

Stormwater Management Program

for Geauga County

(Permit 3GQ00088*CG)

Updated December 2016



Including the Co-Permittees of

Bainbridge Township

Chester Township

Russell Township

Pursuant to the requirements of the
Ohio EPA NDPES Small MS4 General Permit (OHQ000003)

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List of Acronyms

In the preparation of this document, the following acronyms have been used:

BMP	Best Management Practice
DO	Dissolved Oxygen
E&SC	Erosion and Sediment Control
EPA	Environmental Protection Agency
GIS	Geographical Information System
GPS	Global Positioning Satellites
HSTS	Home Sewage Treatment System
MCM	Minimum Control Measure
MOU	Memorandum of Understanding
MS4	Municipal Separate Storm Sewer System
NEOPIPE	Northeast Ohio Public Involvement and Public Education Committee
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
ORC	Ohio Revised Code
SWMP	Stormwater Management Program
SWMTF	Stormwater Management Taskforce
SWPPP	Stormwater Pollution Prevention Plan
TMDL	Total Maximum Daily Load
TSS	Total Suspended Solids
USP	Urban Site Program (Geauga SWCD Tracking Program)
WMSC	Water Management and Sediment Control

Executive Summary

The previous NPDES Small MS4 general permit (OHQ000002) required the development and implementation of a Stormwater Management Program (SWMP) that satisfied the appropriate water quality requirements of Ohio Revised Code (ORC) 6111 and the Clean Water Act. This document must provide what best management practices (BMPs) the MS4 has selected to address the six minimum control measures (MCMs) in the permit, why those particular BMPs were selected by the MS4 in light of local water quality issues, and performance standards for BMP implementation. The six MCMs are:

- Public Education and Outreach
- Public Participation and Involvement
- Illicit Discharge Detection and Elimination
- Construction Site Runoff Control
- Post-Construction Runoff Control
- Pollution Prevention/Good Housekeeping for Municipal Operations

The NPDES Small MS4 permit was reissued on September 11, 2014 (OHQ000003), and requires MS4 communities which are renewing coverage under this permit to update their SWMP to be consistent with OHQ000003 and submit to Ohio EPA for review. OHQ000003 requires that where applicable, BMPs shall be selected to address U.S. EPA approved TMDL recommendations for identified water quality problems associated with MS4 discharges within the watersheds within the Phase 2 Areas of the townships of Bainbridge, Chester and Russell and Geauga County. Geauga County and the townships of Bainbridge, Chester and Russell are covered under consolidated facility permit number 3GQ00088*CG.

Legal Authorities to Implement the Stormwater Management Program

Bainbridge, Chester, and Russell Townships have the legal authority to implement the following Stormwater Management Program under their governmental authority granted by Title 5, Chapters 501 to 521, Title 15, Chapter 1502, and Title 55, Chapter 5571 of the Ohio Revised Code. In addition, Ohio Attorney General Opinion No. 85-053 holds that a township may enact zoning resolutions which regulate land use in such a manner as to control sediment and stormwater runoff from urban development. In this context, “urban development” may include large-lot housing subdivisions and low density, semi-rural commercial or industrial development, and does not necessarily imply the higher-density type of development associated with cities. Geauga County has the legal authority to implement the following Stormwater Management Program under its governmental authority granted by Title 3, Chapter 307 and 315 and Title 61, Chapter 6117 of the Ohio Revised Code.

Financial Authorities to Implement the Stormwater Management Program

Bainbridge, Chester, and Russell Townships and Geauga County will fund the activities necessary to implement its SWMP through dollars from their respective general funds. Periodically, these entities will evaluate the SWMP and, if necessary, suggest alternative funding arrangements.

Overview of Community Stormwater System and TMDLs

The subsequent watersheds in the townships of Bainbridge, Chester, and Russell and Phase 2 areas of Geauga County have had U.S. EPA-approved TMDL reports prepared for the below listed water quality problems and pollutants, although Geauga County recognizes that the Upper Cuyahoga and Lower Cuyahoga only apply to 0.2 and 0.5 sq miles respectively within our Phase 2 area. In addition, according to the TMDL reports for these two watersheds, the small areas subdrainage systems are in full attainment, so our focus will remain on the Chagrin River.

Chagrin River

Phosphorus, Nitrogen, Habitat, Bacteria, Sediment/TSS

Cuyahoga River (Lower)

Phosphorus, Nitrogen, Habitat, Bacteria, Low DO/Organic Enrichment

Cuyahoga River (Upper)

Phosphorus, Habitat

In order to maintain compliance with OHQ000003, the townships of Bainbridge, Chester, and Russell and the Phase 2 areas of Geauga County will consider the recommendations made pertaining to the TMDLs for the above watersheds to better tailor our BMP selection to address noted water quality problems resulting from MS4 discharges.

Description of Program Development and Decision Process

To develop its SWMP, the townships of Bainbridge, Chester, and Russell and Geauga County followed the steps outlined below:

1. Designation of MS4 Manager – Geauga County Engineer
2. Designation of preparer of SWMP and Annual Report – Geauga SWCD
3. Formation of the Geauga County Stormwater Taskforce
4. Geauga SWCD creates draft SWMP based on input gathered from public and agencies
5. Taskforce meets at least once a year to review formation of SWMP and/or progress on consolidated SWMP
6. SWMP and Annual Report is posted on website for public comment
7. Adoption of Consolidated SWMP and Annual Report by Geauga County

Table of Organization of SWMP and Annual Report is provided in the Appendix at the end of this document.

MCM #1 - Public Education and Outreach (III.B.1.a)

Program (Themes, Target Audience and Performance Standards)

Our MS4 is located in the Chagrin Watershed, which has TMDLs of sediment, nutrients, bacteria and habitat and a very limited portion of our MS4 is located within the Upper Cuyahoga Watershed (0.5 sq. mi.), which has TMDLs of nutrients and habitat and the Lower Cuyahoga Watershed (0.2 sq mi), which as TMDLs of sediment, nutrients, bacteria, habitat, low dissolved oxygen and organic enrichment. Because the majority of these pollution problems are caused by increases in impervious cover and the resulting increases in stormwater volume and velocity, we will focus much of our Public Education and Outreach program on increasing public awareness of the links between land use practices and stormwater pollution. We will also focus on septic system maintenance education since the majority of our homeowners have septic systems. We will target pollutant sources identified in our TMDL such as sediment pollution from stream bank erosion and improperly controlled construction sites and habitat alteration due to land use changes. Our education and outreach program focuses on addressing these pollutants as well as special recommendations to preserve and improve coldwater habitat. During our permit term, we will choose at least five themes. These themes may include but are not limited to the following:

1. Addressing nutrients and habitat degradation through promotion of reducing turfgrass, limiting conventional fertilizer and pesticide use or using alternative organic fertilizer and pesticide products
2. Addressing bacteria and nutrient pollution through septic maintenance education programs and manure nutrient management programs in the agricultural industry
3. Educating developers on construction site erosion and sediment control practices
4. Promoting the benefits of riparian buffers for maintaining a healthy stream corridor and reducing streambank erosion
5. Educating homeowners on watershed awareness to correlate stormwater runoff to its effects on Lake Erie
6. Promoting rain gardens and native plantings to teach residents about infiltrating stormwater on-site and enable them to better manage stormwater on their properties
7. Offering ways to reduce runoff on residential properties (soil amendments, composting, tree planting)
8. Advocating proper disposal of toxic household chemical waste and use of alternative non-toxic products.

