



Department of Public Services
Environmental Services Division
1415 N. Harrison St.
Kalamazoo, Michigan 49007-2565
(269) 337-8701
FAX (269) 337-8699

March 31, 2015

Janelle Hohm
Water Resources Division
Michigan Department of Environmental Quality
Kalamazoo District Office
7953 Adobe Road
Kalamazoo, Michigan 49009

RE: 2015 Stormwater NPDES Permit Application Submittal
MS4 Permit MIS040000 and Certificate of Coverage MIG610336

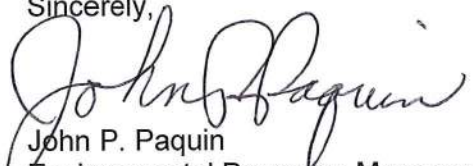
Dear Ms. Hohm:

Enclosed is the City of Kalamazoo's 2015 Permit Application for Discharge of Stormwater to Surface Waters of the State from a Municipal Separate Storm Sewer System (MS4) for the State of Michigan National Pollutant Discharge Elimination System (NPDES).

The submittal is organized as follows: Permit Application, Supplemental Text, Figures, Tables, and Attachments.

If you have any questions or comments, please contact me at 269-337-8737, via E-mail at paquinj@kalamazoocity.org, or at the address provided below.

Sincerely,


John P. Paquin
Environmental Programs Manager

Enclosure

C Sue Foune, Public Services Department Director
Michael C. Wetzel, Environmental Services Superintendent

REVISED
8-30-16



State of Michigan

National Pollutant Discharge Elimination System

Permit Application for Discharge of Storm Water to Surface Waters of the State from a Municipal Separate Storm Sewer System

DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER RESOURCES DIVISION
PERMITS SECTION
P.O. BOX 30458
LANSING, MICHIGAN 48909-7958
TELEPHONE: 517-284-5568
FAX: 517-241-9003



Michigan Department of Environmental Quality – Water Resources Division
STORM WATER DISCHARGE PERMIT APPLICATION

Do Not Return This Page with the Completed Application

PURPOSE AND AUTHORITY

The National Pollutant Discharge Elimination System (NPDES) Program protects the surface waters of the state by assuring that discharges of wastewater comply with state and federal regulations. Anyone discharging or proposing to discharge wastewater to the surface waters of the state are required to make application for and obtain a valid NPDES permit prior to wastewater discharge.

NPDES permits are required under Section 402 of the Federal Clean Water Act (the "Federal Act"), as amended (33 U.S.C. 1251 et seq., P.L. 92-500, 95-217), and under Part 31, Water Resources Protection, of Michigan's "Natural Resources and Environmental Protection Act", 1994 PA 451, as amended (NREPA). Part 31 of the NREPA also provides authority for the State to issue NPDES permits. The Michigan Department of Environmental Quality (DEQ) administers the NPDES permit program for the State of Michigan.

This Application should be used to apply for a storm water discharge from a regulated Municipal Separate Storm Sewer System (MS4) to the surface waters of the state.

ELIGIBLE PERMITTEES

Except as excluded below, any public body that owns or operates a regulated MS4 may be eligible for permit coverage including, but not limited to, the United States, the State of Michigan, a city, village, township, county, public school district, public college or university, a single purpose governmental agency, or any other governing body which is created by federal or state statute or law.

The DEQ will determine eligibility for permit coverage.

Nongovernmental entities, such as individuals, private schools, private colleges, and private universities, or industrial and commercial entities, are not eligible for permit coverage.

PENALTIES

The information in this Application is required by the Part 21 Rules of the NREPA. A municipality, business, or industry that violates the Part 21 Rules may be enjoined by action commenced by the Attorney General in a court of competent jurisdiction.

Federal and State laws provide penalties for submitting false application information. The laws imposing those penalties are cited below.

The Federal Act, Section 309(c)(4): "Any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under this chapter or who knowingly falsifies, tampers with, or renders inaccurate any monitoring device or method required to be maintained under this chapter, shall upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment shall be a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or by both."

The NREPA, Section 3115(2): "A person who at the time of the violation knew or should have known that he or she discharged a substance contrary to this part, or contrary to a permit or order issued or rule promulgated under this part, or who intentionally makes a false statement, representation, or certification in an application form pertaining to a permit or in a notice or report required by the terms and conditions of an issued permit, or who intentionally renders inaccurate a monitoring device or record required to be maintained by the department, is guilty of a felony and shall be fined not less than \$2,500.00 or more than \$25,000.00 for each violation. The court may impose an additional fine of not more than \$25,000.00 for each day during which the unlawful discharge occurred. If the conviction is for a violation committed after a first conviction of the person under this subsection, the court shall impose a fine of not less than \$25,000.00 per day and not more than \$50,000.00 per day of violation. Upon conviction, in addition to a fine, the court, in its discretion may sentence the defendant to imprisonment for not more than 2 years or impose probation upon a person for a violation of this part. With the exception of the issuance of criminal complaints, issuance of warrants, and the holding of an arraignment, the circuit court for the county in which the violation occurred has exclusive jurisdiction. However, the person shall not be subject to the penalties of this subsection if the discharge of the effluent is in conformance with and obedient to a rule, order, or permit of the department. In addition to a fine, the attorney general may file a civil suit in a court of competent jurisdiction to recover the full value of the injuries done to the natural resources of the state and the costs of surveillance and enforcement by the state resulting from the violation."

The Michigan Department of Environmental Quality will not discriminate against any individual or group on the basis of race, sex, religion, age, national origin, color, marital status, disability, or political beliefs. Questions or concerns should be directed to the Office of Personnel Services, P.O. Box 30473, Lansing, MI 48909.

Michigan Department of Environmental Quality – Water Resources Division
STORM WATER DISCHARGE PERMIT APPLICATION

PLEASE TYPE OR PRINT								
Applicants for either new permit coverage or reissuance of a permit shall include all of the following requested information for Sections I-VIII.								
SECTION I. APPLICANT NAME AND MAILING ADDRESS				Current Permit/COC Number (if applicable)				
City of Kalamazoo				MIG610336				
Additional Applicant Name Information								
Street Address or P.O. Box				e-mail				
1415 N. Harrison Street				paquinj@kalamazoo-city.org				
City or Village		State		ZIP Code				
Kalamazoo		MI		49007-2565				
Telephone (with area code)		FAX Number (with area code)						
269-337-8737		269-337-8535						
SECTION II. CONTACTS	<input checked="" type="checkbox"/> Application Contact <input checked="" type="checkbox"/> Storm Water Program Manager <input checked="" type="checkbox"/> Storm Water Billing		First Name		Last Name			
			John		Paquin			
			Title		Business			
			Water Resources Division Manager					
			Address 1		Address 2			
			1415 N. Harrison Street					
	City			State	ZIP Code			
	Kalamazoo			MI	49007-2565			
	Telephone (with area code)		FAX (with area code)		e-mail			
	269-337-8737		269-337-8535		paquinj@kalamazoo-city.org			
	<input type="checkbox"/> Application Contact <input type="checkbox"/> Storm Water Program Manager <input type="checkbox"/> Storm Water Billing		First Name		Last Name			
			Title		Business			
			Address 1		Address 2			
			City			State	ZIP Code	
			Telephone (with area code)		FAX (with area code)		e-mail	
<input type="checkbox"/> Application Contact <input type="checkbox"/> Storm Water Program Manager <input type="checkbox"/> Storm Water Billing		First Name		Last Name				
		Title		Business				
		Address 1		Address 2				
		City			State	Zip Code		
		Telephone (with area code)		FAX (with area code)		e-mail		
SECTION III. PERMIT ACTION REQUESTED:								
<input type="checkbox"/> New Authorization								
<input checked="" type="checkbox"/> Reissuance of Previous Authorization								
<input type="checkbox"/> Modification of Current Permit								
SECTION IV. REGULATED AREA								
Provide a map identifying the urbanized area within the applicant's jurisdictional boundary as defined by the 2010 Census. The regulated municipal separate storm sewer system (MS4) means an MS4 owned or operated by a city, village, township, county, district, association, or other public body created by or pursuant to state law and the nested MS4 identified in Section VI. that is located in an urbanized area and discharges storm water into surface waters of the state. The 2010 Census maps are located at								

Michigan Department of Environmental Quality – Water Resources Division
STORM WATER DISCHARGE PERMIT APPLICATION

http://www.michigan.gov/documents/deq/wrd-stormwater-urbanizedareas_374344_7.pdf

Michigan Department of Environmental Quality – Water Resources Division
STORM WATER DISCHARGE PERMIT APPLICATION

SECTION V. OUTFALLS AND POINTS OF DISCHARGE

Identify and provide the surface water of the state that receives the discharge from each of the applicant's outfalls and points of discharge in Table 1 or an alternative format. Please note that an MS4 is not a surface water of the state. For example, an open county drain that is a surface water of the state is not an MS4.

SECTION VI. NESTED JURISDICTIONS

Submit the name and general description of each nested MS4 for which a cooperative agreement has been reached to carry out the terms and conditions of the permit for the nested jurisdiction. The applicant shall be responsible for assuring compliance with the permit for those nested jurisdictions with which they have entered into an agreement and listed as part of the Application. If the primary jurisdiction and the nested jurisdiction agree to cooperate so that the terms and conditions of the permit are met for the nested MS4, the nested jurisdiction does not need to apply for a separate permit. A city, village, or township shall not be a nested jurisdiction.

NESTED JURISDICTION NAME AND GENERAL DESCRIPTION:

NA

SECTION VII. STORM WATER MANAGEMENT PROGRAM

This Application requires a description of the Best Management Practices (BMPs) the applicant will implement for each minimum control measure and the applicable water quality requirements during this permit cycle. The applicant shall incorporate the BMPs to develop a Storm Water Management Program (SWMP) as part of the Application. The SWMP shall be developed, implemented, and enforced to reduce the discharge of pollutants from the MS4 to the Maximum Extent Practicable and protect water quality in accordance with the appropriate water quality requirements of the NREPA 451, Public Acts of 1994, Part 31, and the Federal Water Pollution Control Act, as amended, (33 U.S.C. 1251 *et seq.*). The Maximum Extent Practicable may be met by implementing the BMPs identified in the SWMP and demonstrating the effectiveness of the BMPs. The applicant shall attach any appropriate and necessary documentation to demonstrate compliance with the six minimum control measures and applicable water quality requirements as part of the Application.

The applicant shall complete this Application to the best of its knowledge and ensure that it is true, accurate, and meets the minimum requirements for a SWMP to the Maximum Extent Practicable.

When answering the questions in this section of the Application, the applicant's MS4 encompasses what the applicant identified in Sections IV, V, and VI, above. The applicant shall include a measurable goal for each BMP. Each measurable goal shall include, as appropriate, a schedule for BMP implementation (months and years), including interim milestones and the frequency of the action. Each measurable goal shall have a measure of assessment to measure progress towards achieving the measurable goal. A United States Environmental Protection Agency (USEPA) guidance document on measurable goals is available at <http://www.epa.gov/npdes/pubs/measurablegoals.pdf>.

Several minimum control measures include a statement requesting the applicant to indicate in the response if you are, or will be, working collaboratively with watershed or regional partners on any or all activities to meet the minimum control measure requirements. If the applicant chooses to work collaboratively with watershed or regional partners to implement parts of the SWMP, each applicant will be responsible for complying with the minimum permit requirements.

For purposes of this Application a procedure means a written process, policy or other mechanism describing how the applicant will implement minimum requirements. It may be helpful to read all questions in each section first.

Enforcement Response Procedure (ERP)

The applicant shall describe the current and proposed enforcement responses to address violations of the applicant's ordinances and regulatory mechanisms identified in the SWMP. The following question represents the minimum requirement for the ERP. Please complete the question below.

1. Provide the ERP. The ERP shall include the applicant's expected response to violations to compel compliance with an ordinance or regulatory mechanism implemented by the applicant in the SWMP (e.g., written notices, citations, and fines). The ERP shall contain a method for tracking instances of non-compliance, including, as appropriate, the name of the person responsible for violating the applicant's ordinance or regulatory mechanism, the date and location of the violation, a description of the violation, a description of the enforcement response used, a schedule for returning to compliance, and the date the violation was resolved. The applicant may keep an electronic file or hard copy file of the enforcement tracking.

ERP Reference (page and paragraph of attachments): *e.g., Attachment A, Page 3, Section b.* Please see Attachment A. See attached additional information, August 2016.

Public Participation/Involvement Program (PPP)

The applicant shall describe the current and proposed BMPs to meet the minimum control measure requirements for the PPP to the maximum extent practicable, which shall be incorporated into the SWMP. Please indicate in your response if you are, or will be, working collaboratively with watershed or regional partners on any or all activities in the PPP during the permit cycle (i.e., identify collaborative efforts in the procedures). The following questions represent the minimum control measure requirements for the PPP. Please complete all the questions below. A measurable goal with a measure of assessment shall be included for each BMP, and, as appropriate, a schedule for implementation (months and years), including interim milestones and the frequency of the BMP.

Michigan Department of Environmental Quality – Water Resources Division
STORM WATER DISCHARGE PERMIT APPLICATION

2. Provide the procedure for making the SWMP available for public inspection and comment. The procedure shall include a process for notifying the public when and where the SWMP is available and of opportunities to provide comment. The procedure shall also include a process for complying with local public notice requirements, as appropriate.

Procedure Reference (page and paragraph of attachments): e.g., *Attachment A, Page 3, Section b*. Please see Attachment B See attached additional information, August 2016.

3. Provide the procedure for inviting public involvement and participation in the implementation and periodic review of the SWMP.

Procedure Reference (page and paragraph of attachments): Please see Attachment B See attached additional information, August 2016.

Public Education Program (PEP)

The applicant shall describe the current and proposed BMPs to meet the minimum control measure requirements for the PEP to the maximum extent practicable, which shall be incorporated into the SWMP. Please indicate in your response if you are, or will be, working collaboratively with watershed or regional partners on any or all activities in the PEP during the permit cycle. The following questions represent the minimum requirements for the PEP. Please complete all the questions below. A measurable goal with a measure of assessment shall be included for each BMP, and, as appropriate, a schedule for implementation (months and years), including interim milestones and the frequency of the BMP. The responses shall reflect the nested MS4s identified in Section VI.

4. Provide the procedure with the assessment of high priority, community-wide issues and targeted issues to reduce pollutants in storm water runoff as part of the PEP. The assessment shall include a list of the priority issues.

Procedure Reference (page and paragraph of attachments): e.g., *Attachment A, Page 3, Section b* _____
 Not applicable – PEP topics will not be prioritized.

5. The applicant shall identify applicable PEP topics below and, if prioritizing topics, prioritize based on the assessment in Question 4. The PEP topics may be prioritized as high, medium, and low or in order from 1-11 based on the assigned priority level (e.g., 1 being the highest priority topic and 11 being the lowest priority topic). For each applicable topic, identify the target audience; key message; delivery mechanism; year and frequency the BMP will be implemented; and the responsible party.

