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

November 16, 2011

RE: MEDINA COUNTY
CITY OF BRUNSWICK
NPDES PERMIT NO. OHQ000002
OHIO EPA PERMIT NO 3GQ10004*BG
MS4 AUDIT - MCM #6

Mayor and Council
4095 Center Rd.
Brunswick, OH 44212

Dear Mayor and Council:

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) 3GQ10004*BG and Ohio Administrative Code 3745-39.

On August 1st and 4th, 2011, Ohio EPA met with representatives of the City of Brunswick 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 implement the storm water pollution prevention plans (SWP3) for the service garage and park garage.** Many best management practices (BMP) and the inspections detailed within the SWP3 have not been implemented. This is a violation of Part III.B.6.c of the NPDES permit and Ohio Revised Code (ORC) 6111.04 and 6111.07. The SWP3s for the service garage and park garage must be implemented with all BMPs executed and inspections performed. See comments in the attached worksheets for suggestions and recommendations.

- **Failure to implement procedures for the proper disposal of waste removed from City streets.** This is a violation of Part III.B.6.d.iii.3 of the NPDES permit and ORC 6111.04 and 6111.07. No BMPs have been implemented to prevent the generation and discharge of leachate. Please be aware that any leachate generated from the spoils must be prevented from discharging into "waters of the State or to the MS4." See comments in the attached worksheets for suggestions and recommendations.

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- **Failure to develop an employee training program on how to reduce the discharge of pollutants from the MS4 for the first permit term.** This is a violation of Part 3.2.6.1.2 of the NPDES permit #OHQ000001 and Ohio Revised Code (ORC) 6111.04 and 6111.07. The first generation of the MS4 permit required the City to develop an employee training program to prevent and reduce storm water pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances and storm water system maintenance. The City stated that training of employees at the park garage is not occurring.

  Please be aware that the NPDES permit #OHQ000002 requires your training program to provide at least one training event per year. 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 maintain appropriate records to document storm water pollution prevention training.** This is a violation of the City's pollution prevention and good housekeeping program. Part III.B.6.e of the NPDES Permit #OHQ000002 requires the City to conduct employee training on storm water program issues at least once annually and maintain appropriate records to document employee training events. Training records were not available at the time of the audit. Appropriate training records must be maintained to document storm water pollution prevention training events.

- **Failure to provide controls for reducing or eliminating the discharge of pollutants from the service garage and park garage.** 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 maintenance and storage yards:

  - Failure to implement the proper BMPs to prevent the discharge of salt residue from the salt storage area at the service garage.
  - Failure to implement the proper BMPs to prevent the discharge of pollutants from the sand stockpile area located at the park garage.
  - Failure to provide a cover for the street sweepings roll-off, which allows for the saturation of the spoils and the illegal discharge of leachate to the City's MS4.
  - 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.

  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:

- The City must revise their SWP3s to better represent the current operations of the service garage and park garage. The SWP3s for these facilities must also include a site map to illustrate the drainage of each facility, the location of all catch basins, floor drains, and ditches and their outfalls. Please review notes in the *Facilities Operation and Maintenance* section of the Municipal Storm Water Program Evaluation worksheet for information on how to improve your program.

- The SWP3s for municipal facilities subject to this program must provide a storm water contact or pollution prevention team for each facility. The SWP3s for the service garage and park garage must be revised to include the current storm water contact or pollution prevention team information.

- The City did not provide a copy of the records documenting 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 Annual Report form that must be submitted to Ohio EPA by April 1st each year. Please submit a copy of the catch basin cleaning records for catch basin cleaning activities that occurring in calendar year 2011.

- The City did not provide a copy of the 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 a copy of the application plan.

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 December 31, 2011.** Please note that this response does not replace the requirement to submit an Annual Report.

Should you have any questions regarding this matter, please contact me at your earliest convenience at (330) 963-1118 or via e-mail at chris.moody@epa.ohio.gov.

Sincerely,

Chris Moody
Environmental Specialist II
Division of Surface Water

CM/cs

Ec: Ryan Cummins, Consulting City Engineer
Patrick McNamara, Service Director
John Piepsny, Director of Parks and Recreation

Cc: Jason Fyffe, Ohio EPA, DSW, CO

Municipal Storm Water Program Evaluation

MS4 Maintenance Component Worksheet

Date of Evaluation
August 4, 2011
Evaluator Name, Title
Chris Moody Environmental Specialist II
MS4 Permittee
Brunswick, City of

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
Pat McNamara Service Director	City of Brunswick	(440) 623-3455 pmcnamara@brunswick.oh.us
Bob Savage Superintendent	City of Brunswick	(330) 558-6804 savage@brunswick.oh.us
Ryan Cummins Consulting Engineer	City of Brunswick Chagrin Valley Engineering, Ltd.	(440) 439-1999 cummins@cvelimited.com
Chris Hartman Consulting Engineer	City of Brunswick Chagrin Valley Engineering, Ltd.	(440) 439-1999 hartman@cvelimited.com