Our community's population was 26,840 at the 2010 census. Our primary target audience is residential landowners as single-family residential comprises over 50% of our community's land use and of those over 90% have home sewage treatment systems, so their actions on their properties contribute significantly to stormwater runoff and proper septic system functionality in our MS4. We will also focus on the development community as they have the potential to contribute significant amounts of sediment pollution to our MS4 if not properly educated. Proper best management practices in the agricultural community will also be addressed as it consists of 7% of the land use within our Phase 2 Area. Fortunately, over 50% of the land within the MS4 is forested which provides natural stormwater benefits that don't require infrastructure; therefore, the benefits that trees and natural areas provide for stormwater will be promoted.

Geauga SWCD is also a member of the Northeast Ohio Public Information and Public Education Work Group (NEOPIPE) whom continue to meet regularly and develop annual themes for upcoming years, pool resources to conduct regional workshops on these themes, and produce outreach materials and venues that are available to residents of the townships of Bainbridge, Chester and Russell.

Outreach Mechanisms

Our primary mechanisms for delivery are the following:

- A minimum of two articles per year covering a stormwater pollution prevention topic and at least one based on the particular theme of the year. These articles will be printed in the newspapers of general circulation in the County, posted on social media, available to the townships to post on their websites and publish in their newsletters. A sample article is included in the Appendix.
- The SWCD website www.geaugaswcd.com which is updated at least monthly receives an average of 50 unique visitors a month. There are pages specific to stormwater education, construction sites, NPDES Phase 2 and general landowner resources that include pollution prevention tips. Russell Township has a website, <http://twp.russell.oh.us/> and Chester Township has a website, <http://www.chestertwp.com/> that provides stormwater information for residents.
- The Geauga SWCD Facebook page which currently has over 200 likes is updated regularly with stormwater information and links to upcoming events.
- Geauga SWCD hosts a minimum of one community workshop a year focused on the stormwater theme of the year. An example of a workshop was a composting workshop where approximately 100 people attended to learn how to compost to improve soil health which increases its stormwater infiltration and cleansing capacity. These programs are advertised on social media, websites and local newspapers and reach over 50% of the population.
- The Geauga SWCD prepares a stormwater display on the annual theme with informational displays and interactive activities at the Geauga County Fair. This event draws in thousands of people over a 5 day period.
- New resident informational packets or letter about programs and stormwater pollution prevention education topics are created and disseminated.
- Publications on stormwater pollution prevention are routinely created, updated and maintained by the Geauga SWCD.
- Geauga SWCD offers rain barrels and composters for sale to the public with information on the benefits these can provide for stormwater.
- Geauga Park District has permanent displays at its West Woods Nature Center on green roof construction, nonpoint source pollution and riparian buffers. All visitors to the park are able to experience these displays.
- Banners highlighting various stormwater pollution prevention tips are on display at township offices and Geauga SWCD for viewing.

In addition to these primary mechanisms, we may use other mechanisms such as posters, brochures, flyer mailings, permit inserts or new resident outreach mailings. Information on any additional mechanisms used will be collected and documented by the Geauga SWCD for reach and success, and included in the annual reporting to Ohio EPA. Our measurable goal is to reach a minimum of 50% of our MS4 population over five years, using a minimum of five themes with at least two mechanisms of delivery for each theme. If it does not appear that these objectives are being reached, the program will be re-evaluated and different mechanisms will be selected to meet our measurable goal.

Responsibility and Oversight

The persons and departments responsible for management and implementation of this program are as follows:

Primary: **GEAUGA COUNTY ENGINEER/DRAINAGE ENGINEER**
JOSEPH CATTELL, P.E., P.S.
440-279-1800
Email: jcattell@co.geauga.oh.us

Secondary: **GEAUGA SOIL AND WATER CONSERVATION DISTRICT**
CARMELLA SHALE, P.E.
440-834-1122
Email: cshale@geaugaswcd.com

The Geauga County Engineer/Drainage Engineer is responsible for the overall management and implementation of our public education and outreach plan. To assist in implementing MCM 1 in our SWMP, a Memorandum of Understanding with the Geauga County Soil and Water Conservation District, Geauga County Drainage Engineer and the townships of Bainbridge, Chester and Russell has been adopted. These MOUs are attached in the Appendix. The Director/Engineer of the Geauga SWCD prepares the annual report each year which documents all educational activities completed in the current year as well as the plan for the upcoming year.

Evaluation and Assessment

Each December/ January the Township Trustees and the SWCD will assemble information gathered from the steps listed below to evaluate the progress on the plan.

1. Meetings with key commercial property owners
2. Meetings with homeowners associations
3. Review of how many printed educational materials were picked up over the course of the year
4. Review number of website hits on topics regarding stormwater
5. Review number of participants or material collected at recycle pickup events
6. Collect number of septic systems pumped over the course of the year
7. Evaluations of education events held
8. Web surveys to gauge public awareness and knowledge and what extent adoption of BMPs has occurred

Annual Reporting

Gauga Soil and Water Conservation District will assemble the Annual Report for the Geauga County Consolidated Permit utilizing the Ohio EPA form. Each co-permittee and service provider will provide required information to Geauga SWCD annually by January 31. This report will identify both the mechanism used to convey each stormwater theme and audience directed as well as how many people were reached.