For each topic below, complete one or more of the following

- Fill out Table 2 for each applicable PEP topic.
- Reference the page number in your existing PEP document.
- Explain why the PEP activity is not applicable or a priority issue.

- A. Promote public responsibility and stewardship in the applicant's watershed(s).

Priority Ranking _____

- See Table 2
 Attach existing approved PEP (page and paragraph of attachments): Please see Table 3, Page 1, Row 1
 Not applicable. Provide explanation below.

- B. Inform and educate the public about the connection of the MS4 to area waterbodies and the potential impacts discharges could have on surface waters of the state.

Priority Ranking _____

- See Table 2
 Attach existing approved PEP (page and paragraph of attachments): Please see Table 3, Page 1, Row 2
 Not applicable. Provide explanation below.

- C. Educate the public on illicit discharges and promote public reporting of illicit discharges and improper disposal of materials into the MS4.

Priority Ranking _____

- See Table 2
 Attach existing approved PEP (page and paragraph of attachments): Please see Table 3, Page 1, Row 3
 Not applicable. Provide explanation below.

Michigan Department of Environmental Quality – Water Resources Division
STORM WATER DISCHARGE PERMIT APPLICATION

D. Promote preferred cleaning materials and procedures for car, pavement, and power washing.

Priority Ranking _____

See Table 2

Attach existing approved PEP (page and paragraph of attachments): Please see Table 3, Page 1, Row 4

Not applicable. Provide explanation below.

E. Inform and educate the public on proper application and disposal of pesticides, herbicides, and fertilizers.

Priority Ranking _____

See Table 2

Attach existing approved PEP (page and paragraph of attachments): Please see Table 3, Page 2, Row 1

Not applicable. Provide explanation below.

F. Promote proper disposal practices for grass clippings, leaf litter, and animal wastes that may enter into the MS4.

Priority Ranking _____

See Table 2

Attach existing approved PEP (page and paragraph of attachments): Please see Table 3, Page 2, Row 2

Not applicable. Provide explanation below.

G. Identify and promote the availability, location, and requirements of facilities for collection or disposal of household hazardous wastes, travel trailer sanitary wastes, chemicals, and motor vehicle fluids.

Priority Ranking _____

See Table 2

Attach existing approved PEP (page and paragraph of attachments): Please see Table 3, Page 2, Row 3

Not applicable. Provide explanation below.

H. Inform and educate the public on proper septic system care and maintenance, and how to recognize system failure.

Priority Ranking _____

See Table 2

Attach existing approved PEP (page and paragraph of attachments): Please see Table 3, Page 2, Row 4

Not applicable. Provide explanation below.

I. Educate the public on, and promote the benefits of, green infrastructure and Low Impact Development.

Priority Ranking _____

See Table 2

Attach existing approved PEP (page and paragraph of attachments): Please see Table 3, Page 3, Row 1

Not applicable. Provide explanation below.

J. Promote methods for managing riparian lands to protect water quality.

Priority Ranking _____

See Table 2

Attach existing approved PEP (page and paragraph of attachments): Please see Table 3, Page 3, Row 2

Not applicable. Provide explanation on the next page.

Michigan Department of Environmental Quality – Water Resources Division
STORM WATER DISCHARGE PERMIT APPLICATION

K. Identify and educate commercial, industrial, and institutional entities likely to contribute pollutants to storm water runoff.

Priority Ranking _____

See Table 2

Attach existing approved PEP (page and paragraph of attachments): Please see Table 3, Page 3, Row 3

Not applicable. Provide explanation below.

6. Provide the procedure for evaluating and determining the effectiveness of the overall PEP. The procedure shall include a method for assessing changes in public awareness and behavior resulting from the implementation of the PEP and the process for modifying the PEP to address ineffective implementation.

Procedure Reference (page and paragraph of attachments): Please see Table 3, Column 8

See attached additional information, August 2016.

Illicit Discharge Elimination Program (IDEP)

The applicant shall describe the current and proposed BMPs to meet the minimum control measure requirements for the IDEP to the Maximum Extent Practicable, which shall be incorporated into the SWMP. Please indicate in your response if you are or will be working collaboratively with watershed or regional partners on any or all BMPs in the IDEP during the permit cycle (e.g., identify collaborative efforts in the procedures). The following questions represent the minimum control measure requirements for the IDEP. Please complete all the questions below. A measurable goal with a measure of assessment shall be included for each BMP, and, as appropriate, a schedule for implementation (months and years), including interim milestones and the frequency of the BMP. The responses shall reflect the nested MS4s identified in Section VI.

The following definitions apply to the terms used below:

- Illicit Discharge: Any discharge to, or seepage into, an MS4 that is not composed entirely of storm water or uncontaminated groundwater except discharges pursuant to an NPDES permit. A discharge that originates from the applicant's property and meets the illicit discharge definition is considered an illicit discharge.
- Illicit Connection: A physical connection to an MS4 that primarily conveys non-storm water discharges other than uncontaminated groundwater into the MS4; or a physical connection not authorized or permitted by the local authority, where a local authority requires authorization or a permit for physical connections.

The Center for Watershed Protection has a guide on developing and implementing an IDEP available at http://www.epa.gov/npdes/pubs/idd_manualwithappendices.pdf. This guide is a useful tool to assist with completing the Application.

Storm Sewer System Map

7. Provide the location where an up-to-date storm sewer system map(s) is available. The map(s) shall identify the following: the storm sewer system, the location of all outfalls and points of discharge, and the names and location of the surface waters of the state that receive discharges from the permittee's MS4 (for both outfalls and points of discharge). A separate storm sewer system includes: roads, catch basins, curbs, gutters, parking lots, ditches, conduits, pumping devices, and man-made channels. A storm sewer system map(s) may include available diagrams, such as certification maps, road maps showing rights-of-way, as-built drawings, or other hard copy or digital representation of the storm sewer system.

The map (or maps) is available at the following location: e.g., *The Department of Public Works front office* Please see Figure 3 for map stormwater outfalls and <http://www.kalamazoocity.org/city-maps-gis>.

Illicit Discharge Identification and Investigation

8. Provide the procedure for prioritizing the applicant's MS4 for detecting non-storm water discharges. The goal of the prioritization process is to target areas with high illicit discharge potential. The procedure shall document the process for selecting each priority area using the list below.

- Areas with older infrastructure
- Industrial, commercial, or mixed use areas
- Areas with a history of past illicit discharges
- Areas with a history of illegal dumping
- Areas with septic systems
- Areas with older sewer lines or with a history of sewer overflows or cross-connections
- Areas with sewer conversions or historic combined sewer systems
- Areas with poor dry-weather water quality

Michigan Department of Environmental Quality – Water Resources Division
STORM WATER DISCHARGE PERMIT APPLICATION

- Areas with water quality impacts, including waterbodies identified in a Total Maximum Daily Load
- Priority areas applicable to the applicant not identified above

Procedure Reference (page and paragraph of attachments): *e.g., Attachment A, Page 3, Section b Attachment C, Pages 8-14.*
 Not applicable – The applicant will perform illicit discharge identification and investigation throughout the entire MS4. Skip to Question 10.

9. Provide the geographical location of each prioritized area using either a narrative description or map and identify the prioritized areas that will be targeted during the permit cycle.

IDEP Prioritized Areas (page and paragraph of attachments): NA

10. Provide the procedure for performing field observations at all outfalls and points of discharge in the priority areas as identified in the procedure above or for the entire MS4 during dry-weather at least once during the permit cycle. The procedure shall include a schedule for completing the field observations during the permit cycle or more expeditiously if the applicant becomes aware of a non-storm water discharge. *As part of the procedure, the applicant may submit an interagency agreement with the owner or operator of the downstream MS4 identifying responsibilities for ensuring an illicit discharge is eliminated if originating from the applicant's point(s) of discharge. The interagency agreement would eliminate the requirement for performing a field observation at that point(s) of discharge.*

The focus of the field observation shall be to observe the following:

- Presence/absence of flow
- Deposits/stains on the discharge structure or bank
- Vegetation condition
- Structural condition
- Biology, such as bacterial sheens, algae, and slimes
- Water clarity
- Color
- Odor
- Floatable materials

Procedure Reference (page and paragraph of attachments): Attachment C, pages 8-9; IDEP Appendix (Forms)
See attached additional information, August 2016.

11. Provide the procedure for performing field screening if flow is observed at an outfall or point of discharge and the source of an illicit discharge is not identified during the field observation. Field screening shall include analyzing the discharge for indicator parameters (e.g., ammonia, fluoride, detergents, and pH). The procedure shall include a schedule for performing field screening.

Procedure Reference (page and paragraph of attachments): Attachment C, Pages 8-12; Figure 4.

12. Provide the procedure for performing a source investigation if the source of an illicit discharge is not identified by field screening. The procedure shall include a schedule for performing a source investigation.

Procedure Reference (page and paragraph of attachments): Attachment C, Pages 8-14, Figure 4; IDEP Appendix.

13. Provide the procedure for responding to illegal dumping/spills. The procedure shall include a schedule for responding to complaints, performing field observations, and follow-up field screening and source investigations as appropriate.

Procedure Reference (page and paragraph of attachments): Attachment C, Pages 14- 16; IDEP Appendix

14. Provide the procedure for responding to illicit discharges upon becoming aware of such a discharge outside of the priority areas. The procedure shall include a schedule for performing field observations, and follow-up field screening and source investigations as appropriate.

Procedure Reference (page and paragraph of attachments): _____
 Not applicable – Field observations will be conducted at all outfalls and points of discharge

15. Provide the procedure that includes a requirement to immediately report any release of any polluting materials from the MS4 to the surface waters or groundwaters of the state, unless a determination is made that the release is not in excess of the threshold reporting quantities in the [Part 5 Rules](#), by calling the appropriate [MDEQ District Office](#), or if the notice is provided after regular working hours call the MDEQ's 24-Hour Pollution Emergency Alerting System telephone number: 800-292-4706.

Procedure Reference (page and paragraph of attachments): Attachment C, Pages 15-16; IDEP Appendix

16. If the procedures requested in Questions 8 through 14 do not accurately reflect the applicant's procedure(s), describe the alternative approach to meet the minimum requirements.

Michigan Department of Environmental Quality – Water Resources Division
STORM WATER DISCHARGE PERMIT APPLICATION

Not applicable

17. Provide the procedure for responding to illicit discharges once the source is identified. The procedure shall include a schedule to eliminate the illicit discharge and pursue enforcement actions. The procedure shall also address illegal spills/dumping.

Procedure Reference (page and paragraph of attachments): Attachment C, Pages 13-14

IDEP Training and Evaluation

18. Provide the program to train staff employed by the applicant on the following topics. The program shall include a training schedule for this permit cycle. *It is recommended that staff be trained more than once per permit cycle.*

- Techniques for identifying an illicit discharge or connection, including field observation, field screening, and source investigation.
- Procedures for reporting, responding to, and eliminating an illicit discharge or connection and the proper enforcement response.
- The schedule and requirement for training at least once during the term of this permit cycle for existing staff and within the first year of hire for new staff.

Program Reference (page and paragraph of attachments): Table 2 (SWMP), Row 8, Attachment C, Pages 7 and 8.

19. Provide the procedure for evaluating and determining the overall effectiveness of the IDEP. The procedure shall include a schedule for implementation. *Examples of evaluating overall effectiveness include, but are not limited to, the following: evaluate the prioritization process to determine if efforts are being maximized in areas with high illicit discharge potential; evaluate the effectiveness of using different detection methods; evaluate the number of discharges and/or quantity of discharges eliminated using different enforcement methods; and evaluate program efficiency and staff training frequency.*

Procedure Reference (page and paragraph of attachments): Attachment C, Pages 17-18
See attached additional information, August 2016.

Illicit Discharge Ordinance

20. Provide the ordinance or regulatory mechanism in effect that prohibits non-storm water discharges into the applicant's MS4 (except the non-storm water discharges addressed in Questions 21 and 22).

Ordinance number(s) or regulatory mechanism title(s) (attach a copy): Attachment A (Chapter 29 of Code, Section 29-4A.)

21. Does the ordinance or other regulatory mechanism exclude prohibiting the discharges or flows from firefighting activities to the applicant's MS4 and require that these discharges or flows only be addressed if they are identified as significant sources of pollutants to waters of the State? The ordinance shall not authorize illicit discharges; however, the applicant may choose to exclude prohibiting the discharges and flows from firefighting activities if they are identified as not being significant sources of pollutants to waters of the state.

Yes, ordinance or regulatory mechanism reference (page and paragraph of attachments): Attachment A, Chapter 29, 29-4A(3)
 Not applicable – All non-storm water discharges into the applicant's MS4 will be prohibited.

22. Does the ordinance or other regulatory mechanism prohibit the following categories of non-storm water discharges or flows if identified as significant contributors to violations of Water Quality Standards? The ordinance shall not authorize illicit discharges; however, the applicant may choose to exclude prohibiting the following discharges or flows if they are identified as not being a significant contributor to violations of Water Quality Standards.

- a. Water line flushing and discharges from potable water sources
- b. Landscape irrigation runoff, lawn watering runoff, and irrigation waters
- c. Diverted stream flows and flows from riparian habitats and wetlands
- d. Rising groundwaters and springs
- e. Uncontaminated groundwater infiltration and seepage
- f. Uncontaminated pumped groundwater, except for groundwater cleanups specifically authorized by NPDES permits
- g. Foundation drains, water from crawl space pumps, footing drains, and basement sump pumps
- h. Air conditioning condensation
- i. Waters from noncommercial car washing
- j. Street wash water
- k. Dechlorinated swimming pool water from single, two, or three family residences. (A swimming pool operated by the permittee shall not be discharged to a separate storm sewer or to surface waters of the state without NPDES permit authorization from the MDEQ.)

Yes, ordinance or regulatory mechanism reference (page and paragraph of attachments): Attachment A, Chapter 29, 29-4A (3)
 Not applicable – All non-storm water discharges into the applicant's MS4 will be prohibited.

23. Provide the ordinance or regulatory mechanism that regulates the contribution of pollutants to the applicant's MS4.

Michigan Department of Environmental Quality – Water Resources Division
STORM WATER DISCHARGE PERMIT APPLICATION

Ordinance or regulatory mechanism reference (page and paragraph of attachments): Attachment A, Chapter 29, 29-4A and 4B.

24. Provide the ordinance or regulatory mechanism that prohibits illicit discharges, including illicit connections and the direct dumping or disposal of materials into the applicant's MS4.

Ordinance or regulatory mechanism reference (page and paragraph of attachments): Attachment A, Chapter 29, 29-4A and 4B.

25. Provide the ordinance or regulatory mechanism with the authority established to inspect, investigate, and monitor suspected illicit discharges into the applicant's MS4.

Ordinance or regulatory mechanism reference (page and paragraph of attachments): Attachment A, Chapter 29, 29-7, 8, 11

26. Provide the ordinance or regulatory mechanism that requires and enforces elimination of illicit discharges into the applicant's MS4, including providing the applicant the authority to eliminate the illicit discharge.

