conducted in a designated place not exposed to stormwater?	There is no service garage located at this facility. Any maintenance is taken to the City Service Center or to an outside business.
Are fueling stations properly designed with spill kits nearby?	N/A. There is no fueling station at this facility.
Are vehicles washed on-site? Is wash water discharged to the MS4 or sanitary sewer?	Vehicle are not washed onsite. Any vehicle washing is taken to the City Service Center or to an outside business.
Material storage	
Are all materials that are potential stormwater contaminants stored under cover or in secondary containment?	All scrap metal needs to be removed from this site and any empty drums should be scrapped out or taken to a different location.
Hazardous waste management	
Are all hazardous materials properly labeled and stored to prevent exposure to stormwater runoff?	The connection points for the ferrous chloride are points of exposure for this plant. Also the outside connection point for activated sludge return is a point of exposure. See Notes.
Waste management	
Are waste bins covered with waste properly disposed in containers?	The dumpster indicated in the photographs below is leaching dumpster juices into the City's MS4. This

	dumpster needs to be ***covered and drain holes plugged*** to prevent this discharge from occurring again. If there is any room for the dumpster indoors, that would be ideal. All dumpsters on site need to be *lidded*, *plugged*, and *inspected* for leaks on a regular basis. This inspection process should be included in the sites SWP3 so the dumpsters do not leak solid waste leachate on the yard and become a storm water pollutant source.
How is landscape waste stored?	Landscape waste is not stored at this location.
Spill response	
Does the facility have a spill response plan, and are spill kits readily available?	***A spill response plan is a required component of the SWP3.*** Spill kits should be present in locations where a spill may occur.
Employee training	
What type of stormwater training do maintenance staffs receive?	Training on storm water pollution prevention is required for the staff at this facility.

Notes or additional information:

Strongsville "C" WWTP

At this time the City has coverage under the Ohio EPA NPDES Permit #3PB00048*FD Parts I, II, and III for "C" Plant. The permit does not have the language required for storm water related to industrial activity, i.e., Parts IV, V, and VI as a part of their NPDES Permit. The City has two options, first, to add storm water language to your existing permit, i.e., Parts IV, V, and VI, requiring the City to seek a permit modification and submit Form 2F. If you opt to go this route, please contact Erm Gomes of our office at (330) 963-1196. The second is to submit a Notice of Intent (NOI) for coverage under the Ohio EPA General Storm Water NPDES Permit for Industrial Activities #OHR000004.

Regardless of the option chosen, a Storm Water Pollution Prevention Plan (SWP3) will need to be developed and implemented for this facility within 180 days of submitting the permit modification or NOI.

Facilities that discharge storm water associated with industrial activity may qualify for an exemption from the storm water permitting if they can certify a condition of "No Exposure". However, my inspection revealed that there were many points of exposure at Plant "C" that the City must first eliminate before a condition of no exposure can be achieved.

- The first point of exposure is the ***ferric chloride connection points*** from the tanks for loading and unloading the chemical. As discussed during the inspection, the Plant needs to create some type of containment for the connection points. This could include making sure the connection point on the tank is re-piped so that, if there was a spill at this connection, it would be contained within the tanks concrete secondary containment. Also, the connection point at the truck will need containment e.g. a concrete containment area that the truck can back into, etc.
- Another point of exposure is the ***dumpster*** leaking dumpster juices to the City's MS4. This dumpster needs to be plugged and lidded to prevent contact with storm water. It may even be necessary for the City to move the dumpster indoors.

- The ***scrap metal and empty drums*** stored outside need to be scraped out and removed from the WWTP. The City should refrain from storing such materials outdoors at the Plant if they plan on achieving a condition of no exposure.
- The outdoor ***connection point for the activated sludge return valve*** must be contained to achieve no exposure. This containment would be similar to that of the connection points for the ferrous chloride.

Although a condition of no exposure was discussed during the inspections, it is reasonably difficult for municipalities to receive a No Exposure Certification for their WWTPs. ***It is my recommendation that the City first add the storm water language Parts IV, V, and VI to their NPDES Permits and develop SWP3s for both plants, and then work towards a condition of no exposure.*** Once a condition of no exposure is achieved, the City can then submit a No Exposure Certification and eliminate Parts IV, V and VI from the NPDES permit for its WWTPs.

INSPECTION PHOTOS
WWTP "C"
City of Strongsville
Photos Taken: July 27, 2010

Fig 1: The ferrous chloride connection points (both the one at the tank and the one at the truck) are a point of exposure for the Plant.

Fig 2: All empty drums need to be removed from the Plant. The City should refrain from storing drums outdoors to achieve a condition of no exposure.

Fig 3: This dumpster needs to be plugged and lidded to prevent the discharge of the dumpster juices into the City's MS4. It may be necessary to move the dumpster indoors.

Fig 4: Scrap metal should be scraped out and the area cleaned out if anything in this location leaked fluids.

Fig 5: The sludge return connection point should be contained.