MCM #2 - Public Involvement and Participation

Program (Activities, Target Audience and Performance Standards)

Our MS4 is located in the Chagrin Watershed, which has TMDLs of sediment, nutrients, bacteria and habitat and a very limited portion of our MS4 is located within the Upper Cuyahoga Watershed (0.5 sq. mi.), which has TMDLs of nutrients and habitat and the Lower Cuyahoga Watershed (0.2 sq mi), which has TMDLs of sediment, nutrients, bacteria, habitat, low dissolved oxygen and organic enrichment. Although we acknowledge that the majority of these pollution problems are caused by increases in impervious cover and the resulting increases in stormwater volume and velocity, as well as septic system maintenance issues, we will focus more on the micro scale of what individual homeowners can do to improve TMDL loadings since it is more logistically manageable. Over the previous permit term we have found that our best participation in events comes from people attending a workshop where they “make and take” or get something that will facilitate a change in behavior. With this in mind, we will host events for the public to actively engage them in small activities at their homes that will improve the capturing and filtering of stormwater runoff into the soil. We will also engage teachers and students in stream quality monitoring that immerses them in the stream to sample streams to determine the water quality. Understanding that effects of construction are a contributing factor of TMDL loading, we strive to discover a component that can result in a contractor behavioral change. By providing concrete washout containers to contractors at the time of obtaining a permit, the contractor can easily use the proper method instead of washing out into nearby streams, ditches or storm drains, thus addressing the sediment, habitat TMDLs.

During this permit cycle, we will offer a minimum of five public involvement activities. These activities may include but are not limited to the following:

1. Backyard composting to improve soil (TMDLs: nutrients/habitat)
2. Tree sales – information about amount of stormwater captured for each tree purchased by the residents (TMDLs: nutrients/habitat)
3. Portable concrete washout handout program (TMDLs: sediment/nutrients/habitat)
4. Household Hazardous Waste Collection Events (TMDLs: habitat)
5. Social Media quizzes/questions to engage the public on pollution prevention (TMDLs: sediment/nutrients/bacteria/habitat)
6. Landowner Assistance on stream and erosion issues (TMDLs: habitat/sediment)
7. Public forums/meetings at various townships to assess program and needs of the public (TMDLs: habitat/sediment/nutrients/bacteria)
8. Alternative green cleaners “make and take” (TMDLs: nutrients/habitat)
9. Poster contests (TMDLs: nutrients/habitat/sediment/bacteria)
10. Stream quality monitoring (TMDLs: nutrients/habitat/sediment/bacteria)

As a member of NEOPIPE, Geauga SWCD will continue to meet regularly to develop activities and pool resources to conduct activities that are relevant and available to residents of the townships of Bainbridge, Chester and Russell.

Outreach Mechanisms

The public has been and will be involved in the development, submittal and annual assessment of our NOI and SWMP description through public meetings, newspaper coverage, email, interactive website, surveys, social media, input by professionals in environmental and ecological fields and at least one private citizen appointment on the Geauga County SWTF. These same venues will be used to get information out about events where the public has the opportunity to participate in various activities and/or projects. Being a government agency and as advertised on website, the SWCD automatically receives calls from the public and other agencies on complaints as well as requests for technical assistance.

Responsibility and Oversight

The persons and departments responsible for management and implementation of this program are as follows:

Primary: **GEAUGA COUNTY ENGINEER/DRAINAGE ENGINEER**
JOSEPH CATTELL, P.E., P.S.
440-279-1800
Email: jcattell@co.geauga.oh.us

Secondary: **GEAUGA SOIL AND WATER CONSERVATION DISTRICT**
CARMELLA SHALE, P.E.
440-834-1122
Email: cshale@geaugaswcd.com

The Geauga County Engineer/Drainage Engineer is responsible for the overall management and implementation of our public involvement and participation plan. To assist in implementing our MCM 2 in our SWMP, a Memorandum of Understanding has been entered into with the Geauga County Soil and Water Conservation District, Geauga County Drainage Engineer and the townships of Bainbridge, Chester and Russell has been adopted. These MOUs are attached in the Appendix. The Director/Engineer of the Geauga SWCD prepares the annual report each year which summarizes and documents all educational activities completed in the current year as well as the plan for the upcoming year.

Evaluation and Assessment

Each December/ January the SWCD will meet with the SWMTF to evaluate whether or not various activities done over the course of the year were successful based on the following (as applicable) and at least one activity occurred each year:

- 1) Participation by the public
- 2) Recognition of products being used in the field that were given out
- 3) Assessment of number of homeowner assisted with stream, erosion or other issues pertaining to pollution prevention
- 4) Assessment of number of complaints received on construction sites
- 5) Amount of recycled items brought to recycling events

Annual Reporting

Geauga Soil and Water Conservation District will assemble the Annual Report for the Geauga County Consolidated Permit utilizing the Ohio EPA form. Each co-permittee and service provider will provide required information to Geauga SWCD annually by January 31.

MCM #3 - Illicit Discharge Detection and Elimination (III.B.3.a-h)

Adoption of Illicit Discharge Detection and Elimination Ordinance

Geauga County utilizes their nuisance Geauga County Household Sewage Regulations and Nuisance complaint procedure in ORC 3707.01 to address illicit discharges detected. Since Geauga County's MS4 is primarily roadside ditches and the illicit discharges primarily found are originating from malfunctioning septic system, the County has chosen to utilize their existing regulations and ORC laws to manage these violations. Since the townships have limited authority over septic systems, the procedure to investigate and eliminate an illicit discharge is one of a complaint driven process to the Geauga County Health District.

Development and Update of the Storm Sewer Outfalls and Comprehensive Storm Sewer System Maps

Geauga SWCD has mapped the storm sewer outfalls, storm sewer systems and HSTS locations per available data using GIS mapping as the base map. A Comprehensive Outfall Database was created and maintained that links to the GIS mapping and provides basic information about the outfalls including type, size, dry weather inspection data, and follow up investigation findings. The receiving waters of our MS4 drainage areas are the Chagrin River. Outfalls were located using existing topography supplemented by field groundtruthing of outfall locations by the Geauga SWCD. Although there are minimal storm sewers within the Phase 2 Areas of Geauga County, the storm sewer map is regularly updated as additional storm sewers or enclosed ditches are discovered. Copies of both the storm sewer system/outfall map and off-lot discharging HSTS map are included in this SWMP Appendix.

Determination of Priority Areas

Initial dry-weather screening of all outfalls was completed during the #OHQ000001 permit term by the road departments of Geauga County and the townships of Bainbridge, Chester, and Russell. All outfalls that were found wet during a 72-hour period of dry weather were verified within the #OHQ000002 permit period by their respective communities. A list of outfalls was created where dry-weather flow was found. The Geauga County Department of Water Resources conducts sampling of all these outfalls to determine if the total fecal coliform counts exceeds 5000 ppm which is the standard set by the Geauga County Health District. If the total fecal coliform count exceeds 5000 ppm, additional investigation is performed by the Geauga County Health District to determine the source of the illicit discharge and then a plan to eliminate is undertaken. Priority for outfalls chosen for testing and elimination is based first on those with the highest total fecal coliform counts, and then those that are located in a clustered area.