Ordinance or regulatory mechanism reference (page and paragraph of attachments): Attachment A, 29-11, 13, 14

Construction Storm Water Runoff Control Program

The applicant shall describe the current and proposed BMPs to meet the minimum control measure requirements for the construction storm water runoff control program to the maximum extent practicable, which shall be incorporated into the SWMP. Please indicate in your response if you are or will be working collaboratively with watershed or regional partners on any or all requirements of this program during the permit cycle. The following questions represent the minimum control measure requirements for the construction storm water runoff control program. Please complete all the questions below. A measurable goal with a measure of assessment shall be included for each BMP, and, as appropriate, a schedule for implementation (months and years), including interim milestones and the frequency of the BMP. The responses shall reflect the nested MS4s identified in Section VI.

Qualifying Local Soil Erosion and Sedimentation Control Programs

27. Is the applicant a Part 91 Agency? A list of Part 91 agencies is available at http://www.michigan.gov/deq/0,4561,7-135-3311_4113-8870--00.html.

Yes. Choose type: County Enforcing Agency Municipal Enforcing Agency Authorized Public Agency
 No, the applicant relies on the following Qualifying Local Soil Erosion and Sedimentation Control Program (Part 91 Agency)

Construction Storm Water Runoff Control

28. Provide the procedure with the process for notifying the Part 91 Agency or appropriate staff when soil or sediment is discharged to the applicant's MS4 from a construction activity. The procedure shall allow for the receipt and consideration of complaints or other information submitted by the public or identified internally as it relates to construction storm water runoff control. For non-Part 91 agencies, consideration of complaints may include referring the complaint to the qualifying local Soil Erosion and Sedimentation Control Program as appropriate. Construction activity is defined pursuant to Part 21, Wastewater Discharge Permits, Rule 323.2102 (K). The applicant may consider as part of their procedure when and under what circumstances the Part 91 Agency or appropriate staff will be contacted.

Procedure Reference (page and paragraph of attachments): e.g., Attachment A, Page 3, Section b Attachment D "Notifications" and Attachment E.
See attached additional information, August 2016.

29. Provide the procedure for when to notify the MDEQ when soil, sediment, or other pollutants are discharged to the applicant's MS4 from a construction activity. Other pollutants include pesticides, petroleum derivatives, construction chemicals, and solid wastes that may become mobilized when land surfaces are disturbed. The applicant may consider as part of their procedure when and under what circumstances the MDEQ will be contacted.

Procedure Reference (page and paragraph of attachments): See Attachment D "Notifications" and Attachment E.

30. Provide the procedure for ensuring that construction activity one acre or greater in total earth disturbance with the potential to discharge to the applicant's MS4 obtains a Part 91 permit, or is conducted by an approved Authorized Public Agency as appropriate. Note: For applicants that conduct site plan review, the procedure must be triggered at the site plan review stage.

Procedure Reference (page and paragraph of attachments): See Attachment D "MEA for SESC"; Attachment E; Attachment F Section 1.d
See attached additional

31. Provide the procedure to advise the landowner or recorded easement holder of the property where the construction activity will occur

Michigan Department of Environmental Quality – Water Resources Division
STORM WATER DISCHARGE PERMIT APPLICATION

of the State of Michigan Permit by Rule (Rule 323.2190).

Procedure Reference (page and paragraph of attachments): See Attachment D "MEA for SESC"

Post-Construction Storm Water Runoff Program

Post-construction storm water runoff controls are necessary to maintain or restore stable hydrology in receiving waters by limiting surface runoff rates and volumes and reducing pollutant loadings from sites that undergo development or significant redevelopment.

The applicant shall describe the current and proposed BMPs to meet the minimum control measure requirements for the post-construction storm water runoff program to the maximum extent practicable, which shall be incorporated into the SWMP. Please complete the questions below as appropriate. If the "No" response is selected but a date is requested for the minimum requirement to

be available, please provide a date to meet the minimum requirement. All dates provided by the applicant in this Application should be on or before October 1, 2015. Some questions are set up to allow for additional responses to meet the minimum requirements. If space is not available for an additional response, then the minimum requirement must be met in accordance with the question. A measurable goal with a measure of assessment shall be included for each BMP, and, as appropriate, a schedule for implementation (months and years), including interim milestones and the frequency of the BMP. The responses shall reflect the nested MS4s identified in Section VI.

An applicant may reference in its ordinance or regulatory mechanism other technical documents used to implement the post-construction storm water runoff program. For example, an applicant may answer a question with a reference to a performance or technical standards document in the ordinance **and** the reference in the technical document. When referencing the ordinance, regulatory mechanism, or other technical documents, attach the document and provide the page and paragraph reference.

The MDEQ has the following resources available to assist with development of a Post-Construction Storm Water Runoff Program.

- A Post-Construction Storm Water Runoff Program Compliance Assistance Document available at www.michigan.gov/documents/deq/wrd-storm-MS4-ComplianceAssistance_470350_7.pdf
- A manual titled *Low Impact Development Manual for Michigan* available at <http://www.semcog.org/LowImpactDevelopment.aspx>. Chapter 9 of the manual provides a methodology for addressing post-construction storm water runoff.

Ordinance or Other Regulatory Mechanism

32. Is an ordinance or other regulatory mechanism in effect to address post-construction storm water runoff from new development and redevelopment projects, including preventing or minimizing water quality impacts? The ordinance or other regulatory mechanism shall apply to private, commercial, and public projects, including projects where the applicant is the developer. This requirement may be met using a single ordinance or regulatory mechanism or a combination of ordinances and regulatory mechanisms.

- Yes, ordinance or regulatory mechanism reference (page and paragraph of attachments): e.g., Attachment A, Pages 1-15 See Attachment G, Sections 5 and 6; Attachment F, Sections 8.3H1.d and 8.3H7i,k,l,m
- No, the ordinance or regulatory mechanism will be available on A revised Ordinance will be available by 10-1-15

33. Does the ordinance or other regulatory mechanism apply to projects that disturb at least one or more acres, including projects less than an acre that are part of a larger common plan of development or sale and discharge into the applicant's MS4?

- Yes, ordinance or regulatory mechanism reference (page and paragraph of attachments): See Attachment G Sections 5 and 6; Attachment F, Sections 8.3H1.d and 8.3H7i,k,l,m
- No, the ordinance or regulatory mechanism will be available on A revised Ordinance will be available by 10-1-15

Federal Facilities

Federal facilities are subject to the Energy Independence and Security Act of 2007. Section 438 of this legislation establishes post-construction storm water runoff requirements for federal development and redevelopment projects.

34. Is the applicant the owner or operator of a federal facility with a storm water discharge?

- Yes
- No, skip to Question 36

35. Is the applicant implementing the post-construction storm water runoff control requirements in Section 438 of the Energy Independence and Security Act? A guidance document is available at

- http://www.epa.gov/greeningepa/documents/epa_swm_guidance.pdf
- Yes, regulatory mechanism reference (page and paragraph of attachments): _____
- No, the regulatory mechanism will be available on _____

Water Quality Treatment Performance Standard

36. Does the ordinance or other regulatory mechanism include one or more of the following water quality treatment standards?

- Treat the first one inch of runoff from the entire project site. Ordinance or other regulatory mechanism reference (page and paragraph of attachments) _____ Skip to Question 38.
- Treat the runoff generated from 90 percent of all runoff-producing storms for the project site. Ordinance or other regulatory mechanism reference (page and paragraph of attachments) _____
- No, the ordinance or other regulatory mechanism will be available on _____

Michigan Department of Environmental Quality – Water Resources Division
STORM WATER DISCHARGE PERMIT APPLICATION

The ordinance or other regulatory mechanism is/will be available on October 1, 2015 and includes the following water quality treatment standard. Provide an explanation as to how the water quality treatment standard will prevent or minimize water quality impacts.

Revisions to the existing Performance Standards (that require treating the first one-half inch) will require treating one-inch runoff - See Attachment H "Post-Construction Stormwater Runoff Program."

37. What is the source of the rainfall data if the applicant has chosen the water quality treatment standard of requiring the treatment of the runoff generated from 90 percent of all runoff-producing storms?

The MDEQ's memo dated March 24, 2006 providing the 90 percent annual non-exceedance storm statistics. The memo is available at http://www.michigan.gov/documents/deq/lwm-hsu-nps-ninety-percent_198401_7.pdf.

An analysis of at least ten years of local published rain gauge data following the method in the March 25, 2006, MDEQ memo titled *90 Percent Annual Non-Exceedance Storms* cited above.

Other rainfall data source (page and paragraph of attachments) NA

38. Does the ordinance or other regulatory mechanism require that BMPs be **designed** on a site-specific basis to reduce post-development total suspended solids loadings by 80 percent or achieve a discharge concentration of total suspended solids not to exceed 80 milligram per liter?

Yes, ordinance or other regulatory mechanism reference (page and paragraph of attachments): The existing Performance Standards, Section Section 5.1 Uniform Standard 2 addresses sediment.

No, the ordinance or other regulatory mechanism will be available on October 1, 2015.

The ordinance or other regulatory mechanism defines treatment as follows:

The revisions to the existing Performance Standards (available by October 1, 2015) will provide greater clarity to this standard - see Attachment H "Post- Construction Stormwater Runoff Program."

Channel Protection Performance Standard

39. Does the ordinance or other regulatory mechanism require that the post-construction runoff rate and volume of discharges not exceed the pre-development rate and volume for all storms up to the two-year, 24-hour storm at the project site? At a minimum, pre-development is the last land use prior to the planned new development or redevelopment. *A spreadsheet to assist with these calculations is available at www.michigan.gov/documents/deq/wb-storm-MS4-RunoffVolume_331235_7.xls*

Yes, ordinance or other regulatory mechanism reference (page and paragraph of attachments): _____

No, the ordinance or other regulatory mechanism will be available on _____

The ordinance or other regulatory mechanism is/will be available on October 1, 2015 and includes the following channel protection standard. Provide an explanation as to how the channel protection standard will prevent or minimize water quality impacts.

See Attachment F "Post-Construction Stormwater Runoff Program."

40. Does the ordinance or other regulatory mechanism exclude any waterbodies from the channel protection performance standard? The channel protection performance standard is not required for the following waterbodies: the Great Lakes or connecting channels of the Great Lakes; Rouge River downstream of the Turning Basin; Saginaw River; Mona Lake and Muskegon Lake (Muskegon County); and Lake Macatawa and Spring Lake (Ottawa County).

Yes, ordinance or other regulatory mechanism reference (page and paragraph of attachments): _____

No, the ordinance or other regulatory mechanism will be available on _____

Not applicable

Site-Specific Requirements

41. Provide the procedure for reviewing the use of infiltration BMPs to meet the water quality treatment and channel protection standards for new development or redevelopment projects in areas of soil or groundwater contamination in a manner that does not exacerbate existing conditions. The procedure shall include the process for coordinating with MDEQ staff as appropriate.

Procedure Reference (page and paragraph of attachments): See Attachment G (Performance Standards), Section 5.1 Uniform Standard 3, and Section 5.2 See add..

42. Does the ordinance or other regulatory mechanism require BMPs to address the associated pollutants in potential hot spots as part of meeting the water quality treatment and channel protection standards for new development or redevelopment projects? Hot spots

Michigan Department of Environmental Quality – Water Resources Division
STORM WATER DISCHARGE PERMIT APPLICATION

include areas with the potential for significant pollutant loading such as gas stations, commercial vehicle maintenance and repair, auto recyclers, recycling centers, and scrap yards. Hot spots also include areas with the potential for contaminating public water supply intakes.

- Yes, ordinance or other regulatory mechanism reference (page and paragraph of attachments): See Attachment G, Section 5.2
 No, the ordinance or other regulatory mechanism will be available on _____

Off-Site Mitigation and Payment in Lieu Programs

43. Does the ordinance or other regulatory mechanism allow for the approval of off-site mitigation for redevelopment projects that cannot meet 100 percent of the performance standards on-site after maximizing storm water retention? Off-site mitigation refers to BMPs implemented at another location within the same jurisdiction and watershed/sewershed as the original project. *A watershed is the geographic area included in a 10-digit Hydrologic Unit Code and a sewershed is the area where storm water is conveyed by the applicant's MS4 to a common outfall or point of discharge.*

- Yes, ordinance or other regulatory mechanism reference (page and paragraph of attachments): _____
 No, the ordinance or other regulatory mechanism will be available on _____
 Not pursuing this option

44. Does the ordinance or other regulatory mechanism allow for the approval of payment in lieu for projects that cannot meet 100 percent of the performance standards on-site after maximizing storm water retention? A payment in lieu program refers to a developer paying a fee to the applicant that is applied to a public storm water management project within the same jurisdiction and watershed/sewershed as the original project in lieu of installing the required BMPs onsite. The storm water management project may be either a new BMP or a retrofit to an existing BMP and shall be developed in accordance with the applicant's performance standards. *A watershed is the geographic area included in a 10-digit Hydrologic Unit Code and a sewershed is the area where storm water is conveyed by the applicant's MS4 to a common outfall or point of discharge.*

- Yes, ordinance or other regulatory mechanism reference (page and paragraph of attachments): _____
 No, the ordinance or other regulatory mechanism will be available on _____
 Not pursuing this option. If "not pursuing this option" was selected for both Questions 43 and 44, skip to Question 52.

45. Does the ordinance or other regulatory mechanism establish criteria for determining the conditions under which off-site mitigation and/or payment in lieu are available and require technical justification as to the infeasibility of on-site management? The determination that performance standards cannot be met on-site shall not be based solely on the difficulty or cost of implementing, but shall be based on multiple criteria related to the physical constraints of the project site, such as: too small of a lot outside of the building footprint to create the necessary infiltrative capacity even with amended soils; soil instability as documented by a thorough geotechnical analysis; a site use that is inconsistent with the capture and reuse of storm water; too much shade or other physical conditions that preclude adequate use of plants. The criteria shall also include consideration of the stream order and location within the watershed/sewershed as it relates to the water quality impacts from the original project site (*e.g., the water quality impact from a project site with a discharge to a small-sized stream would be greater than a project site on a large river and an offset downstream of the project site may provide less water quality benefit.*) The highest preference for off-site mitigation and in lieu projects shall be given to locations that yield benefits to the same receiving water that received runoff from the original project site.

- Yes, ordinance or other regulatory mechanism reference (page and paragraph of attachments): _____
 No, the ordinance or other regulatory mechanism will be available on _____

46. Does the ordinance or other regulatory mechanism establish a minimum amount of storm water to be managed on-site as a first tier for off-site mitigation or payment in lieu? A higher offset ratio is required if off-site mitigation or payment in lieu is requested for the amount of storm water identified as the first tier. *For example, a minimum of 0.4 inches of storm water runoff shall be managed on-site as a first tier.*

- Yes, ordinance or other regulatory mechanism reference (page and paragraph of attachments): _____
 No, the ordinance or other regulatory mechanism will be available on _____
 The ordinance or other regulatory mechanism requires the following:

47. Does the ordinance or other regulatory mechanism require an offset ratio of 1:1.5 for the amount of storm water above the first tier (identified in Question 46) not managed on-site to the amount of storm water required to be mitigated at another site or for which in-lieu payments shall be made?