MS4 Mapping	
Interview Questions	Response
Outfalls and receiving waters mapped? Catch basins? Pipes, ditches, other conduits? Public stormwater facilities (BMPs)? Private stormwater facilities (BMPs)?	Yes Yes Yes Yes Yes
How are maps used (i.e. tracking illicit discharges)?	The maps are utilized by the City for the following activities: • Addressing drainage issues; • Answering questions from residents; • Economic development;

MS4 Mapping		
Interview Questions	Response	
	• Customer service on infrastructure questions; • Illicit discharge investigations; and • Spill tracking.	
Applicable Documents	Reviewed	Obtained
Map(s) of MS4 system	Yes	No

Notes
MS4 Mapping The City of Brunswick has a comprehensive map that details the locations of the MS4, manholes, catch basins, clean outs, junction boxes, yard drains, outlet control structures, parcels with septic systems, post-construction storm water management BMPs. **Discharging Home Sewage Treatment Systems** The City of Brunswick has developed a comprehensive map that includes the parcels located within the urbanized are that have septic systems. Part 3.2.3.1.2.1 of NPDES permit 3GQ10004*AG required the City of Brunswick to provide Ohio EPA a list of all on-site sewage disposal systems (i.e. home sewage treatment systems) connected to discharge to the MS4. The City of Brunswick stated that it has been working with the Medina County Health Department to determine which on-site sewage disposal systems discharge to the MS4. The City of Brunswick must provide the Ohio EPA this information. In addition, please be aware that in accordance with Part III.B.3.c of NPDES permit 3GQ10004*BG requires the City of Brunswick to develop, by June 3, 2014, the following items: i. A list of all on-site sewage disposal systems connected to discharge to your MS4 (a.k.a. home sewage treatment systems (HSTSs)) including the addresses; and ii. A storm sewer map showing the location of all HSTSs connected to your MS4. This map shall include details on the type and size of conduits/ditches in your MS4 that receive discharges from HSTSs, as well as the water bodies receiving the discharges from your MS4. **Illicit Discharge Detection** The City of Brunswick is documenting outfall monitoring and has been utilizing the Medina County Health Department to assist in addressing illicit discharge eliminations.

Catch Basin Cleaning	
Interview Question	Response
Schedule established for inspections and cleaning?	No The City of Brunswick has not developed a schedule for inspecting and cleaning catch

	basins. According to the revised SWMP, the City of Brunswick is to clean one hundred percent of the catch basins within the MS4 a minimum of one time over the permit term.
Is cleaning and maintenance of catch basins tracked:	Yes The City of Brunswick stated that records are being maintained, but were not available during the inspection. The City of Brunswick committed to forwarding copies of the catch basin cleaning records to Ohio EPA for review.
How are spoils materials disposed of?	Spoil materials are disposed of within uncovered dumpsters that are removed by Republic Waste.
Are storm drain pipes inspected? Proactive or only in response to blockage event?	Yes In 2004 through 2008 camera lines were utilized to inspect the entire MS4. Currently, inspections of storm drain pipes are only conducted in response to blockages or when sinkholes occur.

Applicable Documents	Reviewed	Obtained
List of active municipal construction projects	No	No
CHECK DATABASE BEFORE INSPECTION: List of municipal projects covered under the Ohio EPA general storm water NPDES permit for construction activities: **3GC03673*AG** - Hathaway/Applewood Drives Storm & SS Replacement **NOTE:** Permit is only required if project disturbs 1 or more acre (5 or more acres for "routine maintenance")		

Notes

NPDES Permit Coverage

During the inspection, the City of Brunswick stated that three active municipal construction projects, which include the following:

- Hadcock Road - Grafton Road intersection;
- Hadcock Road reconstruction project - Phase 2; and
- Highland Avenue storm sewer project.

Ohio EPA records do not indicate that these municipal construction projects have obtained an Ohio EPA general storm water NPDES permit for construction activities. Information must be provided to clarify if the municipal construction projects have disturbed one or more acres of land.

Municipal Construction Project

According to Ohio EPA records, the Hathaway/Applewood Drives Storm & SS Replacement project was issued NPDES permit 3GC03673*AG on January 8, 2008, which an estimated construction schedule of March 31, 2008 to December 31, 2010. A Notice of Termination must be submitted within 45 days of completing all permitted land disturbance activities and satisfying one of the following requirements:

i. Final stabilization (see definition in Part VII) has been achieved on all portions of the site for which the permittee is responsible (including, if applicable, returning agricultural land to its pre-construction agricultural use);
ii. Another operator(s) has assumed control over all areas of the site that have not been finally stabilized;
iii. For residential construction only, temporary stabilization has been completed and the lot, which includes a home, has been transferred to the homeowner. (Note: individual lots without housing which are sold by the developer must undergo final stabilization prior to termination of permit coverage.); or
iv. An exception has been granted under Part III.G.4.