Enforcement and Escalation Procedures for Illicit Discharges and Illegal Dumping and Spills

The Health District is responsible for locating, tracking and eliminating illicit discharges. When an illicit discharge is detected based on the exceedance of total fecal coliform counts, the Health District as dictated through the ORC ensures that failing septic systems, and in this case illicit discharges, are eliminated either by replacing or repairing the system.

The following general procedure is used for identifying and correcting illicit discharges within Geauga County. A more specific procedure is attached in Appendix:

- Geauga SWCD maps location of all outfalls within the Phase 2 areas of Geauga County and the townships of Bainbridge, Chester and Russell.
- Geauga SWCD gives listing of all outfalls to the townships of Bainbridge, Chester and Russell to inspect and document any dry weather flow (at least 72 hours after the last rainfall of 0.10 inches or more).
- The communities document findings and provide reports back to the Geauga SWCD.
- Geauga SWCD updates database with inspection data.
- Geauga SWCD provides a listing of all outfalls with dry weather flow to the Geauga Department of Water Resources to conduct further investigation by testing samples against the standards not to exceed 5000 ppm of total fecal coliform.
- Any outfall with less than 5000 ppm of total fecal coliform is removed from list of potential illicit discharge.
- Outfalls over 5000 ppm of total fecal coliform are forwarded to the Geauga County Health District for further investigation to the source and ultimate correction or elimination.

Gauga County Health District also has a “For Sale of Property” point of sale inspection program which is a portion of the Geauga County Health District supplemental HSTS regulations (copy attached in Appendix). The For Sale of Property Regulations protects home purchasers and the community from failures in private sewage systems. The regulation requires that home sellers with an existing household sewage system have the system inspected by a Geauga County Health District Registered Sanitarian during the selling process to insure proper operation of the system. A copy of the checklist and procedures is also attached in the Appendix.

The following procedure is used for illegal dumping and spills:

Action will be initiated when a spill or dumping is reported to a staff member within the townships of Bainbridge, Chester, or Russell, the Geauga County Engineer, Geauga Soil and Water Conservation District, Geauga Board of County Commissioners, Geauga County Health District.

Hazardous materials are referred to the Fire Department of the community where it has occurred in and the Geauga County Department of Emergency Services for clean-up in conjunction with the procedures and guidelines in the Ohio EPA’s Emergency Response Program, found here:

www.epa.state.oh.us/derr/ersis/er/er.aspx

Coordination with MCMs 1 and 6

The Geauga County Stormwater Management Plan coordinates our MCM 3 program with our MCM 1 and MCM 6 programs. With the pollution prevention education initiatives, as described earlier in MCM 1, education on waste management is covered as a specific theme in one of the years during the permit term. Through MCM 6, at least one training per year covering proper disposal of waste fluids at the township and county road garages occurs.

Program Responsibility and Oversight

The Geauga County Engineer is responsible for the overall management of the illicit discharge detection and elimination program with assistance and specific responsibilities delegated to the Geauga Soil and Water Conservation District, Geauga County Water Resources and Geauga County Health District as outlined in the MOU as included in the Appendix.

Procedures specified in carrying out MCM 3 were selected due to the predominance of potential illicit discharges occurring within our storm sewer system (roadside ditches) originating from a failing septic system, staffing capacity and permit requirements while maintaining the rural character of the county. The BMPs selected were chosen to address the watershed TMDLS for TSS/sediment, nutrient, habitat, low DO, and bacteria pollution. The Geauga County Engineer and Stormwater Taskforce meet once a year in conjunction with the annual reporting to Ohio EPA and evaluate the success of this plan by reviewing progress on annual updates to the storm sewer/outfall map as needed to include catch basins, pipes, ditches, flood control facilities, public and private post-construction water quality BMPs installed to satisfy Ohio EPA's NPDES Construction General Permit. Also a review of total number of point of sale septic system upgrades required as well as illicit discharge eliminations completed per the list of potential illicit discharges discovered and tested.

Gauga County Water Resources will additionally provide a report at the end of the year to the Geauga SWCD for inclusion in to the Annual Report of all sanitary sewer overflows that occurred within the previous year, including time and date of occurrence, where it occurred, reason for overflow and how situation was remedied.

Annual Reporting (III.B.3.k)

Gauga Soil and Water Conservation District will assemble the Annual Report for the Geauga County Consolidated Permit utilizing the Ohio EPA form. Each co-permittee and service provider will provide required information to Geauga SWCD annually by January 31. The annual report will document the following: (1) number of outfalls dry-weather screened, (2) number of dry-weather flows identified, (3) number of illicit discharges identified, (4) number of illicit discharges eliminated, (5) a list of illicit connections have been identified but have yet to be eliminated, including estimated schedules for elimination and (6) summary of any storm sewer system mapping updates.

MCM #4 - Construction Site Storm Water Runoff Control (III.B.4.a)

Program Description

Since 1979, the Geauga County Water Management and Sediment Control (WMSC) Regulations have been in effect to establish technically feasible and economically reasonable standards to achieve a level of management and conservation practices that will abate water erosion of the soil or abate the degradation of the Waters of the State by soil sediment in conjunction with land grading, excavating, filling, or other soil disturbing activities on land used or being developed for nonfarm commercial, industrial, residential or other nonfarm purposes. The Geauga Board of County Commissioners have authorized the Geauga SWCD to administer these regulations. The last update was in 2009 and they are currently being reviewed and are expected to be completely updated as needed for compliance with the most recent Ohio EPA NPDES General Storm Water Permit for Construction Activities (#OHC00004) by the 1st quarter of 2017. There is also an MOU between the Geauga Board of County Commissioners, Geauga County Drainage Engineer, Geauga Soil and Water Conservation District and the townships of Bainbridge, Chester and Russell outlining the responsibilities and working agreements and is included in the Appendix. Geauga SWCD also developed a comprehensive tracking program entitled Urban Site Program (USP) that the District utilizes to track projects, generate plan reviews and site inspections, issue Notices of Violation and Stop Work Orders, track complaints and convert projects with Post Construction Stormwater Controls to a separate database for tracking and annual inspections of these Post Construction BMPS. A copy of the most current set of WMSC regulations is enclosed in the Appendix. In summary, the regulations cover the following:

- **Applicability:** Require operators to submit for review and approval plans that show the implementation of erosion and sediment controls for soil disturbing activities that are proposed that will disturb one (1) acre or more, or less than one (1) acre and part of a larger common plan of development
- **Waste Control:** Plans must contain best management practices such as a dumpster to manage construction waste and a concrete washout for concrete truck rinse outs
- **Review Process:** A review process that requires the applicant to submit for review to the Geauga SWCD the complete WMSC plan (Gauga County equivalent to SWPPP) along with required review fee for sites subject to review within the WMSC regulations. The Geauga SWCD will review the plan to ensure that plan identifies all required BMPS to minimize pollution and address TMDLs for habitat, sediment, and nutrients. The plan and narrative must also identify the watershed that the project drains to in addition to showing all adjacent streams within 200 feet of the project. Construction may not commence prior to approval of the WMSC plan. There are approximately 200 sites per year within the Phase 2 communities of Bainbridge, Chester and Russell Townships and half of those are actually within the urbanized areas of those communities. Sites range from less than one acre projects that are part of a larger common plan of development to full commercial or residential subdivision projects. For larger projects we require a contractor certification sheet be submitted so that all site contractors sign off that they are familiar with the WMSC plan and its requirements and will follow the approved plan. Along with this certification sheet, we request a meeting with the project engineer and contractor on site prior to construction to answer questions and ensure all parties understand the requirements of the WMSC. These additional processes are done to address the TMDLs for sediment, nutrient and habitat degradation. In addition the townships of Bainbridge, Chester and Russell have within their respective zoning resolutions requirements to receive erosion and sediment control plan review and approval from Geauga SWCD prior to issuance of a zoning certificate. A copy of their zoning resolutions are attached in the Appendix.
- **Site Inspection:** Geauga SWCD reviews all sites at least once per month. Construction sites with soil disturbances of one (1) acre or more are inspected at least twice per month. Inspections on any site may

be more frequent based on proximity to critical natural resource areas such as wetlands, streams or slopes and or lack of responsiveness by owner to corrective items identified. The SWCD generates site inspection reports documenting site conditions noting any deficiencies and approximate time frame to correct. If during subsequent inspections deficiencies are not corrected the following enforcement and escalation procedure takes place to the as permitted and outlined through the ORC:

- First Notice of Violation issued if deficiencies listed on site inspection report have not been addressed or corrected within 30 days.
- Second Notice of Violation issued if deficiencies cited in First Notice of Violation have not been addressed or corrected within 30 days.
- If after 15 days deficiencies cited in Second Notice of Violation are not addressed or corrected, the Geauga SWCD shall request concurrence of egregiousness from the Prosecuting Attorney of the violation and written approval to proceed with a Stop Work Order.
- If imminent degradation or damage to property or water quality is occurring, the Geauga SWCD may request, at any time, the Geauga Board of County Commissioners to request the Geauga County Prosecutor to seek an injunction or assess a fine to correct the deficiencies.
- If the owner, at any time, fails to obtain proper permits, the Geauga SWCD may issue an immediate Stop Work Order.
- After a Stop Work Order is issued, the Geauga Board of County Commissioners may request the Geauga County Prosecutor to seek an injunction or assess fines to correct the deficiencies.
- **Complaints:** The Geauga SWCD tracks all complaints on any site within its USP tracking system. All complaints are investigated and resolution reported within the tracking system.
- **Applicable TMDLs addressed:** Since lack of proper sediment and erosion control implementation on construction sites is generally known to be a large contributor of TMDL loadings of nutrients, habitat, sediment/TSS and habitat, Geauga County's Water Management and Sediment Control Regulations and corresponding procedures and tools enable adequate management of these TMDL loadings.

Annual Reporting

Geauga Soil and Water Conservation District will assemble the Annual Report for the Geauga County Consolidated Permit utilizing the Ohio EPA form. Since Geauga SWCD is the primary entity responsible for this minimum control measure and internally tracks this information, no additional entities are required to submit information for annual reporting. Within the annual report, Geauga SWCD documents the following: (1) number of applicable sites within in the Phase 2 area, (2) number of pre-construction storm water pollution prevention plan reviews, (3) number and frequency of site inspections, (4) number of violation letters issued, (5) number of enforcement actions taken and (6) number of complaints received and number followed up on.

MCM #5 - Post-Construction Storm Water Management in New Development and Redevelopment (III.B.5.a - d)

Post-Construction Stormwater Management Regulation

Since 1979, the Geauga Board of County Commissioners have adopted and updates periodically the Geauga County Water Management and Sediment Control (WMSC) Regulations which have been in place to serve as erosion and sediment control regulations and standards for construction site runoff as well as manage stormwater quantity and since 2004 updated to also manage post construction stormwater quality. The Geauga BOCC have authorized the Geauga SWCD to administer these regulations. The last update was in 2009 and they are currently being reviewed and are expected to be completely updated as needed for compliance with the most recent Ohio EPA NPDES General Storm Water Permit for Construction Activities (#OHC00004) by the 1st quarter of 2017. There is also an MOU between the Geauga Board of County Commissioners, Geauga County Drainage Engineer, Geauga Soil and Water Conservation District and the townships of Bainbridge, Chester and Russell outlining the responsibilities and working agreements and is included in the Appendix. Geauga County SWCD also developed and utilizes a comprehensive tracking program entitled Urban Site Program (USP) that the SWCD utilized to track projects, generate plan reviews and site inspections, issue Notices of Violation and Stop Work Orders, track complaints and convert projects with Post Construction Stormwater Controls to a separate database for tracking and annual inspections of these Post Construction BMPs. All structural stormwater control BMPs are mapped and included in the Appendix (some of these BMPs were not a requirement of the Ohio EPA MS4 permit but are still part of the Geauga County stormwater basins inventory). A copy of the most current set of WMSC regulations is enclosed in the Appendix. In summary, the regulations cover the following:

- **Applicability:** Require operators to submit for review and approval plans that show the proposed design and implementation of post-construction stormwater management best management practices for projects where soil disturbing activities are proposed that will disturb one (1) acre or more, or less than one (1) acre and part of a larger common plan of development
- **Review Process:** A review process that requires the applicant to submit for review to the Geauga SWCD the complete WMSC plan (Gaugua County equivalent to SWPPP) along with the required review fee for sites subject to review within the WMSC regulations. The Geauga SWCD will review the plan to ensure it provides post-construction stormwater quality control practices utilizing the analysis and calculations for water quality volume provided within the WMSC Regulations and Ohio EPA NPDES General Storm Water Permit for Construction Activities (#OHC00004). The designer may choose a BMP from a menu of options such as bioretention, wet extended detention basin and permeable pavement, etc. as provided in the Ohio EPA permit and WMSC Regulations. BMPs for water quality are selected to address the TMDLs for habitat, sediment and nutrients. In addition the townships of Bainbridge, Chester and Russell have within their respective zoning resolutions requirements to receive erosion and sediment control plan review and approval from Geauga SWCD prior to issuance of a zoning certificate. A copy of their zoning resolutions are attached in the Appendix.
- **Site Inspection:** Geauga SWCD inspects all sites at least once per month. Construction sites with soil disturbances of one (1) acre or more are inspected at least twice per month. Inspections on any site may be more frequent based on proximity to critical natural resource areas such as wetlands, streams or slopes or due to lack of responsiveness by owner to correct items needed. Once a site is complete and finalized, Geauga SWCD also inspects all facilities that were built after 2003 once per year to ensure they are still functioning per original approved design and installation. The SWCD generates site inspection reports documenting site conditions noting any deficiencies and approximate time frame to correct and

forwards to the owner of the construction project or person responsible for the long term maintenance of the post-construction stormwater facility. If during subsequent inspections deficiencies are not corrected the following enforcement and escalation procedure takes place as dictated and outlined within the ORC:

- First Notice of Violation issued if deficiencies listed on site inspection report have not been addressed or corrected within 30 days.
 - Second Notice of Violation issued if deficiencies cited in First Notice of Violation have not been addressed or corrected within 30 days.
 - If after 15 days deficiencies cited in Second Notice of Violation are not addressed or corrected, the Geauga SWCD shall request concurrence of egregiousness from the Prosecuting Attorney of the violation and written approval to proceed with a Stop Work Order.
 - If imminent degradation or damage to property or water quality is occurring, the Geauga SWCD may request, at any time, the Geauga Board of County Commissioners to request the Geauga County Prosecutor to seek an injunction or assess a fine to correct the deficiencies.
 - If the owner, at any time, fails to obtain proper permits, the Geauga SWCD may issue an immediate Stop Work Order.
 - After a Stop Work Order is issued, the Geauga Board of County Commissioners may request the Geauga County Prosecutor to seek an injunction or assess fines to correct the deficiencies.
- **As-Built:** Geauga SWCD requires through the WMSC regulations that before a construction project is finalized and closed that an “as-built” be submitted with a certification from the surveyor providing the final elevations and dimensions of the facility as well as certification from the engineer confirming that the final “as-built” structure meets the original approved design requirements per the WMSC regulations.
 - **Long-Term Maintenance:** Geauga SWCD requires, through the WMSC regulations, as part of the plan review process that the applicant submits a long-term maintenance agreement for the post-construction storm water management structures. The document must identify the person responsible for long-term maintenance, maintenance activities required and their frequency, and allows Geauga SWCD access to inspect the facility as needed. This document is also required to be recorded in the County Recorder’s office so it is officially on file and will follow the parcel upon title search. A sample of a document commonly used is located in Appendix. Since 2009, Geauga County created a Drainage Maintenance District where all proposed subdivisions are required to enter into the Drainage Maintenance District with the Geauga County Commissioners. This establishes a funding assessment mechanism for the long term maintenance, inspection and repair of post-construction stormwater facilities through the Geauga County Engineer/Drainage Engineer. Geauga County Subdivision Regulations outlining this requirement is enclosed along with sample documents used when entering into these agreements is included in the Appendix.
 - **Applicable TMDLs addressed:** Phase 2 areas within Geauga County are primarily residential communities with well-defined commercial and industrial development areas. Water quality concerns as identified in the Chagrin Watershed TMDL of sediment/TSS, nutrients and habitat can be attributed to increases in stormwater runoff as impervious cover increases and include sedimentation due to streambank erosion, increased flooding due to increases in stormwater volume, increases in stormwater temperature in detention facilities and habitat loss as riparian and wetland areas are impacted by development. The successful ongoing use of these practices is reflected within the upper reaches of the Chagrin Watershed within Geauga County where the data for the TMDL loadings are not as severe nor as consistent as they appear within the lower reaches of the Chagrin watershed outside Geauga County.

Non-Structural Stormwater BMPs

Within Geauga County there are multiple tools being implemented to address post-construction runoff from new developments and redevelopments. Within the townships of Bainbridge, Chester and Russell, the zoning resolutions specify a frontage/width requirement, front, rear, and side yard setbacks as well as maximum impervious lot coverage. These setbacks and maximum lot coverage requirements help to ensure vegetation and green space within all developed areas are preserved to the maximum extent resulting in larger lots with more capacity to infiltrate stormwater and reduce the impacts of stormwater runoff. These larger type subdivision lots promote the desire to keep as much of the natural existing vegetation and/or woodlots in tact during construction, and only clearing the areas needed to be disturbed to build the infrastructure in order to retain larger natural stormwater treatment areas.

Russell and Bainbridge Townships also have a conservation type development allowance within their zoning resolutions. Russell Township has what is referred to as “Planned Residential Developments” and Bainbridge Township’s is referred to as “Mixed Use Planned Unit Development District”. Both of these zoning resolutions allow the developer to cluster building lots in return for providing larger conserved open space and preservation of natural resources on the subdivisions and lots thus allowing for better stormwater quality and quantity management and more infiltration. These zoning resolutions are attached and can be found at:

<http://twp.russell.oh.us/departments/zoning>

<http://www.bainbridgetwp.com/Departments/Zoning/Zoning-Resolution>

As with all setbacks, landowners proposing activities in setbacks must request a variance and this request is reviewed, modified and approved or disapproved by the township. When considering variance requests, the township may consider the extent to which the requested variance impairs flood control, erosion control, water quality protection or other functions of the riparian setback based on technical and scientific data. The resolutions state that soil disturbing activities permitted in the setback through variance should minimize clearing and use BMPs to minimize erosion and control sediment and those variances should not be granted for installations of impervious surfaces. The townships prioritize granting variances where feasible to other setback requirements in order to maintain the riparian setback where applicable.

Annual Reporting (III.B.5.g)

Geauga Soil and Water Conservation District will assemble the Annual Report for the Geauga County Consolidated Permit utilizing the Ohio EPA form. Since Geauga SWCD is the primary entity responsible for this minimum control measure and internally tracks this information, no additional entities are required to submit information for annual reporting. Within the annual report, Geauga SWCD documents the following: (1) number of applicable sites within the Phase 2 area requiring post-construction controls, (2) number of pre-construction storm water pollution prevention plan reviews performed, (3) number of inspections performed to ensure built to requirements, and (4) number of long-term operation and maintenance (O&M) plans developed and agreements in place.