- Yes, ordinance or other regulatory mechanism reference (page and paragraph of attachments): _____
 No, the ordinance or other regulatory mechanism will be available on _____
 The ordinance or other regulatory mechanism requires the following:

48. Does the ordinance or other regulatory mechanism require that if demonstrated by the developer to the applicant that it is completely infeasible to manage the first tier of storm water identified in Question 47 on-site, the offset ratio for the unmanaged portion is 1:2?

- Yes, ordinance or other regulatory mechanism reference (page and paragraph of attachments): _____
 No, the ordinance or other regulatory mechanism will be available on _____

Michigan Department of Environmental Quality – Water Resources Division
STORM WATER DISCHARGE PERMIT APPLICATION

The ordinance or other regulatory mechanism requires the following:

49. Does the ordinance or other regulatory mechanism require a schedule for completing off-site mitigation and in-lieu projects? *Off-site mitigation and in-lieu projects should be completed within 24 months after the start of the original project site construction.*

Yes, ordinance or other regulatory mechanism reference (page and paragraph of attachments): _____

No, the ordinance or other regulatory mechanism will be available on _____

The ordinance or other regulatory mechanism requires the following:

50. Does the ordinance or other regulatory mechanism require that offsets and in-lieu projects be preserved and maintained in perpetuity, such as deed restrictions and long-term operation and maintenance?

Yes, ordinance or other regulatory mechanism reference (page and paragraph of attachments): _____

No, the ordinance or other regulatory mechanism will be available on _____

The ordinance or other regulatory mechanism requires the following:

51. Describe the tracking system implemented, or to be implemented, to track off-site mitigation and/or in-lieu projects.

52. Are there any other exceptions to the performance standards, other than off-site mitigation and payment in lieu, being implemented or to be implemented during the permit cycle? The applicant shall demonstrate how the exception provides an equivalent or greater level of protection as the performance standards.

Yes, demonstration reference (page and paragraph of attachments): Revised 8-16 No

Site Plan Review

53. Does the ordinance or other regulatory mechanism include a requirement to submit a site plan for review and approval of post-construction storm water runoff BMPs?

Yes, ordinance or regulatory mechanism reference (page and paragraph of attachments): See Attachment F, Section 8.3H71 and Attachment I (Checklists)

No, the ordinance or regulatory mechanism will be available on Revised Specific Performance Standards by October 1, 2015.

54. Provide the procedure for site plan review and approval.

Procedure Reference (page and paragraph of attachments): See Attachment F, Section 8.3 (H71) and Attachment I (Checklists)
See attached additional inform.

55. Provide the reference in the site plan review and approval procedure to the process for determining how the developer meets the performance standards and ensures long-term operation and maintenance of BMPs.

Procedure Reference (page and paragraph of attachments): Generally, Attachment F, Section 8.3; Attachment J;
See attached additional information, August 2016

Long-Term Operation and Maintenance of BMPs

56. Does the ordinance or other regulatory mechanism require the long-term operation and maintenance of all structural and vegetative BMPs installed and implemented to meet the performance standards in perpetuity?

Yes, ordinance or other regulatory mechanism reference (page and paragraph of attachments): We have on special executed a signed Agreement for BMP O & M but currently not for all sites.

No, the ordinance or other regulatory mechanism will be available on Revised Performance Standards by October 1, 2015 will more clearly address this requirement.

57. Does the ordinance or other regulatory mechanism require a maintenance agreement between the applicant and owners or operators responsible for the long-term operation and maintenance of structural and vegetative BMPs installed and implemented to meet the performance standards?

Michigan Department of Environmental Quality – Water Resources Division
STORM WATER DISCHARGE PERMIT APPLICATION

- Yes, ordinance or other regulatory mechanism reference (page and paragraph of attachments): Attachment F, Section 8.3H7I
- No, the ordinance or other regulatory mechanism will be available on Revised Performance Standards by October 1, 2015.
- The ordinance or other regulatory mechanism requires the following:

We have on special situations, executed a signed Agreement for BMP O & M but not all sites currently require it. The revised Performance Standards will address it for all sites. See Attachment H "Post-Construction Stormwater Runoff Control."

58. Does the maintenance agreement or other legal mechanism allow the applicant to complete the following? (Check if yes)

- Inspect the structural or vegetative BMP
- Perform the necessary maintenance or corrective actions neglected by the BMP owner or operator
- Track the transfer of operation and maintenance responsibility of the BMP (e.g., deed restrictions)

If any of the boxes above were not checked, provide a response explaining how the maintenance agreement or other legal mechanism allows the applicant to verify and ensure maintenance of the BMP.

The revised Performance Standards will address the requirement to transfer the O & M responsibility with the property owner. See attached additional information, August 2016.

59. Provide the procedure for tracking compliance with a maintenance agreement or other legal mechanism to ensure the performance standards are met in perpetuity.

Procedure Reference (page and paragraph of attachments): See attached additional information, August 2016.

Pollution Prevention and Good Housekeeping Program

The applicant shall describe the current and proposed BMPs to meet the minimum control measure requirements for the Pollution Prevention and Good Housekeeping Program to the maximum extent practicable, which shall be incorporated into the SWMP. The applicant shall develop and implement a Pollution Prevention and Good Housekeeping Program to prevent or reduce the discharge of pollutants from municipal facilities and operations.

The following definitions apply to the terms used below:

- Fleet: A group of vehicles owned or operated as a unit.
- Maintenance (includes, but not limited to): adding/changing vehicle fluids, fueling, lubrication, painting, mechanical repairs, parts degreasing, and vehicle/equipment washing.
- Storage Yard (includes, but not limited to): areas where vehicles are stored longer than overnight/weekend; areas where road maintenance materials are stored; areas where vehicle maintenance materials are stored; areas where chemicals in bulk are stored; areas where catch basin cleaning wastes are stored; and areas where maintenance equipment such as mowers, tractors, vector trucks, and sweepers is stored.

Please complete the questions below as appropriate. A "Not Applicable" response is appropriate in cases where the applicant does not own or operate a municipal facility or storm water structural control or does not perform the operation in the question. A measurable goal with a measure of assessment shall be included for each BMP, and, as appropriate, a schedule for implementation (months and years), including interim milestones and the frequency of the BMP. The responses shall reflect the nested MS4s identified in Section VI.

Municipal Facility and Structural Storm Water Control Inventory

60. Provide an up-to-date inventory of applicant-owned or operated facilities and storm water structural controls with a discharge of storm water to surface waters of the state. The inventory shall include the location of each facility. **Provide an estimate of the number of structural storm water controls throughout the entire MS4 for each applicable category below (e.g., 100 catch basins and 7 detention basins).**

Inventory Reference (Page and Paragraph of Attachments): *e.g., Attachment A, Page 3, Section b* Location of parks, cemeteries, Public Safety facilities, golf courses, etc. available on-line.

Check all applicant-owned or operated facilities with a discharge of storm water to surface waters of the state:

- | | |
|----------------------------------------------------------------------------------|--------------------------------------------------------------|
| <input checked="" type="checkbox"/> Administration buildings | <input type="checkbox"/> Animal Control Building |
| <input type="checkbox"/> Airports | <input type="checkbox"/> Bus Stations and Garages |
| <input checked="" type="checkbox"/> Cemeteries | <input type="checkbox"/> Composting facilities |
| <input checked="" type="checkbox"/> Equipment storage and maintenance facilities | <input checked="" type="checkbox"/> Fire Stations |
| <input type="checkbox"/> Fuel Farms | <input type="checkbox"/> Hazardous waste disposal facilities |
| <input type="checkbox"/> Hazardous waste handling and transfer facilities | <input type="checkbox"/> Landfills |
| <input type="checkbox"/> Landscape maintenance facilities | <input type="checkbox"/> Libraries |

Michigan Department of Environmental Quality – Water Resources Division
STORM WATER DISCHARGE PERMIT APPLICATION

- | | |
|----------------------------------------------------------------|---------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> Materials storage yards | <input type="checkbox"/> Mosquito Control Facility |
| <input checked="" type="checkbox"/> Parks | <input type="checkbox"/> Pesticide storage facilities |
| <input checked="" type="checkbox"/> Police stations | <input checked="" type="checkbox"/> Public golf courses |
| <input type="checkbox"/> Public parking lots | <input type="checkbox"/> Public schools |
| <input checked="" type="checkbox"/> Public works yards | <input type="checkbox"/> Recycling facilities |
| <input checked="" type="checkbox"/> Salt storage facilities | <input type="checkbox"/> Solid waste handling and transfer facilities |
| <input checked="" type="checkbox"/> Vacant land and open space | <input checked="" type="checkbox"/> Vehicle storage and maintenance yards |
| <input checked="" type="checkbox"/> Outdoor wash areas | <input type="checkbox"/> Other facilities – Provide a description below: |

Administration buildings are located at 415 Stockbridge Avenue, 215 W. South Street. The City's Wastewater Treatment Plant (salt) and Metro Transit Facility are separately permitted for stormwater. SWPPP available for 415 Stockbridge (Fleet/Yards).

Check all applicant-owned or operated structural storm water controls with a discharge of storm water to surface waters of the state:

- | | |
|----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> Catch basins | <input type="checkbox"/> Constructed wetlands |
| <input checked="" type="checkbox"/> Detention basins | <input checked="" type="checkbox"/> Infiltration basins and trenches |
| <input type="checkbox"/> Oil/water separators | <input type="checkbox"/> Porous pavement |
| <input checked="" type="checkbox"/> Pump Stations | <input type="checkbox"/> Rain gardens |
| <input type="checkbox"/> Secondary containment | <input checked="" type="checkbox"/> Underground storage vaults or tanks |
| <input type="checkbox"/> Vegetated swales | |
| <input checked="" type="checkbox"/> Other structural storm water controls – Provide a description below: | |

See Figures 3, 5, 6 and Tables 5 and 6. Pump Station located near VanderSalm Court. Permitted USTs at 415 Stockbridge.

61. Provide the location where an up-to-date map (or maps) is available with the location of the facilities and structural storm water controls identified in Question 60. *The location of the facilities and structural storm water controls may be included on the storm sewer system map maintained for the IDEP.*

The map (or maps) is available at the following location: See Figures 3, 5, and 6, and assets available on the on-line GIS.

62. Provide the procedure for updating and revising the inventory in Question 60 and map (or maps) identified in Question 61 as facilities and structural storm water controls are added, removed, or no longer owned or operated by the applicant. *A suggested timeframe for updating/revising the inventory and map(s) is 30 days following adding/removing a facility or structural storm water control.*

Procedure Reference (page and paragraph of attachments): See Supplemental Text.
See attached additional information, August 2016.

Facility-Specific Storm Water Management

63. Provide the procedure for assessing each facility identified in Question 60 for the potential to discharge pollutants to surface waters of the state. The procedure shall include a process for updating and revising the assessment. *A recommended timeframe for updating/revising the assessment is 30 days prior to discharging storm water from a new facility and within 30 days of determining a need to update/revise the facility assessment.*

The applicant should consider the following factors when assessing each facility:

- Amount of urban pollutants stored at the site (e.g., sediment, nutrients, metals, hydrocarbons, pesticides, fertilizers, herbicides, chlorides, trash, bacteria, or other site-specific pollutants)
- Identification of improperly stored materials
- The potential for polluting activities to be conducted outside (e.g., vehicle washing)
- Proximity to waterbodies
- Poor housekeeping practices
- Discharge of pollutants of concern to impaired waters

Procedure Reference (page and paragraph of attachments): See attached additional information, August 2016 (Revised)

Not Applicable – The applicant does not own a facility that discharges storm water to surface waters of the state. Skip to Question 71.

64. Provide the list of prioritized facilities using the assessment in Question 63. Each facility shall be prioritized based on having the high, medium, or low potential to discharge pollutants to surface waters of the state. Facilities with the high potential for pollutant runoff shall include, but are not limited to, the applicant's fleet maintenance and storage yards. The applicant may submit a demonstration with a description of how the applicant's fleet maintenance and storage yard has the low potential to discharge pollutants to surface waters of the state.

Prioritized Facility List (page and paragraph of attachments): _____

Fleet Maintenance and Storage Yard Demonstrations (page and paragraph of attachments): See Attachment L.

65. Is a site-specific standard operating procedure (SOP) available identifying the structural and non-structural storm water controls implemented and maintained to prevent or reduce pollutant runoff at each facility with the high potential for pollutant runoff? The

Michigan Department of Environmental Quality – Water Resources Division
STORM WATER DISCHARGE PERMIT APPLICATION

SOP shall be available at each facility with the high potential for pollutant runoff and upon request from the MDEQ. The SOP shall identify the person responsible for oversight of the facility. *The MDEQ may request the submission of the SOP during the application review process.*

- Yes, a site-specific SOP is available at each facility with the high potential for pollutant runoff
 Not Applicable – The applicant does not own or operate any facilities with the high potential for pollutant runoff. Skip to Question 70.

66. Provide the reference in the SOP, for each facility with the high potential for pollutant runoff, to the following: the list of significant materials stored on-site that could pollute storm water; the description of the handling and storage requirements for each significant material; and the potential to discharge the significant material.

SOP Reference (page and paragraph of attachments): See separate SWPPP.

This space is available to reference multiple site-specific SOPs
See attached additional information, August 2016.

67. Provide the reference in the SOP, for each facility with the high potential for pollutant runoff, identifying the good housekeeping practices implemented at the site. *Good housekeeping practices include keeping the facility neat and orderly, properly storing and covering materials, and minimizing pollutant sources to prevent or reduce pollutant runoff.*

SOP Reference (page and paragraph of attachments): See separate SWPPP.

This space is available to reference multiple site-specific SOPs
See attached additional information, August 2016.

68. Provide the reference in the SOP, for each facility with the high potential for pollutant runoff, to the description and schedule for conducting routine maintenance and inspections of storm water management and control devices to ensure materials and equipment are clean and orderly and to prevent or reduce pollutant runoff. *A biweekly schedule is recommended for routine inspections.*

SOP Reference (page and paragraph of attachments): See separate SWPPP.

This space is available to reference multiple site-specific SOPs
See attached additional information, August 2016.

69. Provide the reference in the SOP, for each facility with the high potential for pollutant runoff, to the description and schedule for conducting a comprehensive site inspection at least once every six months. The comprehensive inspection shall include an inspection of all structural storm water controls and a review of non-structural storm water controls to prevent or reduce pollutant runoff.

SOP Reference (page and paragraph of attachments): See separate SWPPP.

This space is available to reference multiple site-specific SOPs
See attached additional information, August 2016.

70. Provide the procedure identifying the BMPs currently implemented or to be implemented during the permit cycle to prevent or reduce pollutant runoff at each facility with the **medium and lower potential for the discharge of pollutants** to surface waters of the state using the assessment and prioritized list in Questions 63 and 64.