Stormwater Management Facilities Operation and Maintenance	
Interview Questions	Response
Public facilities inspected? Frequency:	Yes Public facilities are only inspected if a water quality orifice has been installed. Currently, one public facility is inspected on an annual frequency.
Private facilities inspected? Frequency:	Yes The City of Brunswick has an effective ordinance, Chapter 1236 – Storm Water Management, that requires property owners to submit an inspection report on an annual frequency.
Checklist used for inspections?	Yes The City of Brunswick stated that an inspection checklist is required as part of the Comprehensive Storm Water Management Plan, Chapter 1236.08(d). Upon review of the ordinance, the

Stormwater Management Facilities Operation and Maintenance	
Interview Questions	Response
	language does not appear to require the use of an inspection checklist.
Have maintenance standards and procedures been established for these facilities?	Yes Maintenance standards and procedures have been established within Chapter 1236.09 of the effective ordinance.
How is maintenance prioritized? Is data evaluated to target maintenance resources?	No Maintenance is not currently prioritized as the City of Brunswick is only inspecting one public facility.

Applicable Documents	Reviewed	Obtained
Inspection checklist	No	No

Road Maintenance	
Interview Questions	Response
Streets regularly swept? Frequency:	Yes All curbed streets are swept approximately three times per year.
Frequency based on water quality factors (e.g. proximity to streams)?	No
How are spoils disposed of?	Please refer to the *Note Section* below.
Does the community collect road kill? What do they do with the carcasses? **NOTE:** MS4s are not obligated to collect road kill, but if they do, can be disposed in dumpsters or taken to a licensed, Class II composting facility. Cannot have pile of carcasses stacked up. This is open dumping.	Unknown The City of Brunswick committed to contacting animal control to determine if road kill carcasses are collected and how disposal occurs.
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	Yes Collected leaves are transported to a commercial facility for processing and beneficial use.

Road Maintenance	
Interview Questions	Response
facility. Communities may temporarily store leaves awaiting transport to a composting facility but leafate must be prevented from discharging.	
BMPs used during road maintenance activities? Describe types of road maintenance conducted by community staff and the BMPs used	Yes The City of Brunswick stated that the typical BMP implemented during road maintenance activities is not to perform activities when precipitation is occurring. In addition, the service garage's storm water pollution prevention plan (SWP3) requires employees to keep cold patch and concrete materials away from storm sewer inlets and ditches and any excess materials must be swept up and disposed of properly.
BMP guidance available to field staff?	Yes Section 5.2 of the service garage SWP3 details the BMPs that are available to field staff.
Deicers used by MS4?	Yes Rock salt is utilized as a deicer on municipal roadways.
Type and amount of deicer and additives tracked? What measures are being taken to minimize the application of deicers?	Yes The City of Brunswick minimizes the application of deicers by: • Calibrating the spinners and augers; and • Utilizing load counts Calibrations occur on an annual frequency.
Sand/salt swept up after application? How soon?	Yes Spilled salt piles are swept up. Salt applications are swept up with the first street sweeping event that occurs in May.
Does your community operate a snow stockpile yard to store snow that has been removed from community streets and parking lots?	No

Road Maintenance	
Interview Questions	Response
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?	N/A
If YES, what BMPs have you implemented?	

Applicable Documents	Reviewed	Obtained
BMP guidance	Yes	Yes
Street sweeping records	Yes	Yes
Deicer application records	Yes	Yes

Notes
Street Sweeping Street sweeping spoils are placed into a twenty yard dumpster at the service garage for dewatering. The dumpster is stored immediately adjacent to a diversion channel that discharges directly into "waters of the State." The discharge of leachate associated with the solid waste (i.e. street sweeping spoils) constitute violations of Ohio Revised Code (ORC) Chapter 6111.04, ORC 6111.07, and Part III.B.6.d.iii of NPDES permit 3GQ10004*BG. The City of Brunswick must implement an alternative dewatering method that will eliminate the unpermitted discharge of leachate to "waters of the State." Ohio EPA recommends relocating the street sweeping dewatering process to an area that discharges to a sanitary sewer system. **Deicer Storage** The City of Brunswick utilizes salt to deice roadways. Salt storage occurs within covered salt storage areas located at the service garage and the park garage. The service garage covered salt storage area is in a state of disrepair. Holes in the roof of the structure allow precipitation to contact and dissolve the salt and results in an illegal discharge to "waters of the State." The City of Brunswick must implement appropriate BMPS (i.e. repairing the existing storage structure, replacing the existing storage structure, etc.) to eliminate the illegal discharge.