MCM #6 - Pollution Prevention/Good Housekeeping for Municipal Operations (III.B.6.a-c)

Pollution Prevention/Good Housekeeping Program Overview

Geauga County's Pollution Prevention/Good Housekeeping Program was created with consideration of the rural nature of stormwater conveyances and its winter climate within the MS4 communities. The Road Superintendents of Geauga County and the townships of Bainbridge, Chester and Russell maintain inventories of township/county activities throughout the MS4 that may impact stormwater and relays any updates to the Geauga SWCD for revisions to the Pollution Prevention/Good Housekeeping Program. These include:

Vehicle maintenance: County and township personnel conduct basic vehicle and equipment maintenance such as oil changes at their respective MS4 facilities. All waste oils/liquids are collected in an enclosed container and removed by a third party at least once per year. Proper disposal and containment of waste liquids improves the habitat TMDLs.

Salt application: Due to our communities' location within the Northeast Ohio Snowbelt, usage of salt is required on roadways for public safety. Minimization of salt usage is done by oftentimes only applying salt on hills, intersections and curves. Geauga County and the townships of Chester and Russell use a mixture of cinders and salt to reduce the amount of salt used. Bainbridge Township uses "Beet Heet" and a salt brine mixture to prewet and reduce their salt usage. Chester Township uses a product called "Ice Bite" to decrease the need for reapplication. Geauga County uses a liquid salt brine to pretreat roads also resulting in a reduction in salt usage. Salt at all facilities is stored within an enclosed structure. These salt reduction methods were chosen to improve habitat TMDLs.

Ditch cleaning: Roadside ditching is conducted as needed to maintain stormwater flow through ditches and prevent the backup of water onto roadways. As a section of ditching is completed it is followed up by hydroseeding. Typically areas are reseeded within 7 days and within 2 days if within 50 feet of a waterway. Any slopes greater than 2% have turf reinforcement matting installed. Ditch cleaning practices listed above will minimize pollutant runoff and reduce nutrient, habitat and sediment TMDL loadings.

Street sweeping: Street sweeping is generally not conducted within Geauga County due to the lack of curb and gutter streets. When it is necessary to sweep on the few roads that have a curb and gutter those materials collected by the street sweeper are picked up by a refuse company and taken to a landfill. By proper pickup and disposal of sweepings, TMDL loadings of nutrients, sediment and habitat can be addressed.

Fertilizer/Herbicide/Pesticide usage: Fertilizer is used on Geauga County road projects as needed only to encourage vegetation growth from roadside construction projects. Bainbridge Township only utilizes fertilizer/herbicides on ballfields. Chester Township does not use any fertilizers/herbicides and Russell Township contracts all fertilizer/herbicide usage out to a landscaping firm. All applications of fertilizer/herbicide may only be completed by licensed applicators. None of the communities use any pesticides. Minimization and outsourcing of fertilizer and herbicides application has been selected to ensure proper application by licensed applicators and avoid improper application rates to minimize pollutant runoff and reduce nutrient TMDL loadings.

Facilities Subject to Pollution Prevention/Good Housekeeping Program

Facilities subject to the Geauga County Pollution Prevention/Good Housekeeping Program include the following:

Bainbridge Township

ROAD DEPARTMENT AND SETTLERS PARK, 17800 Haskins Road, Chagrin Falls, OH 44022

- Road Department
 - Main Building – Offices, storage of trucks, equipment, parts, signs and equipment fluids such as oils, cleaners, etc. and maintenance of road equipment
 - Road Department Salt Dome – Salt storage only
 - Road Department Secondary Salt and Cinder storage – Storage of salt, cinders, topsoil and sand
 - Road Department Cold Storage – Storage of equipment, herbicides and crack sealer
 - Cell Towers and Building of Towers – Towers and electrical equipment for towers
 - Recycle Area – Roll off containers for residents to recycle paper, cardboard, etc.
 - Waste Oil Tank – 300 gallon above ground waste oil tank
 - Fuel Tanks (Above Ground) – (1) 2500 gallon diesel fuel tank and (1) 1000 gallon gasoline fuel tank
 - Cold Storage – Storage of equipment
- Settlers Park – Soccer and baseball fields, outdoor pavilion, basketball court, sand volleyball court, gazebo and playground

Chester Township

TOWN HALL AND ROAD DEPARTMENT, 12701 Chillicothe Road, Chesterland, OH 44026

FIRE STATION ONE, 8552 Parkside Drive, Chesterland, OH 44026

POLICE STATION, 12696 Opalocka Drive Chesterland, OH 44026

- Town Hall – Housing of personnel and administrative offices. There are no vehicles or raw materials stored or maintained at this location.
- Road Department – Offices, equipment storage, cleaning and maintenance.
 - Road Department Cold Storage Building – Storage of trucks, off road equipment. One service bay for equipment maintenance. Floor drains are directed to an oil/water separator first and then directed to the sanitary sewer.
 - Salt Barn – Storage of salt, #9 gravel, topsoil, mulch, and cold mix.
 - Storage Tank (Above Ground) - 2 Chamber 10,000 gallon storage tank contained within a concrete trough. Stores 3000 gallons of “beet juice” used for ice control and 7000 gallons of “dust bond” used for dust control.
 - Fuel Tanks (Underground) – (1) underground 10,000 gallon gas fuel tank, (1) underground 10,000 gallon diesel fuel tank
- Fire Station One – Housing of personnel and administrative offices, storage of fire and EMS vehicles. Maintenance is done by a third party offsite. There is no storage of raw materials. All floor drains are directed to an inground collection system that is pumped out and removed by a third party at least once per year
- Police Station – Primarily houses personnel and administrative offices. Vehicles are kept outside on the parking lot. There is no storage of any materials and vehicle maintenance and vehicle washing is done by third party offsite. There is no storage of raw materials.

- Police Car Garage – Cold storage of police cars only. No maintenance or washing of vehicles and no storage of raw materials.
- Used Oil Tanks - Two (2) above ground tanks to store used oil.