Procedure Reference (page and paragraph of attachments): See Table 2, Row 10, Table 4 and Attachment J; annual inspections and maintenance as needed.
See att

Structural Storm Water Control Operation and Maintenance Activities

71. Provide the procedure for prioritizing each catch basin for routine inspection, maintenance, and cleaning based on preventing or reducing pollutant runoff. The procedure shall include assigning a priority level for each catch basin and the associated inspection, maintenance and cleaning schedule based on preventing or reducing pollutant runoff. The procedure shall include a process for

Michigan Department of Environmental Quality – Water Resources Division
STORM WATER DISCHARGE PERMIT APPLICATION

updating/revising the priority level for a catch basin giving consideration to inspection findings and citizen complaints. A recommended timeframe for updating/revising the procedure is 30 days following the construction of a catch basin or a change in priority level.

- Procedure Reference (page and paragraph of attachments): See attached additional information, August 2016 (Revised)
 Not Applicable – The applicant does not own or operate catch basins. Skip to Question 75.

72. Provide the geographic location of the catch basins in each priority level using either a narrative description or map.

Catch Basin Priority Location (page and paragraph of attachments): NA - See attached additional information, August 2016.

73. Provide the procedure for inspecting, cleaning, and maintaining catch basins to ensure proper performance. Proper cleaning methods include ensuring accumulated pollutants are not discharged during cleaning and are removed prior to discharging to surface waters of the state. A compliance assistance document titled *Catch Basin Cleaning Activities Guidance Document* is available at http://www.michigan.gov/documents/deq/wb-stormwater-CatchBasinGuidance_216198_7.pdf.

Procedure Reference (page and paragraph of attachments): See Table 2, Row 15, Attachment M (MDEQ Guidance Document) See attached additional information 8-16

74. Provide the procedure for dewatering, storage, and disposal of materials extracted from catch basins. A compliance assistance document titled *Catch Basin Cleaning Activities Guidance Document* is available at http://www.michigan.gov/documents/deq/wb-stormwater-CatchBasinGuidance_216198_7.pdf.

Procedure Reference (page and paragraph of attachments): See Table 2, Row 15, Attachment M (MDEQ Guidance Document) See attached additional inform. 8-16

75. Provide the procedure for inspecting and maintaining the structural storm water controls identified in Question 60, excluding the structural storm water controls included in an SOP as part of Question 65 and catch basins. The procedure shall include a description and schedule for inspecting and maintaining each structural storm water control and the process for disposing of maintenance waste materials. The procedure shall require that controls be maintained to reduce to the maximum extent practicable the contribution of pollutants to storm water. The procedure shall include a process for updating/revising the procedure to ensure a maintenance and inspection program for each structural storm water control. A recommended timeframe for updating/revising the procedure is 30 days following the implementation of a new structural storm water control.

- Procedure Reference (page and paragraph of attachments): Table 2, Row 10; Attachment I - Annual inspections -disposal practices per regulations.

See attached

- Not Applicable – Applicant does not own or operate any structural storm water controls

76. Provide the procedure requiring new applicant-owned or operated facilities or new structural storm water controls for water **quantity** be designed and implemented in accordance with the post-construction storm water runoff control performance standards and long-term operation and maintenance requirements.

Procedure Reference (page and paragraph of attachments): See Supplemental Text.

Municipal Operations and Maintenance Activities

77. Provide the procedure with the assessment of the applicant's operation and maintenance activities for the potential to discharge pollutants to surface waters of the state. The assessment shall identify all pollutants that could be discharged from each applicable operation and maintenance activity and the BMPs being implemented or to be implemented to prevent or reduce pollutant runoff. The procedure shall include a process for updating and revising the assessment. A suggested timeframe for updating/revising the assessment is 30 days following adding/removing BMPs to address new and existing operation and maintenance activities.

At a minimum, the procedure shall include assessing the following municipal operation and maintenance activities if applicable (check all that apply):

- Road, parking lot, and sidewalk maintenance (e.g., pothole, sidewalk, and curb and gutter repair)
- Bridge maintenance
- Right-of-way maintenance
- Unpaved road maintenance
- Cold weather operations (e.g., plowing, sanding, application of deicing agents, and snow pile disposal)
- Vehicle washing and maintenance of applicant-owned vehicles (e.g., police, fire, school bus, public works)

- Procedure Reference (page and paragraph of attachments): See attached additional information, August 2016.
 Not Applicable – Provide an explanation below.

Michigan Department of Environmental Quality – Water Resources Division
STORM WATER DISCHARGE PERMIT APPLICATION

See Supplemental Text.

78. Provide the procedure for prioritizing applicant-owned or operated streets, parking lots, and other impervious infrastructure for street sweeping based on the potential to discharge pollutants to surface waters of the state. The procedure shall include assigning a priority level for each parking lot and street and the associated cleaning schedule (i.e., sweeping frequency and timing) based on preventing or reducing pollutant runoff. The procedure shall include a process for updating/revising the priority level giving consideration to street sweeping findings and citizen complaints. *A recommended timeframe for updating/revising the prioritization is 30 days following the construction of a new street, parking lot, or other applicant-owned or operated impervious surface or within 30 days of identifying a need to revise a priority level.*

Procedure Reference (page and paragraph of attachments): See Supplemental Text.

See attached additional information, August 2016.

Not Applicable – The applicant does not own or operate any streets, parking lots, or other impervious infrastructure. Skip to Question 82.

79. Provide the geographic location of the streets, parking lots, and other impervious surfaces in each priority level using either a narrative description or map.

Street Sweeping Priority Location (page and paragraph of attachments): The downtown area is the priority (see Table 2).
See attached additional information, August 2016.

80. Provide the procedure identifying the sweeping methods based on the applicant's sweeping equipment and use of additional resources in sweeping seasonal leaves or pick-up of other materials. *Proper sweeping methods include operating sweeping equipment according to the manufacturers' operating instructions and to protect water quality.*

Procedure Reference (page and paragraph of attachments): See Supplemental Text.

81. Provide the procedure for dewatering, storage, and disposal of street sweeper waste material. *A compliance assistance document titled Catch Basin Cleaning Activities Guidance Document is available at http://www.michigan.gov/documents/deq/wb-stormwater-CatchBasinGuidance_216198_7.pdf*

Procedure Reference (page and paragraph of attachments): See Supplemental Text.

Managing Vegetated Properties

82. Provide the procedure requiring the applicant's pesticide applicator to be certified by the State of Michigan as an applicator in the applicable category, to prevent or reduce pollutant runoff from vegetated land. A description of the categories is located at http://www.michigan.gov/mdard/0,4610,7-125-1569_16988_35289-11992--,00.html

Procedure Reference (page and paragraph of attachments): See Supplemental Text and Attachment P.

Not Applicable – Provide an explanation below (e.g., the applicant's pesticide applicator only uses ready-to-use products from the original container).

Contractor Requirements and Oversight

83. Provide the procedure requiring contractors hired by the applicant to perform municipal operation and maintenance activities comply with all pollution prevention and good housekeeping BMPs as appropriate. The procedure shall include the process implemented for providing oversight of contractor activities to ensure compliance.

Procedure Reference (Page and Paragraph of Attachments): Stormwater certified staff oversee contractor work; Table 2, Row 8.

Employee Training

84. Provide the employee training program to train employees involved in implementing or overseeing the pollution prevention and good housekeeping program. The program shall include the training schedule. At a minimum, existing staff shall be trained once during the permit cycle and within the first year of hire for new staff.

Program Reference (Page and Paragraph of Attachments): See Table 2, Row 8.

Michigan Department of Environmental Quality – Water Resources Division
STORM WATER DISCHARGE PERMIT APPLICATION

Total Maximum Daily Load (TMDL) Implementation Plan

The following questions address discharges to impaired waters with a USEPA approved TMDL that includes a pollutant load allocation assigned to the permittee's MS4. BMPs shall be implemented to reduce the discharge of the TMDL pollutant from the MS4 to make progress in meeting Water Quality Standards. Applicable TMDLs are TMDLs approved prior to the applicant being notified of the need to apply for permit reissuance. Applicable TMDLs for the applicant were provided in the application notice letter.

The applicant shall describe the current and proposed BMPs to meet the minimum requirements for the TMDL Implementation Plan, which shall be incorporated into the SWMP. Please indicate in your response, if you are or will be working collaboratively with watershed or regional partners on any or all activities in the TMDL Implementation Plan during the permit cycle. The following questions represent the minimum requirements for a TMDL Implementation Plan. Please complete the following questions as appropriate. A measurable goal with a measure of assessment shall be included for each BMP, and, as appropriate, a schedule for implementation (months and years), including interim milestones and the frequency of the BMP. The responses shall reflect the nested MS4s identified in Section VI.

The USEPA has a document to assist with developing a TMDL Implementation Plan available at http://water.epa.gov/lawsregs/lawsguidance/cwa/tmdl/upload/region3_factsheet_tmdl.pdf.

85. Was a TMDL included in the applicant's application notice?

Yes, the following approved USEPA TMDL(s) was included in my application notice letter:

See Attachment N "Total Maximum Daily Load (TMDL) Implementation Plan."

No, Skip to Section VIII.

86. Provide the procedure for identifying and prioritizing BMPs currently being implemented or to be implemented during the permit cycle to make progress toward achieving the pollutant load reduction requirement in each TMDL identified in Question 85. The procedure shall include a process for reviewing, updating, and revising BMPs implemented or to be implemented to ensure progress in achieving the TMDL pollutant load reduction.

Procedure Reference (page and paragraph of attachments): *e.g., Attachment A, Page 3, Section b* See Supplemental Text.

87. Provide the list of prioritized BMPs currently being implemented or to be implemented during the permit cycle to make progress toward achieving the pollutant load reduction requirement in each TMDL identified in Question 85. Each BMP shall include a reference to the targeted TMDL pollutant.

TMDL BMP Priority List (page and paragraph of attachments): See Supplemental Text.

88. Provide the monitoring plan for assessing the effectiveness of the BMPs currently being implemented, or to be implemented, in making progress toward achieving the TMDL pollutant load reduction requirement, including a schedule for completing the monitoring. Monitoring shall be specifically for the pollutant identified in the TMDL. Monitoring may include, but is not limited to, outfall monitoring, in-stream monitoring, or modeling. At a minimum, monitoring shall be conducted two times during the permit cycle or at a frequency sufficient to determine if the BMPs are adequate in making progress toward achieving the TMDL pollutant load reduction. *Existing monitoring data may be submitted for review as part of the plan to meet part of the monitoring requirement.*

TMDL Monitoring Plan (page and paragraph of attachments): See Attachment N.

SECTION VIII. CERTIFICATION

Rule 323.2114(1-4), promulgated under the NREPA, requires that this Application be signed by either a principal executive officer or ranking elected official (e.g., mayor, village president, city or village manager, or clerk). Note: If the signatory is not a principal executive officer or ranking elected official, but is authorized to sign the Application, please provide documentation of the authorization.

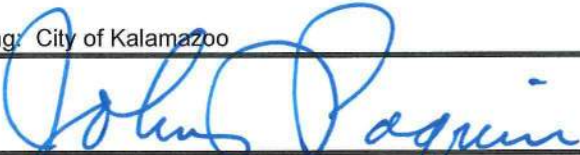
"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for having knowledge of violations."

I understand that my signature constitutes a legal agreement to comply with the requirements of the NPDES Permit. I certify under penalty of law that I possess full authority on behalf of the legal owner/permittee to sign and submit this Application. I certify to the best of my knowledge that it is true, accurate and meets the minimum permit requirements for a SWMP to the MEP.

Print Name: John P. Paquin

Title: Water Resources Division Manager (Revised)

Michigan Department of Environmental Quality – Water Resources Division
STORM WATER DISCHARGE PERMIT APPLICATION

Representing: City of Kalamazoo	
Signature: 	Date: 8-30-16

Please submit this completed Application and attachments to:

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER RESOURCES DIVISION
PERMITS SECTION
P.O. BOX 30458
LANSING, MICHIGAN 48909-7958



STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
KALAMAZOO DISTRICT OFFICE



RICK SNYDER

GOVERNOR

KEITH CREAGH

DIRECTOR

May 20, 2016

Mr. John Paquin
Environmental Programs Manager
Department of Public Services
Environmental Services Division
City of Kalamazoo
1415 North Harrison Street
Kalamazoo, Michigan 49007

Dear Mr. Paquin:

SUBJECT: National Pollutant Discharge Elimination System (NPDES)
Municipal Separate Storm Sewer System (MS4) Permit Application Comments
Designated Name: Kalamazoo MS4-Kalamazoo

The Department of Environmental Quality (DEQ), Water Resources Division, received the application for reissuance of the NPDES MS4 permit on April 3, 2015. Staff of the DEQ have reviewed the application. The DEQ appreciates the efforts to prepare and submit a comprehensive application; however, before the application can be considered complete, additional information and clarification is needed to continue the review process.

The attached application comments are based on a review of the procedures, ordinances, or regulatory mechanisms referenced in the application. The comments include a list of items to be addressed which corresponds to the numbered "Questions" in Section VII of the application.

Please provide the requested information, which may include a revised application form or sections thereof, to my attention, by August 31, 2016. In the response, please certify whether the revised submittal includes any changes or additions besides those requested in the attachment. If the submittal does include changes/additions, please describe and identify the location of the changes/additions.

Once the information is received and the application is complete, the DEQ will continue to process the permit reissuance. Please feel free to contact me if you have any questions.

Sincerely,

Janelle Hohm
Kalamazoo District Office
Water Resources Division
269-568-2699
hohmj@michigan.gov

Appendix 1: Comments on City of Kalamazoo MS4 Permit Application

Section VII. Storm Water Management Program

1. Provide the ERP.

Comment: The City provided a copy of Chapter 29 of the City Code of Ordinances “Stormwater Systems” and Chapter 30 “Soil Erosion and Sedimentation Control”. These ordinances give the City authority to address violations, but there is no explanation of how the City will follow up on violations and track status. Please include this explanation in a revised ERP.

2. Provide the procedure for making the Storm Water Management Program (SWMP) available for public inspection and comment.

Comment: The City has committed to posting the SWMP on the www.protectyourwater.net and www.kalamazoo.org for public review. The City needs to commit to a mechanism for making the public aware of the opportunity to view the documents online and comment. For example, a notice could be placed in the newspaper and/or The View from the Curb. Please revise the Public Participation/Involvement Program to include a commitment to notify members of the public who do not routinely visit the City’s website.

3. Provide the procedure for inviting public involvement and participation in the implementation and periodic review of the SWMP.

Comment: The City is committed to accepting public comments on the SWMP, and revising the SWMP annually as needed. However, there was no mention of involving the public in the implementation of the SWMP. Please revise the Public Participation/Involvement Program to include one or more mechanisms for the public to be involved in implementation of the SWMP.