Flood Management	
Interview Questions	Response
Inventory of flood management structures completed?	Yes Flood management structures have been mapped.
Structures been assessed for stormwater retrofit?	No

Flood Management	
Interview Questions	Response
New structures include water quality considerations?	Yes New flood management structures will include water quality considerations.

Applicable Documents	Reviewed	Obtained
Inventory	Yes	No

Notes
Storm Water Retrofits The City of Brunswick's public storm water management facilities should be evaluated for possible retrofit opportunities so that they can treat the water quality volume (WQv). While NPDES permit 3GQ10004*BG does not require the implementation of retrofit projects, they are an important piece of the storm water management for older, developed portions of the urbanized area. Current post-construction requirements only affect areas where new development or redevelopment disturbs one or more acres of land. This program will not create BMPs in previously developed areas unless they are redeveloped and the one acre threshold is satisfied. As a result, U.S. EPA is currently evaluating whether retrofits should be required in future generations of the MS4 NPDES permit. It is important to look for retrofit opportunities by developing 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, additional retrofit projects include the installation of 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)? **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:*	Yes	
	Response Developed?	**SWP3**
• Landfills Type:_____	No	N/A since do not operate
• Airports	No	N/A since do not
• Shipping Ports or Marinas		

Facilities Operation & Maintenance	
Interview Questions	**Response**
• Steam Electric Power Plants • Wastewater Treatment Plants ≥ 1 MGD or with a pretreatment program	operate No N/A since do not operate No N/A since do not operate No N/A since do not operate
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	**NOTE:** No permit or SWP3 required if facility has no exposure. However, even if a No Exposure Certification has been submitted for the facility, inspect to verify validity.
• Maintenance Yards ➢ How many do they operate? Two (3) ➢ List facility names/locations:	**Response Developed?** **SWP3** No N/A since do not operate No N/A since do not operate Yes Yes • Service Garage 1238 West 13oth Street Brunswick, OH 44212 • Park Garage 4383 Center Road Brunswick, OH 44212 • Bus Garage 4095 Center Road Brunswick, OH 44212
• Composting Operations ✓ No discharge of leachate permitted • Solid Waste Transfer Stations or Operations ✓ Under landfill permit if community owns the transfer station and the landfill where waste will be taken ✓ If not, then SWP3 is only needed if vehicle maintenance, equipment washing or fueling activities occur at the transfer station, **or** if a portion of the facility is involved with recycling or composting	**Response Developed?** **SWP3** No N/A since do not operate No N/A since do not operate

Facilities Operation & Maintenance	
Interview Questions	Response
• Parks & Cemeteries ➢ How many in UA? _____ ➢ List facility names/locations: • Parking Lots ➢ How many do they operate? _____ ➢ List facility name/locations: • Bus Terminals • Vehicle Maintenance Garages ➢ How many do they operate? Three (3) ➢ List facility name/locations:	Yes N/A The City of Brunswick committed to providing the number of cemeteries and location as this information was not available during the inspection. Yes N/A The City of Brunswick committed to providing the number of cemeteries and location as this information was not available during the inspection. Yes N/A Yes Yes Please refer to the *Service Garage Section* above.
Facilities inspected? **NOTE:** Go through list above where YES is response and write in answers for each activity. Frequency: **NOTE:** Go through list above where YES is response and write in answers for each activity.	Yes The City of Brunswick stated that employees perform two dry-weather inspections and two wet-weather inspections of the facilities annually. In addition, the City Engineer performs an annual compliance evaluation.
Checklist used? **NOTE:** Go through list above where YES is response and write in answers for each activity. Checklist should be part of SWP3.	Unknown The City of Brunswick was unable to locate copies of the inspection reports that have been utilized to document previous

Facilities Operation & Maintenance	
Interview Questions	Response
	inspections. The City of Brunswick committed to providing a copies of the inspection reports, once located.
Staff which perform the inspections (department or agency: **NOTE:** Go through list above where YES is response and write in answers for each activity. Checklist should document name of inspector.	Bob Savage, Superintendent, will perform the inspections that occur at the Service garage. John Piepsny, Director, will perform the inspections that occur at the Park Garage.
Is there a designated stormwater contact person for each facility? **NOTE:** Go through list above where YES is response and write in answers for each activity. Name is SWP3 should match name given. If not, SWP3 must be updated.	Yes According the SWP3s for the Service garage and the park garage, Sam Scaffide and Dave Green are the respective designated storm water contacts.
Describe enforcement procedures used to address noncompliance on a MS4-owner facility, i.e., what disciplinary measures are taken against those that do not implement standard operating procedures?:	The City of Brunswick does not have disciplinary actions specific to storm water noncompliance; however, sections 46.04 and 46.05 of the employee contract details the types of actions/activities that will result in disciplinary action.
Parking lots owned/operated by the permitee swept? Frequency? Do you operate any asphalt parking lots? Do you use any coal tar-based sealants on those asphalt parking lots? **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.	No N/A Yes No, the City of Brunswick utilizes rubber based sealants on asphalt parking lots.
Do you have any combined sewer systems?	No