Russell Township

POLICE STATION: 14820 Chillicothe Road, Novelty, OH 44072

FIRE STATION: 14810 Chillicothe Road, Novelty, OH 44072

ROAD DEPARTMENT: 15635 Chillicothe Road, Chagrin Falls, OH 44022

TOWN HALL: 14890 Chillicothe Road, Novelty, OH 44072

- Police Station - Administrative and employee facility for police officers and staff. Police cruiser vehicles are stored inside the structure in garage bays. Cleaning of vehicles such as car washing is done within the garage bay facility with proper drainage installed to storm sewer system. There is no storage of raw materials on-site.
- Fire Station - Administrative offices and employee facility for EMS, Paramedics, and Fire fighters. Sleeping, kitchen, shower, washer and dryer areas for gear and conference room are on site. Ambulance, Fire and Rescue vehicles are stored inside the structure in garage bays. Any vehicle washing is done within garage facilities and enters storm sewer system after passing through an oil/water separator.
- Road Department - There is a cement pad where fueling of vehicles is done. An EcoVault is present for storage of fuels, i.e., oil, diesel, and gasoline.
 - Houses administrative office and employee facility for road crew personnel. All vehicles are stored inside the structure in garage bays. Washing of trucks and road vehicles is done within the garage area where the floor drains are connected to an oil separation system to catch any pollutants discharged to drains. Limited vehicle and equipment maintenance and repair service is conducted on-site such as oil change and lubrication services. Any paints, solvents or other HazMat materials are stored in fireproof safes designed for these materials. All major vehicle maintenance is done off-site at specialized garage facilities.
 - Salt/storage barn and is used to store salt, cinders, and crack sealer.
 - Cold Storage Sheds – Storage of road signs and mulching materials
- Historic Town Hall - The historic town hall is used as a community meeting facility for homeowner associations, the Russell Historical Society, and other community township functions, meetings, and gatherings. There are no vehicles or raw materials stored, fueled or maintained at this location.

A Pollution Prevention/Good Housekeeping Program is prepared for all facilities listed above and was last updated June 1, 2013. A copy is kept on file at each facility and is included in the Appendix. There are no Industrial Facilities within the permit area.

Evaluation of Flood Management Projects

For any flood management projects undertaken by Geauga County or the townships, all related construction and maintenance activities within jurisdictional waters of the United States are done in compliance with Sections 402 and 404 of the Clean Water Act. Plans and specifications of such activities requiring permits and NOI would be forwarded to the Ohio EPA and the US Army Corps of Engineers when appropriate. The use of sediment and erosion control measures on all projects is required per the Geauga County WMSC Regulations. The Geauga SWCD

would review these projects to determine that water quality practices are implemented where applicable. At this time, Geauga County does not have any MS4 owned regional flood control projects.

Training

Geauga SWCD and Geauga County Engineer coordinate annual training for the Road Departments of Geauga County and the townships of Bainbridge, Chester and Russell that are up to date and relevant to their daily operations as it pertains to stormwater management and pollution prevention. Trainings conducted in the past include: Review of the Pollution Prevention and Good Housekeeping Manual, stormwater pollution prevention, onsite compliance walk-thru and review of facilities, road salt spreading and calibration, and spill prevention. The Geauga County Engineer is responsible for the scheduling and organization of the training.

A field manual of Erosion and Sediment Control for roadside construction BMPs was created by Geauga SWCD and provided to Geauga County and the townships of Bainbridge, Chester and Russell to be utilized as a quick reference tool by members of their respective road departments. This handbook directly addresses TMDLs of sediment and habitat degradation by minimization of erosion and sediment. This book will be reviewed annually. A copy of this manual is included in the Appendix.

Program Evaluation and Oversight

The Road Superintendents of Geauga County and the townships of Bainbridge, Chester and Russell are responsible for the overall management and implementation of the Pollution Prevention/Good Housekeeping program as it pertains to their facility. To assist in implementing MCM 6 in our SWMP, a Memorandum of Understanding with the Geauga County Soil and Water Conservation District, Geauga County Drainage Engineer and the townships of Bainbridge, Chester and Russell has been adopted. These MOUs are attached in the Appendix. The road superintendents communicate with the Geauga SWCD and Stormwater Committee annually in conjunction with the annual reporting required by Ohio EPA to evaluate whether BMPs need to be adjusted or if conditions at their facilities need to be updated. A copy of the Annual Facility Inspection Reports used by the communities is included in the Appendix at the end of the Geauga County Pollution Prevention/Good Housekeeping Plan. BMPs are selected to improve TMDL loadings of habitat, bacteria, nutrients and sediment.

Annual Reporting (III.B.6.f)

Geauga Soil and Water Conservation District will assemble the Annual Report for the Geauga County Consolidated Permit utilizing the Ohio EPA form. Each co-permittee and service provider will provide required information to Geauga SWCD annually by January 31 which shall include their annual self-inspection reports of their facilities. The Geauga County Consolidated Annual Report shall document the following: (1) summary of employee training program(s) implemented with number of employees that attended and (2) summary of activities and procedures implemented for your operation and maintenance program.

Review and Update of the Stormwater Management Program

An annual review of our SWMP in conjunction with preparation of the Annual Report to Ohio EPA required under Part IV.C of the MS4 Permit #OHQ000003 is conducted. Any proposed additions to the SWMP during the life of the permit are made upon written notification to Ohio EPA and through the Annual Report. Changes replacing an ineffective or infeasible BMP specifically identified in the SWMP with an alternate BMP are requested of Ohio EPA according to the procedure outlined in accordance with Part V.G of the MS4 Permit #OHQ000003 and include the following information:

- An analysis of why the BMP is ineffective or infeasible (including cost prohibitive),
- Expectations on the effectiveness of the replacement BMP,
- An analysis of why the replacement BMP is expected to achieve the goals of the BMP to be replaced.
- Unless specifically denied by Ohio EPA, the requested changes proposed in accordance with the criteria above shall be deemed approved and may be implemented 60 days from submittal of the request.

Evaluating, Record Keeping and Reporting

Through the procedures established in each MCM rationale, Geauga County Engineer and SWCD evaluates program compliance, appropriateness of identified BMPs, progress towards achieving identified measurable goals and satisfying the performance standards. Geauga County SWCD retains copies of all reports and documentation required by Part IV.B.1 of the MS4 Permit #OHQ000003 and will retain and make our required documentation accessible to the public if requested to do so in writing according to Part IV.B.2 of the MS4 Permit OHQ000003. For the 5-year term of the permit, yearly reports are prepared detailing the progress of our community in meeting the measurable goals of the program using the reporting forms provided by Ohio EPA. Reports are filed annually in accordance with the requirements of Part IV.C of the MS4 Permit #OHQ000003.

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Appendix A-5 Off-Lot Discharging HSTS Map

Appendix A-7 For Sale of Property – Health District Regulations and checklist

Appendix A-9 Township WMSC Zoning Resolutions

Appendix A-10 Structural Stormwater Control BMP map

Appendix A-11 Sample Long-Term Operation & Maintenance Agreement

Appendix A-12 Geauga County Subdivision Regulations – Drainage Maintenance District

Appendix A-13 Sample Drainage Maintenance District Agreements

Appendix A-14 Township Zoning Resolutions – lot coverages, conservation development

**Appendix A-15 Best Management Practices – Erosion and Sediment Control Field
Manual for Local Government Highway and Public Utility
Departments**

**Appendix A-16 Geauga County Pollution Prevention/Good Housekeeping
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