- 4.-6. Public Education Program (PEP)

Comment: The City has committed to several public education delivery mechanisms, but has not committed to a minimum frequency for each task (e.g. frequency of radio ads, classroom presentations, storm water related articles, etc.). The City needs to revise the PEP to include a measurable goal with a measure of assessment for each Best Management Practice (BMP), and as appropriate, a schedule for implementation, including interim milestones and the frequency of the BMP. The City will need to measure not only effort, but also change in awareness and behavior. This will likely need to be assessed through a public survey. The survey does not necessarily need to be conducted through the mail; it could be a short survey given to residents that stop to visit a booth at an event. Examples of items that may be measured include awareness of the IDEP reporting system, or knowledge of the ultimate discharge location of storm drains.

- 8.-19. Illicit Discharge Elimination Plan (IDEP)

Comment: The City plans to assess effectiveness by determining the progress of its components such as number of outfall inspections, field investigations, source investigations, facility evaluations, number of illicit connections discovered, and number of illicit connections

eliminated. Please revise the IDEP to include a procedure for evaluating and determining the overall effectiveness of the IDEP. For example, different screening techniques and enforcement protocols could be compared to determine which methodologies have the most effective outcomes.

The Implementation Schedule (page 18) states that, depending on the City's schedule, the City may rely on other MS4s to notify the City if dry weather flows are entering another MS4 system from the City's points of discharge. Please note that the City must either conduct dry weather screening at these points of discharge, or submit an interagency agreement with the owner or operator of the downstream MS4 identifying responsibilities for ensuring an illicit discharge is eliminated if originating from the applicant's point(s) of discharge. The interagency agreement would eliminate the requirement for performing a field observation at that point(s) of discharge.

Please either revise the City's procedure to include routine dry weather screening at all points of discharge, or submit the necessary interagency agreements.

Also, please "find and replace" DNRE with DEQ in the IDEP document.

28.-31. Construction Storm Water Runoff Control

Comment: Under 30. and 31., the City is required to provide the procedure for ensuring that construction activities with the potential to discharge to the City's MS4 are covered under the appropriate Soil Erosion and Sedimentation Control permits and /or procedures. The City referenced Attachment D, which does not include an actual procedure for staff use. Please revise the SWMP to include an appropriate procedure for staff use. This may include, for example, a decision tree and/or checklist that staff use when reviewing a site plan.

32.-59. Post-Construction Storm Water Runoff Program

Comments:

41. In the City's Performance Standards, there is a reference to high risk land uses, but there is no reference to the use of infiltration BMPs in areas of existing soil or groundwater contamination. Section 9.0 Contaminated Properties states that site-specific requirements may apply, and references the DEQ Post-Construction Storm Water Runoff Controls Compliance Assistance Document. This response is incomplete. The statement that site-specific requirements "may apply" does not establish criteria, and leaves potential for infiltration in areas of groundwater contamination. The application requirement specifies that the applicant must communicate with Remediation and Redevelopment Division (RRD) staff when reviewing a site plan for a Part 201 or Part 213 site to ensure that post-construction storm water controls align with the remediation efforts. Please revise the Performance Standards and/or other relevant documentation to direct City staff to communicate with RRD staff as appropriate.

52. The application states, "Alternatives will be considered if they meet or exceed the City's revised Performance Standard". This statement needs clarification, because the question

relates to exceptions to the Performance Standards, and the application states that all sites will be required to meet the Performance Standards. Going above and beyond permit requirements is not an alternative. Please either clarify, or check “no” if appropriate.

54.-55. The procedure for site plan review and approval was not submitted. The checklists only asked for the location of storm water facilities. A procedure is needed which explains how the site plan is reviewed by a qualified individual to make sure that storm water controls are in compliance with the performance standards. Also, an internal procedure is needed to demonstrate the process for determining how the developer meets the performance standards and ensures long-term operation and maintenance of BMPs. Please submit these internal procedures as part of the revised SWMP.

58. The application states that the maintenance agreement or other legal mechanism allows the applicant to 1) inspect the structural or vegetative BMP, 2) perform the necessary maintenance or corrective actions neglected by the BMP owner or operator, and 3) track the transfer of operation and maintenance responsibility of the BMP. DEQ staff were not able to locate this in the Performance Standards. Please provide a copy of the template for the maintenance agreement in the revised SWMP.

59. The City needs to provide the procedure for tracking compliance with a maintenance agreement or other legal mechanism to ensure the performance standards are met in perpetuity. Please include this procedure or mechanism in the revised SWMP.

60.-84. Pollution Prevention and Good Housekeeping Program

Comments:

62. The procedure that was included in the supplemental text needs to include more details regarding the update of the inventory and map (required by 60. And 61.) as facilities and structural storm water controls are added, removed, or no longer owner or operated by the applicant. How will Engineering Division and Environmental Services Division be prompted to relay these updates to each other and to Information Technology Staff? Please explain in a more detailed procedure.

63. The application needs to explain how a new facility would be evaluated to determine if a SWPPP/SOP is needed. The application only states that one facility has a SWPPP. A procedure needs to be included in the revised SWMP.

65.-69. A Standard Operating Procedure (SOP) was submitted with the permit application, but is dated 2010 and needs to be updated to reflect current site conditions, significant materials inventory, and personnel. Also, the SOP would be improved if DEQ’s most recent Storm Water Pollution Prevention Plan (SWPPP) template is used for this revision (available at www.michigan.gov/stormwater, under “Information” choose “Industrial Storm Water”). If using DEQ’s recommended template, the SWPPP should have the first column of both the routine inspection sheet and comprehensive inspection sheet filled out to show areas inspected. If another type of inspection sheet or system is being used, that should be provided.

70. Attachment J contains inspection sheets for storm water treatment devices. Other types of exposures (e.g. chemical storage at parks) are not being addressed. Please address these additional potential sources of pollutant runoff in the revised SWMP.

71. Inspecting catch basins only in response to flooding complaints is not sufficient. Sediment needs to be removed from sumps when a certain level is reached (typically 30%-50% full) in order to allow settling of solids, and protection of water quality. A procedure is needed for prioritizing catch basins for inspection, maintenance, and cleaning. Please include this procedure in the revised SWMP.

72. Catch basin priority location needs to be completed. Please include this information in the revised SWMP.

73. and 74. The procedure is not very detailed, but it appears that the sludge from catch basin cleanouts is taken directly to the WWTP. Please provide info about when catch basins will be cleaned (e.g. when 50% full) in the revised SWMP.

75. The current procedure includes annual inspections of structural controls, and disposal of catch basin cleanout in the sanitary sewer. The procedure needs to be revised to include a process for updating/revising the procedure. Please include this process in the revised SWMP.

77. The referenced table is not a procedure for assessment of the applicant's operation and maintenance activities for potential to discharge pollutants to surface waters. It is a list of BMPs that are being implemented, with frequency/schedule and method of evaluating effectiveness (e.g. inspect and maintain all storm water controls annually, street sweeping, leaf collection, bulk trash, catch basin/inlet cleaning). A procedure needs to be integrated into the revised SWMP, which shall identify pollutants and associated BMPs, and also include a process for updating and revising the assessment.

78. No procedure for prioritization of streets and parking lots for street sweeping was included, except responding to complaints at the City's discretion. Please include the required procedure in the revised SWMP.

79. The downtown area is listed as the priority for street sweeping. No map was provided. Which streets/areas constitute "downtown"? Please provide this information in the revised SWMP.

**STATE OF MICHIGAN
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM**

**City of Kalamazoo
Permit Application for Discharge of Stormwater
to Surface Waters of the State from a Municipal Separate Storm Sewer System (MS4)**

Supplemental Text (Revised 8-16)

Answers to the questions in this Stormwater Discharge Permit Application are provided on the actual Permit Application Form and/or below, unless otherwise included and referenced as an enclosed Figure, Table or an Attachment.

SECTION IV. REGULATED AREA – Please see Figure 1 for the map of the Kalamazoo Urbanized Area, and Figure 2 that shows the Sub-Watersheds within the City of Kalamazoo.

SECTION V. OUTFALLS AND POINTS OF DISCHARGE – Please see Figure 3 for the Outfall locations and Table 1 for the Points of Discharge.

SECTION VI. NESTED JURISDICTIONS – NA.

SECTION VII. STORMWATER MANAGEMENT PROGRAM – Please see Table 2 for the Stormwater Management Plan (SWMP).

1. Provide the Enforcement Response Procedure (ERP) - Please see Attachment A that contains Chapter 29 of the City Code of Ordinances “Stormwater System” – the primary ERP. The secondary ERP is the City’s Chapter 30 “Soil Erosion and Sedimentation Control” (Attachment E). **See attached additional information, August 2016.**
2. Public Participation/Involvement Program (PPP) – Please see Attachment B for the procedure reference for public inspection and comment. **See attached additional information, August 2016.**
3. Public Participation/Involvement Program (PPP) – Please see Attachment B for the procedure reference for inviting public involvement and participation. **See attached additional information, August 2016.**
4. Public Education Program (PEP) – NA **See attached additional information, August 2016.**
5. See Table 3 for the PEP and Sections A through K of the Permit Application.
6. See Table 3, Column 8.
7. Storm Sewer System Map – Please see Figure 3 for the “Stormwater Outfalls within the City of Kalamazoo” and the on-line City Geographic Information System (GIS) located at <http://www.kalamazoocity.org/about-kzoo/government> “Online Services” “Find GIS/Property Mapping” and selecting “Stormwater Utilities” as one of the available layers.
8. Illicit Discharge Identification and Investigation – Prioritization. NA – will perform illicit discharge identification and investigation throughout the entire MS4.

9. NA.
10. See Attachment C “IDEP Plan” pages 8-9, Table 4 “2015 Stormwater Outfall Status and Action Plan” and the IDEP Plan Appendix for the documentation forms. **See attached additional information, August 2016.**
11. See Attachment C, pages 8-12, and Figure 4 “Action Chart for Outfall Field Evaluation.”
12. See Attachment C, pages 8-14, Figure 4, and the IDEP Plan Appendix for documentation forms.
13. See Attachment C, pages 14-16, and the IDEP Plan Appendix for documentation forms.
14. NA –Field observations will be conducted at all outfalls and points of discharge. **See attached additional information, August 2016.**
15. See Attachment C, pages 15-16, and the IDEP Plan Appendix for the MDEQ Spill or Release Report.
16. NA.
17. See Attachment C, pages 13-14, and Attachment A, Sections 29-11 through 29-18.
18. IDEP Training and Evaluation – See Table 2 (SWMP), Row 8, and Attachment C, page 7 and 8.
19. See Attachment C, pages 17-18, and Table 3, Row 3, Column 8. **See attached additional information, August 2016.**
20. See Attachment A, 29-4A.
21. See Attachment A, 29-4A(3).
22. See Attachment A, 29-4A(3).
23. See Attachment A, 29-4A and 4B.
24. See Attachment A, 29-4A and 4B.
25. See Attachment A, 29-7, 8, 11.
26. See Attachment A, 29-11, 13, 14.
27. Qualifying Local Soil Erosion and Sedimentation Control Programs – The City is a Municipal Enforcing Agency for Part 91 of Act 451.
28. See Attachment D “Construction Stormwater Runoff Control” section “Notifications,” and Attachment E that contains Chapter 30 of the City Code of Ordinances “Soil Erosion and Sedimentation Control.” **See attached additional information, August 2016.**
29. See Attachment D “Construction Stormwater Runoff Control” section “Notifications,” and Attachment E that contains Chapter 30 of the City Code of Ordinances “Soil Erosion and Sedimentation Control.”
30. See Attachment D “Construction Stormwater Runoff Control” section “MEA for SESC,” Attachment E that contains Chapter 30 of the City Code of Ordinances “Soil Erosion and Sedimentation Control,” and Attachment F “City of Kalamazoo Code of Ordinances Appendix A – Zoning Ordinance” Section 8.3 H1.d and H7.l. **See attached additional information, August 2016.**
31. See Attachment D section “MEA for SESC.”
32. Post-Construction Stormwater Runoff Program – See Attachment H. The regulatory mechanisms are the Site Plan Review process (Attachment F, Section 8.3H.7l), use of the Site Plan Review Checklist for Public Services (Attachment I), Ordinance 1826 “Performance Standards for Groundwater Protection within Wellhead Protection Capture Zones and Stormwater Quality

Management” (Attachment G) Chapters 5 and 6, and Chapter 29 of the Code of Ordinances (Attachment A).

33. Same references as #32.
34. No.
35. NA.
36. Water Quality Treatment Performance Standard – The existing Performance Standards (Attachment G), Section 5.1 Uniform Stormwater Standard 1 is currently being used to address this issue using treatment of one-half inch of runoff. The Performance Standards will be revised by October 1, 2015 to address the new one-inch requirements, as explained in Attachment H.
37. Source of rainfall data will be the MDEQ’s memo dated March 24, 2006 providing the 90 percent annual non-exceedance storm statistics.
38. Total Suspended Solids (TSS) 80%/80 mg standard - Currently, the existing Performance Standards (Attachment G), Section 5.1 Uniform Stormwater Standard 2 addresses pretreatment. The City currently requires a minimum 80% TSS removal by only accepting the use of systems demonstrated to achieve that standard (3rd Party Certified). The Performance Standards will be revised by October 1, 2015 to address the new requirements, as explained in Attachment H.
39. Channel Protection Performance Standard - Currently, the existing Performance Standards (Attachment G), Section 5.1 Uniform Stormwater Standard 3 addresses stream/channel protection. The Performance Standards will be revised by October 1, 2015 to address the new requirements, as explained in Attachment H.
40. NA
41. Site Specific Requirements - Currently, the existing Performance Standards (Attachment G), Section 5.2 Stormwater Discharge Standards address this requirement by incorporating a groundwater risk assessment component into the decision to allow for infiltration or discharge to the MS4. A spill containment volume is also used for these types of sites. The Performance Standards will be revised by October 1, 2015 to address the new requirements if necessary, as explained in Attachment H. **See attached additional information, August 2016.**
42. Site Specific Requirements - Currently, the existing Performance Standards (Attachment G), Section 5.2 Stormwater Discharge Standards address this requirement by incorporating a groundwater risk assessment component into the decision to allow for infiltration or discharge to the MS4. A spill containment volume is also used for these types of sites. The Performance Standards will be revised by October 1, 2015 to address the new requirements if necessary, as explained in Attachment H.
43. Not pursuing this option.
44. Not pursuing this option – skip to Question 52.
52. Exceptions to Performance Standards – ~~Alternatives that are presented that meet or exceed the revised Performance Standards will be considered dependent upon all factors but not necessarily accepted/approved.~~ **There are no exceptions.**
53. Site Plan Review – Yes, see Attachments F, G, H, and I. **See attached additional information, August 2016.**
54. See Attachment F Section 8.3. **See attached additional information, August 2016.**