Facilities Operation & Maintenance	
Interview Questions	Response
If yes, do you have any combined sewer overflows? ➢ How many? _____ ➢ Do you track frequency and volume?	N/A
Are you aware of any illicit cross connections between your sanitary sewer and MS4?	Unknown
If so, what is your plan to eliminate this illicit discharge?	Unknown The sanitary sewer system is managed by the Medina County Sanitary Engineers. The City of Brunswick must provide the necessary information to Ohio EPA needed to answer these questions.
Have you investigated the extent of infiltration and inflow into storm sewer system?	Unknown
What methods have been used to conduct this investigation?	Unknown
What are your plans to repair and eliminate this source of illicit discharge?	Unknown The sanitary sewer system is managed by the Medina County Sanitary Engineers. The City of Brunswick must provide the necessary information to Ohio EPA needed to answer these questions.
Sewer spill and cleanup procedures in place?	Yes Sewer spill and cleanup procedures have been established by the City of Brunswick Fire Department.

Applicable Documents	Reviewed	Obtained
Facility inventory	Yes	No
Facility SWP3	Yes	Yes

Notes
SWP3 Revision The current SWP3s for the service garage and the park garage must be revised to include the

Notes
following information: i. The facility contacts provided for the service garage and park garage are no longer present at each facility. The SWP3 must be revised to include the current contact and operational information for each facility, please refer to item ii. below; ii. The SWP3 does not appear to identify a specific individual or individuals within the facility organization as members of a Storm Water Pollution Prevention Team that are responsible for developing the SWP3 and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's SWP3; iii. The SWP3s for these facilities must also include a site map to illustrate the drainage of each facility, the location of all catch basins, floor drains, and ditches and their outfalls; iv. Section 2.1 of each SWP3 does not provide the location of the solid waste receiving pits and the locations of the outfalls to "waters of the State" or the MS4; v. The service garage SWP3 does not include for each area of the facility that generates storm water discharges associated with industrial activity with a reasonable potential for containing significant amounts of pollutants (i.e. salt storage dome), a prediction of the direction of flow, and an estimate of the types of pollutants which are likely to be present in storm water discharges associated with industrial activity; and vi. The park garage SWP3 does not address the Animal Control Program located at the facility.

Pesticides, Herbicides & Fertilizers	
Interview Questions	**Response**
Certified applicators used?	Yes
Integrated Pest Management (IPM) practices used?	No
Storage location of pesticides, herbicides, and fertilizers:	Pesticides, herbicides, and fertilizers are stored within a locked cabinet that is located inside the park garage.
BMPs used during application:	Two to three days before and after application occurs; flags are placed around the application area. In addition, application is not performed during precipitation events and during high wind weather patterns.
Fertilizer/pesticide application plan utilized?	No

	Fertilizers and pesticides are applied in accordance with the manufacturer's specifications.

Applicable Documents	Reviewed	Obtained
Fertilizer/pesticide application plan	No	No

Notes

BMPs for Pesticide, Herbicide, and Fertilizer Application

Pesticides, herbicides, and fertilizers should not be applied when the forecast calls for rain. The label of most commercial products will provide guidance on when and how much of the materials should be applied. Do not exceed the manufacturer's recommendations. In addition, the applicators must be trained to avoid overspray and to implement dry clean-up methods should spills occur. Under no circumstance should personnel hose spilled materials into storm drains. In addition, storm drains located 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 utilizes this method to revegetate neighborhoods where blighted homes have been razed. This method will reduce the costs to the City of Cleveland to maintain its 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 additional information, please refer to the following website:

http://www.epa.gov/pesticides/factsheets/ipm.htm

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

Please provide a copy of the City of Brunswick's pesticide, herbicide, and fertilizer application plan. In addition, Section 5.3 of the park garage SWP3 details that a soil test is to be performed periodically to determine fertilizer application rates. Please submit a copy of any soil tests performed to determine fertilizer application rates to Ohio EPA. In addition, an Integrated Pest Management Plan (IPMP) has been developed to utilize pesticides as a last resort. Please submit a copy of the IPMP to Ohio EPA.