55. Long-term O & M of BMPs of Developer – See Attachment F, Section 8.3H7I and Attachment G Section 6.3 “Maintenance.” The Performance Standards will be revised by October 1, 2015 to address the new requirements, as explained in Attachment H. ***See attached additional information, August 2016.***
56. Long-term O & M of BMPs of developer – See Attachment F, Section 8.3H7I and Attachment G Section 6.3 “Maintenance.” The Performance Standards will be revised by October 1, 2015 to address the new requirements, as explained in Attachment H.
57. Maintenance Agreement for Long-term O & M of BMPs - See Attachment F, Section 8.3H7I and Attachment G Section 6.3 “Maintenance.” The Performance Standards will be revised by October 1, 2015 to address the new requirements, as explained in Attachment H.
58. Maintenance Agreement or Other Legal Mechanism to Allow City to Inspect, Perform Corrective Actions, or Transfer O & M Responsibility – See Attachment A, Sections 29-7, 8, 11, 13, 14. Also, if it is suspected that a stormwater BMP is not being properly maintained that may or has resulted in a water quality impairment, the City can use its Site Plan Review Zoning Ordinance process to address the violation. Attachment J contains the Stormwater Treatment Unit Inspection Reports that are provided to the site plan review applicant that proposes use of a stormwater BMP. ***See attached additional information, August 2016.***
59. Tracking Compliance with Maintenance Agreement or Other Legal Mechanism - Attachment J contains the Stormwater Treatment Unit Inspection Reports that are provided to the site plan review applicant that proposes use of a stormwater BMP. The reports are required to be submitted by the applicant to the City’s Environmental Services Division. As resources allow, City staff will follow-up if forms are not submitted on an annual basis. City Staff will respond to any observation or report of a BMP O & M issue or failure to enforce the applicable Ordinances. ***See attached additional information, August 2016.***
60. Pollution Prevention and Good Housekeeping Program – Municipal Facility and Structural Stormwater Control Inventory – See Attachment K “City of Kalamazoo Stormwater Assets.” See Figures 3, 5, and 6, and Tables 5 and 6. The City also installed a native vegetative buffer around the South Crosstown Pond, and in select areas at Milham Park.
61. Location Where Map(s) is Available with Facility Locations with Stormwater Controls – See Figure 5 and 6, and the City Geographic Information System (GIS) located at <http://www.kalamazoocity.org/about-kzoo/government> “Online Services” “Find GIS/Property Mapping” and selecting “Stormwater Utilities” as one of the available layers.
62. Procedure for Updating/Revising Stormwater Structure Inventory – Engineering Division and Environmental Services Division staff will report changes to each other and the IT Staff (that manage the GIS database and on-line GIS) so that the changes are properly updated every six months. ***See attached additional information, August 2016.***
63. Facility-Specific Stormwater Management – All City facilities have been assessed whether a stormwater BMP needs to be implemented. This original assessment resulted in stormwater pre-treatment structures being installed at City facilities/projects as indicated in Table 6, and the preparation of the SWPPP at the 415 Stockbridge Facility. No other facilities have been identified to justify the installation of BMPs at this time. However, if information is obtained that

supports the need for additional stormwater BMPs, they will be evaluated and implemented as necessary. **See attached additional information, August 2016.**

64. Prioritized Facilities – The Fleet Maintenance and Storage Yard Facility located at 415 Stockbridge Avenue has been given priority for the implementation of pollution prevention measures. These measures are identified in the SWPPP prepared for the site (Attachment L).
65. See Attachment L. **See attached additional information, August 2016.**
66. See Attachment L. **See attached additional information, August 2016.**
67. See Attachment L. **See attached additional information, August 2016.**
68. See Attachment L. **See attached additional information, August 2016.**
69. See Attachment L. **See attached additional information, August 2016.**
70. See Tables 5 and 6. These structures are inspected on an annual basis by the Environmental Services Inspection staff and maintenance is recommended to Field Services Division as necessary. **See attached additional information, August 2016.**
71. Structural Stormwater Control Operation and Maintenance Activities – Due to limited staffing and budget, catch basin/inlet cleanings are only done on as needed basis, primarily in response to reports of localized flooding due to obstructions or sediment build-up. **See attached additional information, August 2016.**
72. NA – see number 71. **See attached additional information, August 2016.**
73. Procedure for Inspection, Cleaning, and Maintaining Catch Basins – Field Services Division staff that perform the subject work have been provided the MDEQ “Catch Basin Cleaning Activities Guidance Document” for reference. **See attached additional information, August 2016.**
74. See Table 2, Page 2, Row 6, Column 2. Field Services Division staff that performs the subject work have been provided the MDEQ “Catch Basin Cleaning Activities Guidance Document” for reference. **See attached additional information, August 2016.**
75. Schedule for Inspection and Maintenance of Stormwater Structure Controls – Stormwater infrastructure is repaired or replaced as needed, based on reports of failing or failed structures or planned road improvements. There are no currently available resources to routinely inspect stormwater infrastructure (other than the stormwater treatment structures or the 415 Stockbridge Facility via its SWPPP referenced previously). Waste materials are always performed in accordance with regulatory requirements. **See attached additional information, August 2016.**
76. Procedure for Existing or New Stormwater Controls for Water Quantity – All stormwater controls will follow the City’s Engineering standards for design and operations and be consistent with the Performance Standards.
77. Municipal Operations and Maintenance Activities – See Table 2 (SWMP), Rows 1, 8, 10, 11, 14, 16, 17, 18, last column, and the SWPPP for the 415 Stockbridge Facility. **See attached additional information, August 2016.**
78. Prioritizing Applicant-owned Operated Streets, Parking Lots, and Other Impervious Infrastructure for Street Sweeping – See Table 2 (SWMP), Row 11. If citizen reports/complaints are received about sediment in the streets, and subsequently validated, it is the discretion of the Field Services Manager or Supervisory staff to schedule the cleaning. **See attached additional information, August 2016.**

79. Street Sweeping Priority Location – The downtown area is the priority area for street sweeping. Street sweeping is also used associated with the leaf and brush pick up programs and certain construction projects. See Table 2 (SWMP), Rows 11, 12, 13. ***See attached additional information, August 2016.***
80. See Table 2 (SWMP), Rows 11, 12, 13, column 2. Work is performed consistent with equipment manufacturer’s recommendations.
81. See Table 2 (SWMP), Rows 11, 12, 13. MDEQ Catch Basin Cleaning Guidance will be provided to the appropriate Field Services Division staff. Work is performed per regulatory standards.
82. City applies ready-to-use products or uses approved state-certified application contractors. The information provided in Attachment P will be provided to City staff that may be involved in applying these types of chemicals or managing contractors that perform those services (e.g. Parks, Field Services, and Maintenance staff).
83. Contractor Requirements and Oversight – See Text and Table 2, Row 8. Staff will be reminded at the stormwater training about the requirement to ensure City contractors comply with the City’s stormwater policies.
84. Employee Training – See Table 2, Row 8.
85. Total Maximum Daily Load (TMDL) Implementation Plan – See Attachment N.
86. TMDL - See Table 2, Rows 3-13, 22-23; Table 3, Rows 1-6; Attachments D, E, F, G, H, I, J. All of the information obtained while implementing the BMPs or policies referenced in these Attachments is used to respond to operation and maintenance of existing BMPs and to consider the need for new BMPs to meet the TMDL objectives, especially by reducing sediment – the primary transport mechanism for phosphorus. Also see Attachment N.
87. TMDL - See Table 2, Rows 3-13, 22-23; Table 3, Rows 1-6; Attachments D, E, F, G, H, I, J. All of the information obtained while implementing the BMPs or policies referenced in these Attachments is used to respond to operation and maintenance of existing BMPs and to consider the need for new BMPs to meet the TMDL objectives, especially by reducing sediment – the primary transport mechanism for phosphorus. Also see Attachment N.
88. See Attachment N.

**City of Kalamazoo Response to MDEQ Comments in Letter dated May 20, 2016
Described in “Appendix 1: Comments on City of Kalamazoo MS4 Permit Application”
Regarding City of Kalamazoo 2015 Application for Reissuance of the NPDES MS4 Permit
August 30, 2016**

Revised or additional new information are provided as responses to the numbered MDEQ comments noted below as follows:

- Text contained within this document, shown in bold italics
- Revised Permit Application Form
- Revised “Supplemental Text”
- Attachments contained within numerous “Additional Information to Supplement Textual Response” sections, separated by cover title sheets

Documents that were revised are attached, and any additions/changes to the text are shown in italics and/or bold within the documents, unless the entire Attachment is new. Changes were made to the actual Permit Application Form as best as possible, given the limitations of active cell space on the on-line web-based form. The statement “See attached additional information, August 2016” (or an abbreviated form) was added to each section of the Permit Application where revisions were made.

Section VII. Storm Water Management Program

1. Provide the ERP.

Comment: The City provided a copy of Chapter 29 of the City Code of Ordinances “Stormwater Systems” and Chapter 30 “Soil Erosion and Sedimentation Control”. These ordinances give the City authority to address violations, but there is no explanation of how the City will follow up on violations and track status. Please include this explanation in a revised ERP.

Response:

The “Stormwater IDEP Enforcement Tracking Table” is to be included as additional information in the Permit Application within Attachment A and will be used as a tracking tool for violations and follow-up for Chapter 29 of the Code of Ordinances “Stormwater Systems.” The completed IDEP sheet will be provided with every Stormwater Program Progress Report. In addition, a copy of a print screen from the BS&A Software used to track violations for individual property parcels (including those associated with soil erosion and sedimentation permits) is also included as additional information in Attachment A. This system sets up inspection schedules. A letter or enforcement action can also be generated from the system.

2. Provide the procedure for making the Storm Water Management Program (SWMP) available for public inspection and comment.

Comment: The City has committed to posting the SWMP on the www.protectyourwater.net and www.kalamazoocity.org for public review. The City needs to commit to a mechanism for making the public aware of the opportunity to view the documents online and comment. For example, a notice could be placed in the newspaper and/or The View from the Curb. Please revise the Public Participation/Involvement Program to include a commitment to notify members of the public who do not routinely visit the City’s website.

Response:

The City will publish a notice for the opportunity to view the SWMP online and comment in the next "View from the Curb" publication, scheduled for March, 2017. This update is be incorporated (shown italicized) into the revised Public Participation/Involvement Program (Attachment B in Permit Application).

3. Provide the procedure for inviting public involvement and participation in the implementation and periodic review of the SWMP.

Comment: The City is committed to accepting public comments on the SWMP, and revising the SWMP annually as needed. However, there was no mention of involving the public in the implementation of the SWMP. Please revise the Public Participation/Involvement Program to include one or more mechanisms for the public to be involved in implementation of the SWMP.

Response:

The mechanisms for the public to be involved in the implementation, participation, and review of the SWMP include: Keeping catch basins and inlets located in the streets in front of their homes clear of debris; reporting any observed illegal dumping of chemicals/debris down catch basins/inlets; washing cars on lawn areas; disconnecting downspouts that run to street and re-route them to vegetated areas; implementing appropriate BMPs found on the www.protectyourwater.net website; and directing comments regarding the SWMP using the website Contact form. Clarification regarding these opportunities is incorporated (shown italicized) into a revised Public Participation/Involvement Plan (Attachment B in Permit Application).

4.-6. Public Education Program (PEP)

Comment: The City has committed to several public education delivery mechanisms, but has not committed to a minimum frequency for each task (e.g. frequency of radio ads, classroom presentations, storm water related articles, etc.). The City needs to revise the PEP to include a measurable goal with a measure of assessment for each Best Management Practice (BMP), and as appropriate, a schedule for implementation, including interim milestones and the frequency of the BMP. The City will need to measure not only effort, but also change in awareness and behavior. This will likely need to be assessed through a public survey. The survey does not necessarily need to be conducted through the mail; it could be a short survey given to residents that stop to visit a booth at an event. Examples of items that may be measured include awareness of the IDEP reporting system, or knowledge of the ultimate discharge location of storm drains.

Response:

A revised PEP (Table 3 in Permit Application) provides additional detail regarding frequency of the selected BMPs. The City has already had two public surveys regarding water resources- one in 2006 and one in 2012, and has submitted a grant proposal for another one in 2017. If grant funding is received, the public survey will include questions regarding knowledge/awareness and behavior relative the city's public education and outreach efforts. If this grant funding is not received for 2017, funding will be proposed for the 2018 calendar budget to perform a survey. It is the opinion of City staff that if surveys are used as such a measure of a change in public awareness and behavior, a scientifically prepared and validated process must be used.

8.-19. Illicit Discharge Elimination Plan (IDEP)

Comment: The City plans to assess effectiveness by determining the progress of its components such as number of outfall inspections, field investigations, source investigations, facility evaluations, number of illicit connections discovered, and number of illicit connections eliminated. Please revise the IDEP to include a procedure for evaluating and determining the overall effectiveness of the IDEP. For example, different screening techniques and enforcement protocols could be compared to determine which methodologies have the most effective outcomes.

The Implementation Schedule (page 18) states that, depending on the City's schedule, the City may rely on other MS4s to notify the City if dry weather flows are entering another MS4 system from the City's points of discharge. Please note that the City must either conduct dry weather screening at these points of discharge, or submit an interagency agreement with the owner or operator of the downstream MS4 identifying responsibilities for ensuring an illicit discharge is eliminated if originating from the applicant's point(s) of discharge. The interagency agreement would eliminate the requirement for performing a field observation at that point(s) of discharge.

Please either revise the City's procedure to include routine dry weather screening at all points of discharge, or submit the necessary interagency agreements.

Also, please "find and replace" DNRE with DEQ in the IDEP document.

Response:

As part of the preparation of each Stormwater Program Progress Report, the City will evaluate the effectiveness of the IDEP by reviewing the overall status and progress with the IDEP. Considerations will include the effectiveness of program elements as: Risk reduction prioritization process (if warranted); adequacy/appropriateness of outfall evaluation schedule; detection methods; water quality monitoring methods; field documentation forms; illicit connection elimination process/Ordinance effectiveness; response to acute reports of illicit discharges; asset management and mapping; staff training and contractor accountability, and current cost effectiveness relative to current, projected, and proposed human and other budgetary resources. Also, changes will be made to methodologies/processes if it is deemed necessary and/or appropriate prior to a scheduled Stormwater Program Progress Report. A draft checklist is provided to be used as an addition to Attachment C in the Permit Application.

The City will continue to consider the strategy of inter-agency agreements regarding points of discharge but in the interim, will place all of the identified points of discharge in the four-year dry-weather monitoring schedule with the stormwater outfalls, starting in 2017.

The City changed the term "DNRE" to "DEQ" in the revised IDEP document as appropriate, as presented in Attachment C.

28.-31. Construction Storm Water Runoff Control

Comment: Under 30. and 31., the City is required to provide the procedure for ensuring that construction activities with the potential to discharge to the City's MS4 are covered under the appropriate Soil Erosion and Sedimentation Control permits and /or procedures. The City referenced Attachment D, which does not include an actual procedure for staff use. Please

revise the SWMP to include an appropriate procedure for staff use. This may include, for example, a decision tree and/or checklist that staff use when reviewing a site plan.