Standards, BMPs, & Outreach	
Interview Questions	Response

Standards, BMPs, & Outreach	
Interview Questions	Response
BMP technical guidance document available to maintenance staff?	Yes Copies of the service garage and park garage SWP3s are available to maintenance staff.
MS4 use contractual staff to complete MS4 maintenance activities?	Yes
BMP guidance materials provided to contracted staff?	Yes
Requirement to consider stormwater impacts and utilize appropriate BMPs in contracts?	Yes
Materials used to educate the public regarding stormwater impacts on MS4 property (if applicable, i.e. public spaces):	Material utilized to educate the public regarding storm water impacts on MS4 property is provided at the City of Brunswick library, city hall, and recreation center. The City of Brunswick contracts with the Medina County Soil and Water Conservation District for education materials.

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

Notes
Contracted Staff The City of Brunswick utilizes contact staff to complete MS4 maintenance activities. Please ensure that language requiring pollution controls in all contracts and requests for proposal (RFP) where the activities are a potential source of storm water pollution. Contract language must be added to all contracts with such parties, e.g., operators that provide catch basin cleaning, street sweeping, herbicide application, lawn care, road maintenance, and waste collection services. The operations of third party service providers should be reviewed periodically by the City of Brunswick to ensure that the required pollution controls are being implemented.

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 Staff are trained to identify potential storm water pollution sources which would result in an illicit discharge annually.

Staff Education and Training	
Interview Questions	Response
Materials used to train staff:	The materials utilized to train staff are materials provided during Ohio EPA MS4 training workshops.

Applicable Documents	Reviewed	Obtained
Training materials	No	No

Notes

MS4 Staff Training

Part 3.2.6.1.2 of NPDES permit 3GQ10004*AG required the City of Brunswick 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 submit copies of the training records (i.e. employee names, training agenda, date of training, etc.) that document the training that has occurred with employees at the service garage and park garage since April 1, 2003.

The following materials may assist in the City of Brunswick's training program:

i. 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 at the following website:

http://epa.ohio.gov/ocapp/storm_water.aspx

ii. Ohio Department of Transportation'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.

iii. U.S. EPA has two to three webcasts per minimum control measure that can be viewed from the following website:

http://www.epa.gov/npdes/training

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

v. The Lake County (Ohio) Storm Water Management Department has developed a series of Toolbox Talks that can be used during training events to train maintenance staff on a single storm water pollution prevention topic. Please contact Tim Miller, Director of LCSMD at (440) 350-5900 for additional information.

FIELD INSPECTION WORKSHEET

MS4 SWMP Evaluation
MS4 Maintenance Facility Field Inspection Worksheet

Permittee:	City of Brunswick – Service Garage
Address of facility:	1238 West 130th Street
Date of visit:	August 1, 2011

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

Name	Title
Pat McNamara	Service Director
Bob Savage	Superintendent
Ryan Cummins	Consulting Engineer
Chris Hartman	Consulting Engineer

Evaluator Observations:	
SWP3 or stormwater plan	
Has the maintenance facility developed a SWP3 or stormwater plan?	Yes A SWP3 has been developed for the facility. Please refer to the *MS4 Maintenance Component Worksheet* for additional information.
Does the plan include a site map, list of pollutant sources, BMPs, and maintenance procedures?	Yes The SWP3 includes a site map, a list of potential pollutants, BMPs, and maintenance procedures.
Does the permittee conduct and document periodic inspections of the facility?	Unknown The City of Brunswick stated that employees perform two dry-weather inspections and two wet-weather inspections of the facilities annually. In addition, the City Engineer performs an annual compliance evaluation. The City of Brunswick was unable to locate copies of the service garage inspection report that have been utilized to document inspections.
Are storm drains labeled and free of debris?	Yes Storm drains are labeled and free of debris.

Vehicle maintenance, fueling and washing	
Are vehicle maintenance activities conducted in a designated place not exposed to stormwater?	No Leaking vehicles are located outdoors in areas exposed to precipitation events.
Are fueling stations properly designed with spill kits nearby?	Partially A spill kit is located at the fueling station. A spill kit is not located at the used oil recycling area. Spilled oil was documented on the soil of the used oil recycling area that must be remediated.
Are vehicles washed on-site? Is wash water discharged to the MS4 or sanitary sewer?	Yes Vehicles are washed on-site within the service garage. The resulting wastewater is discharged to the sanitary sewer system.
Material storage	
Are all materials that are potential stormwater contaminants stored under cover or in secondary containment?	No A solid waste dumpster is stored immediately adjacent to the receiving pit that discharges directly to "waters of the State." The dumpster was formerly located within the receiving pit. Pollutants that have accumulated within the receiving pit through the former solid waste management practices at the service garage discharge directly to "waters of the State" during precipitation events. In addition, soil stockpiles are located at the service garage. If the soil stockpiles are to remain idle, stabilization must occur to prevent the discharge of sediment to "waters of the State."
Hazardous waste management	
Are all hazardous materials properly labeled and stored to prevent exposure to stormwater runoff?	No Some pails containing fluids did not have their contents identified. All containers must be labeled to identify their contents.
Waste management	
Are waste bins covered with waste properly disposed in containers?	No The solid waste dumpsters and dumpsters were uncovered allowing leachate to be generated and discharged to "waters of the State."

How is landscape waste stored?	Landscape waste is currently stored in a stockpile immediately adjacent to "waters of the State."
Spill response	
Does the facility have a spill response plan, and are spill kits readily available?	Yes A spill prevention, control, and cleanup procedures have been established within Section 3.3 of the SWP3. In addition, spill kits are readily available at the service garage.
Employee training	
What type of stormwater training do maintenance staff receive?	Unknown The City of Brunswick was unable to locate the service garage training records necessary to document that employees are receiving storm water training.

Notes or additional information:

The failure to implement the service garage's SWP3 constitute violations of ORC Chapter 6111.04, ORC Chapter 6111.07 and Part III.B.6.c of NPDES permit 3GQ10004*BG. The following violations and deficiencies were documented:

i. **Vehicle Maintenance**

Section 3.9 of the SWP3 details that equipment must be kept clean so that oil will not wash away when the equipment is exposed to rain, out-of service vehicles awaiting restoration or service are to have drip pans or containers under the vehicles, and spills must be cleaned up promptly. The inspection documented that the leaking vehicles were stored outdoors in an area that drains to "waters of the State" (Figure 1 to 2).

Figure 1

Figure 2

ii. **Receiving Pit**

An uncovered solid waste dumpster is stored immediately adjacent to the receiving pit that discharges directly to "waters of the State." The dumpster was formerly located within the receiving pit (Figure 3). Pollutants that have accumulated within the receiving pit through the former solid waste management practices at the service garage discharge directly to "waters of the State" during precipitation events (Figure 4).

Figure 3

Figure 4

iii. **Street Sweepings**

Section 3.5 of the SWP3 details that street sweeping waste is stored at the back of the site in a designated dumpster before being hauled to the appropriate landfill. Outdoor storage containers are to be inspected regularly for damage or leaks. The uncovered street sweeping dumpster (Figure 5) is stored immediately adjacent to a diversion channel that discharges directly into "waters of the State" (Figure 6). Leachate from the street sweepings will discharge directly into "waters of the State." Appropriate BMPs must be implemented to eliminate the illegal discharge of pollutants to "waters of the State."

Figure 5

Figure 6

iv. **Solid Waste Management**

Section 3.6 of the SWP3 details that scrap metal or other materials kept outdoors are covered by roof or

tarpaulin. The solid waste dumpster was not covered and was allowing precipitation to contact the solid waste (Figure 7). As a result, leachate is generated and will be discharged to "waters of the State." Appropriate BMPs must be implemented to eliminate the illegal discharge of leachate to "waters of the State."

Figure 7

v. **Used Motor Oil Recycling**

Section 3.3 of the SWP3 details that spills will be cleaned up promptly and not allowed to evaporate so that pollutants do not remain on the pavement to be washed to the storm drains with the next rain or remain in the soil to become a possible groundwater pollutant. Spilled used oil was documented on the ground around the used oil disposal containers (Figure 8). The spill oil and contaminated soil must be properly remediated.

Figure 8

vi. **Salt Storage**

Section 3.5 of the SWP3 details that the road salt storage areas are covered and the salt truck loading areas are swept regularly to minimize salt laden runoff. The storage location of the salt occurs within a covered salt storage area that is in a state of disrepair. Holes in the roof of the structure allow precipitation to contact and dissolve the salt and creates and illegal discharge to "waters of the State" (Figure 9). Salt was present throughout the facility in locations exposed to precipitation events that

must be cleaned-up (Figure 10). Appropriate BMPS (i.e. repairing the existing storage structure, replacing the existing storage structure, etc.) must be implemented to eliminate the illegal discharge of pollutants.

Figure 9

Figure 10

vii. **Outdoor Material Storage**

Section 3.5 of the SWP3 details that a roof or covered plastic sheeting with, when possible, a mounded or bermed area will be utilized to prevent run-on of storm water through the material. Numerous material stockpiles are located at the service garage that do not have any BMPs (i.e. placement under a roof, utilizing plastic sheeting, stabilizing soil with seed and mulch, etc.) implemented to prevent or minimize the discharge of pollutants (Figure 11). In addition, a diversion channel has been constructed to divert sediment-laden runoff directly to "waters of the State" (Figure 12). The diversion channel must be eliminated of a sediment settling pond be constructed to treat the runoff prior to discharge.

Figure 11

Figure 12

FIELD INSPECTION WORKSHEET

MS4 SWMP Evaluation
MS4 Maintenance Facility Field Inspection Worksheet

Permittee:	City of Brunswick – Park Garage
Address of facility:	4383 Center Road
Date of visit:	August 4, 2011

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

Name	Title
John Piepsny	Parks and Recreation Director
Ed Kelly	Parks and Recreation Supervisor
Ryan Cummins	Consulting Engineer
Chris Hartman	Consulting Engineer

Evaluator Observations:	
SWP3 or stormwater plan	
Has the maintenance facility developed a SWP3 or stormwater plan?	Yes A SWP3 has been developed for the facility. Please refer to the *MS4 Maintenance Component Worksheet* for additional information.
Does the plan include a site map, list of pollutant sources, BMPs, and maintenance procedures?	Yes The SWP3 includes a site map, a list of potential pollutants, BMPs, and maintenance procedures.
Does the permittee conduct and document periodic inspections of the facility?	No The City of Brunswick stated that employees are not performing the established two dry-weather inspections and two wet-weather inspections of the facilities annually.
Are storm drains labeled and free of debris?	No Storm drains are not free of debris. The exposed sand stockpiles discharge directly into the storm drain. The storm drain is labeled.
Vehicle maintenance, fueling and washing	

Are vehicle maintenance activities conducted in a designated place not exposed to stormwater?	Yes Leaking vehicles and equipment and maintenance activities are performed within the park garage. Floor drains are present within the park garage, which are connected to the sanitary sewer system.
Are fueling stations properly designed with spill kits nearby?	Partially A spill kit is located at the fueling station; however, it has not been labeled.
Are vehicles washed on-site? Is wash water discharged to the MS4 or sanitary sewer?	Yes Vehicles are washed on-site at the park garage and the resulting wastewater is discharged to the sanitary sewer system.
Material storage	
Are all materials that are potential stormwater contaminants stored under cover or in secondary containment?	No A solid waste dumpster is stored within a receiving pit that discharges offsite. Solid waste leachate associated with this solid waste management practice will result in the illegal discharge of pollutants to "waters of the State" during precipitation events. Sand stockpiles are not covered to prevent the discharge of pollutants to "waters of the State."
Hazardous waste management	
Are all hazardous materials properly labeled and stored to prevent exposure to stormwater runoff?	Yes Are all hazardous materials properly labeled and stored to prevent exposure to storm water runoff.
Waste management	
Are waste bins covered with waste properly disposed in containers?	No The solid waste dumpsters and dumpsters were uncovered allowing leachate to be generated and discharged to "waters of the State." The City of Brunswick's Animal Control Program is located at the park garage. The City of Brunswick was unable to provide information regarding the solid waste management (i.e. animal waste removal and disposal, cleaning of the outdoor animal holding area, animal carcass disposal, etc.). Information regarding the solid

	waste management practices must be submitted to Ohio EPA.
How is landscape waste stored?	Landscape waste (i.e. wood logs) is stored in stockpiles that discharge to storm drains.
Spill response	
Does the facility have a spill response plan, and are spill kits readily available?	Yes A spill prevention, control, and cleanup procedures have been established within Section 3.3 of the SWP3. In addition, spill kits are readily available at the park garage.
Employee training	
What type of stormwater training do maintenance staff receive?	None The City of Brunswick is not conducting storm water training in accordance with SWP3.

Notes or additional information:

The failure to implement the service garage's SWP3 constitute violations of ORC Chapter 6111.04, ORC Chapter 6111.07 and Part III.B.6.c of NPDES permit 3GQ10004*BG. The following violations and deficiencies were documented:

i. **Fueling Area**

A spill kit is located at the fueling area; however, the spill kit must be labeled so that employees can easily identify the spill kit in the event that it is needed (Figure 1).

Figure 1

ii. **Solid Waste Management**

Section 3.6 hat scrap metal or other materials kept outdoors are covered by roof or tarpaulin. An uncovered solid waste dumpster is stored within a receiving pit that has an outlet that, according Section

3.6 of the SWP3, discharges to "waters of the State" (Figures 2 to 3). As a result, leachate is generated when precipitation events contact the solid waste that will ultimately be discharged to "waters of the State." Appropriate BMPs must be implemented to eliminate the illegal discharge of leachate to "waters of the State."

Figure 2

Figure 3

iii. **Outdoor Material Storage**

Section 3.5 of the SWP3 details that a roof or covered plastic sheeting with, when possible, a mounded or bermed area will be utilized to prevent run-on of storm water through the material. An uncovered sand stockpile was located in an area that drains directly to a storm sewer inlet. No BMPs (i.e. placement under a roof, utilizing plastic sheeting, etc.) have been implemented to prevent or minimize the discharge of pollutants (Figure 4).

Figure 4

v. **Animal Control**

The City of Brunswick was unable to provide information regarding the solid waste management (i.e. animal waste removal and disposal, cleaning of the outdoor animal holding area, animal carcass

disposal, etc.) that occurs at the animal control facility (Figure 5). Information regarding the solid waste management practices must be submitted to Ohio EPA.

Figure 5