Response:

Please see response to #1. Attachment A provides an example print screen from the BS&A Software used by staff in the Department of Community Development and Planning Department, Trades Division, to track soil erosion and sedimentation permit/program violations for individual property parcels. Use of this system is the procedure to ensure construction activities with the potential to discharge to the City's MS4 are covered under the appropriate Soil Erosion and Sedimentation Control permits and /or procedures for this Division that is responsible for this program. This system sets up inspection schedules. A letter or enforcement action can also be generated from the system

32.-59. Post-Construction Storm Water Runoff Program

Comments:

41. In the City's Performance Standards, there is a reference to high risk land uses, but there is no reference to the use of infiltration BMPs in areas of existing soil or groundwater contamination. Section 9.0 Contaminated Properties states that site-specific requirements may apply, and references the DEQ Post-Construction Storm Water Runoff Controls Compliance Assistance Document. This response is incomplete. The statement that site-specific requirements "may apply" does not establish criteria, and leaves potential for infiltration in areas of groundwater contamination. The application requirement specifies that the applicant must communicate with Remediation and Redevelopment Division (RRD) staff when reviewing a site plan for a Part 201 or Part 213 site to ensure that post-construction storm water controls align with the remediation efforts. Please revise the Performance Standards and/or other relevant documentation to direct City staff to communicate with RRD staff as appropriate.

Response:

The City contacted the MDEQ Kalamazoo District Office Supervisor from the Remediation and Redevelopment Division (RRD) regarding the best approach to meet this requirement. Mr. Frank Ballo provided the names of David Harn (Part 201) or Alisa Lindsay (Part 213) to serve as MDEQ points of contact regarding stormwater infiltration at contaminated sites. Historically, the City has not supported stormwater infiltration through contaminated soils and has either prohibited it or required pre-treatment standards for properties within a Wellhead Protection Area (WHPA), dictated by the type of capture zone. For contaminated properties not within a WHPA, we routinely request that the applicant provide a map showing contaminated areas so that infiltration would not be the selected stormwater strategy for that impacted area. We will continue to work with the applicant's consultants to verify the site conditions and determine the best reasonable strategy for stormwater control. We will also reference and/or provide the applicant with the EPA guidance "Implementing Stormwater Infiltration Practices at Vacant Parcels and Brownfield Sites" regarding the subject that was referenced in the MDEQ Post-Construction Stormwater Guidance document. Clarification language will be included in the revised Post-Construction Storm Water Runoff Program section.

52. The application states, "Alternatives will be considered if they meet or exceed the City's revised Performance Standard". This statement needs clarification, because the question relates to exceptions to the Performance Standards, and the application states that all sites will

be required to meet the Performance Standards. Going above and beyond permit requirements is not an alternative. Please either clarify, or check "no" if appropriate.

Response:

The "Yes" selection on the Permit Application implied that if other strategies/methodologies not mentioned in the Performance Standards were proposed for a project that met the requirements of the stormwater sections of the Performance Standards - specifically as it pertains to the Water Quality Volume and the Stream Protection Volume – the City would consider them as acceptable alternatives. Given MDEQ's subsequent clarification to the meaning of this question, the City will select "No" in the revised Application to clarify that specific alternatives to the Performance Standards are not provided. It is understood however, that there may be BMPs that meet the Performance Standards that are not specifically mentioned within the document (e.g. a new technology) that may be approved for a property.

54-55. The procedure for site plan review and approval was not submitted. The checklists only asked for the location of storm water facilities. A procedure is needed which explains how the site plan is reviewed by a qualified individual to make sure that storm water controls are in compliance with the performance standards. Also, an internal procedure is needed to demonstrate the process for determining how the developer meets the performance standards and ensures long-term operation and maintenance of BMPs. Please submit these internal procedures as part of the revised SWMP.

Response:

The revised Attachment H contains a checklist for Site Plan Review for groundwater and stormwater related issues.

58. The application states that the maintenance agreement or other legal mechanism allows the applicant to 1) inspect the structural or vegetative BMP, 2) perform the necessary maintenance or corrective actions neglected by the BMP owner or operator, and 3) track the transfer of operation and maintenance responsibility of the BMP. DEQ staff were not able to locate this in the Performance Standards. Please provide a copy of the template for the maintenance agreement in the revised SWMP.

Response:

The Stormwater Best Management Practices Operations & Maintenance Agreement template is included in the revised Attachment H "Post-Construction Stormwater Runoff Program."

59. The City needs to provide the procedure for tracking compliance with a maintenance agreement or other legal mechanism to ensure the performance standards are met in perpetuity. Please include this procedure or mechanism in the revised SWMP.

Response:

A Stormwater Best Management Practices Operations & Maintenance Agreement is provided that serves as the legal mechanism to ensure the Performance Standards are met in perpetuity. In addition, a checklist for Site Plan Review for stormwater related issues is included. The revised SWMP (Table 2) also references that this mechanism is in place.

60-84. Pollution Prevention and Good Housekeeping Program

Comments:

62. The procedure that was included in the supplemental text needs to include more details regarding the update of the inventory and map (required by 60 and 61.) as facilities and structural storm water controls are added, removed, or no longer owner or operated by the applicant. How will Engineering Division and Environmental Services Division be prompted to relay these updates to each other and to Information Technology Staff? Please explain in a more detailed procedure.

Response:

The City has prepared a Work Practice (“WP Number: WP_Eng39”) titled “Updates to Storm Water Asset Inventory and Mapping” that is contained in the revised Attachment K.

63. The application needs to explain how a new facility would be evaluated to determine if a SWPPP/SOP is needed. The application only states that one facility has a SWPPP. A procedure needs to be included in the revised SWMP.

Response:

A “Procedure for Updating and Revising the Existence, Location, Structural Stormwater Controls, and Potential to Discharge Pollutants to the Surface Waters of the State” is contained as ATTACHMENT L2.

65.-69. A Standard Operating Procedure (SOP) was submitted with the permit application, but is dated 2010 and needs to be updated to reflect current site conditions, significant materials inventory, and personnel. Also, the SOP would be improved if DEQ’s most recent Storm Water Pollution Prevention Plan (SWPPP) template is used for this revision (available at www.michigan.gov/stormwater, under “Information” choose “Industrial Storm Water”). If using DEQ’s recommended template, the SWPPP should have the first column of both the routine inspection sheet and comprehensive inspection sheet filled out to show areas inspected. If another type of inspection sheet or system is being used, that should be provided.

Response:

The previously noted primary Certified Industrial Stormwater Operator for the 415 Stockbridge Facility - Mr. Craig Norrod, Fleet Manager - recently retired. Consequently, the previously noted secondary Certified Industrial Stormwater Operator - Mr. Gary Doorlag, Fleet Supervisor - will update the existing “Department of Public Services 415 Stockbridge Facility Storm Water Pollution Prevention Plan (SWPPP)” dated June 1, 2010 to the most recent Storm Water Pollution Prevention Plan (SWPPP) template by December 31, 2016 with assistance from the Water Resources Division Manager (John P. Paquin).

70. Attachment J contains inspection sheets for storm water treatment devices. Other types of exposures (e.g. chemical storage at parks) are not being addressed. Please address these additional potential sources of pollutant runoff in the revised SWMP.

Response:

An evaluation of the definition of “facility” was made during the issuance of the proposed 2008 Stormwater NPDES Permit. This evaluation determined that the Parks and Recreation Complex did not meet the definition of a facility that required a SWPPP.

Consequently, this location was not listed as being warranted to having the level of potential to discharge pollutants to the surface waters of the state to warrant a SWPPP. However, a request will be made to the Parks and Recreation Director to perform an inventory of chemicals stored at City Parks and Recreation owned and operated locations. Other facilities will also be considered associated with exposure potential. The result of these subsequent determinations made whether to list reasonable additional types of exposures – and list of exposures, if warranted - will be provided to MDEQ by the December 31, 2016.

71. Inspecting catch basins only in response to flooding complaints is not sufficient. Sediment needs to be removed from sumps when a certain level is reached (typically 30%-50% full) in order to allow settling of solids, and protection of water quality. A procedure is needed for prioritizing catch basins for inspection, maintenance, and cleaning. Please include this procedure in the revised SWMP.

Response:

Please see ATTACHMENT M2 “Stormwater System Operation and Maintenance Plan.”

72. Catch basin priority location needs to be completed. Please include this information in the revised SWMP.

Response:

“Catch basin priority locations” are defined in the practical sense by those that we receive reports of being plugged. As currently, those will be responded to as they occur and will be treated separately than those to be addressed by the stormwater system cleaning plan described in Attachment M2.

73. and 74. The procedure is not very detailed, but it appears that the sludge from catch basin cleanouts is taken directly to the WWTP. Please provide info about when catch basins will be cleaned (e.g. when 50% full) in the revised SWMP.

Response:

The response to Question 71 addresses the cleaning plan and schedule. The disposal of the material (e.g. sediment) taken from the catch basins/inlets is reportedly done in a similar manner as the material collected by the street sweepers as follows. The material is transported to the 1415 N. Harrison Street Facility (Wastewater Treatment Plant), placed on a dewatering pad, mixed with other material, including that collected from street sweeping, sampled for landfill acceptability (e.g. TCLP for metals, BTEX) and transported to a Type II landfill (currently C & C Landfill in Marshall, Michigan) by a contractor (currently Republic Services). Please see ATTACHMENT M2 “Stormwater System Operation and Maintenance Plan.”

75. The current procedure includes annual inspections of structural controls, and disposal of catch basin cleanout in the sanitary sewer. The procedure needs to be revised to include a process for updating/revising the procedure. Please include this process in the revised SWMP.

Response:

Revisions/updates to the procedure to perform annual inspections of structural controls, and disposal of the materials collected from the catch basins/inlets, will be accomplished by the evaluation of the Stormwater Management Program in conjunction with the preparation of the Progress Reports. This evaluation process will include meetings with

pertinent staff and making revisions to the procedures/processes as deemed appropriate. This process will be included in the revised SWWP.

77. The referenced table is not a procedure for assessment of the applicant's operation and maintenance activities for potential to discharge pollutants to surface waters. It is a list of BMPs that are being implemented, with frequency/schedule and method of evaluating effectiveness (e.g. inspect and maintain all storm water controls annually, street sweeping, leaf collection, bulk trash, catch basin/inlet cleaning). A procedure needs to be integrated into the revised SWMP, which shall identify pollutants and associated BMPs, and also include a process for updating and revising the assessment.

Response:

The table "Municipal Operations/Good House-Keeping for Pollutants, BMPs and Program Assessment" is provided as a supplement to and behind Table 2 (SWMP) and will be used during the assessment process.

78. No procedure for prioritization of streets and parking lots for street sweeping was included, except responding to complaints at the City's discretion. Please include the required procedure in the revised SWMP.

Response:

Please see Street Sweeping Policy, presented as a supplement to and behind Table 2 (SWMP).

79. The downtown area is listed as the priority for street sweeping. No map was provided. Which streets/areas constitute "downtown"? Please provide this information in the revised SWMP.

Please see the Figure "City of Kalamazoo Snow Plowing and Street Sweeping 2016" presented as a supplement to and behind Table 2 (SWMP).

City of Kalamazoo Response to MDEQ Comments in Correspondence dated November 15, 2016 Titled “DEQ Staff Comments in Response to City of Kalamazoo Revised MS4 Permit Application Submitted on August 31, 2016”: January 30, 2017

1. Provide the ERP

“The response explains how the City will track status, but still does not explain how the City will follow up on violations. Please include a procedure which provides the applicants’ expected response to violations to compel compliance. Please include timeframes as appropriate.”

Response:

The “procedure which provides the City of Kalamazoo expected response to violations to compel compliance” is to follow the previously submitted and approved Illicit Discharge Elimination Plan (IDEP) and the “Stormwater IDEP Enforcement Tracking Table,” and to follow protocol in City of Kalamazoo Ordinances that are associated with water quality, provided in previous correspondences and available on-line; primarily: Chapter 29 of the City of Kalamazoo Code of Ordinances (Stormwater System), Chapter 30 of the City of Kalamazoo Code of Ordinances (Soil Erosion and Sedimentation), Ordinance 1825 (Wellhead Protection Overlay), and Ordinance 1826 (Performance Standards).

City Ordinances are designed by the City attorneys to provide the City with legal mechanisms to address the violations but also purposely designed to provide staff with a reasonable level of flexibility in timelines and methodology since each situation exhibits unique characteristics, amount of evidence, and level of known and potential severity.

In the intent to provide MDEQ satisfactory additional detail regarding the City’s objectives in addressing Ordinance violations, the previously submitted “Attachment A: Stormwater IDEP Enforcement Tracking Table” has been revised (see attached) to include additional documentation fields for initial situation assessment, and if the situation warrants an ordinance related response – both with timelines.

28.-31. Construction Storm Water Runoff Control

“The response does not explain how the City insures that required Soil Erosion and Sedimentation Control Permits are obtained before construction begins. The procedure needs further clarification.”

Response:

During Site Plan Review, it is the Building Department’s responsibility to inform the developer/contractor that a Soil Erosion and Sedimentation Control (SESC) Permit is required or not. If it is, then they are required to show it on the site plan. Subsequently, the building inspectors complete a building plan review, using a checklist on the third page of the building permit (see attached). During this process, the inspectors are responsible to check if the SESC

Permit is issued or not, if all measures are in place on the plan, and finally to inspect the soil control measures in the field. Once the SESC Permits are issued and all soil erosion control measures are in place, then the inspectors will enter and track the inspections in the City's BS&A software system until the project is completed and the permits are closed out. Any further questions can be directed to Mr. Robert (Bob) McNutt, Building Official, Code Admin Manager, 269-337-8566. A revised document regarding Construction Stormwater Runoff Control is attached.

41. Post-Construction Storm Water Runoff Program

The City's statement that DEQ RRD staff David Harn and Alisa Lindsay serve at DEQ points of contact does not constitute a commitment to contact these staff in cases where postconstruction storm water practices need to be implemented in areas with existing soil or groundwater contamination. Please provide a statement that DEQ RRD staff will be consulted, and add this step to the City's review checklist."

Response:

DEQ RRD staff will be contacted for consultation in projects where stormwater infiltration is being proposed in areas with known existing soil groundwater contamination. Please see revised Site Plan Review Wellhead Protection and Stormwater Compliance Checklist.

70. Procedure Identifying BMPs at Facilities with Medium and Lower Potential for Discharge of Pollutants

"The City did not submit this procedure with the revised permit application, and stated that further information about exposure potential will be submitted by December 31, 2016. Please submit this procedure along with the other requested revisions."

Response:

The City has determined that other than the Metro Transit Facility and the Wastewater Treatment Plant – both having their own SWPPPs – no other facilities other than the Fleet Maintenance Facility, 415 Stockbridge Avenue, warrant a SWPPP. As requested by the MDEQ in an earlier correspondence, the Fleet Facility SWPPP has been revised to the newer MDEQ SWPPP template (see attached). The procedure selected to identify the need for BMPs at facilities with a "Medium and Lower Potential for Discharge of Pollutants" a facility chemical evaluation was completed by the Public Services Safety Coordinator. The result of this evaluation is attached and is titled "Report Name: Material Report Run Date: 1/24/17." All of the chemicals inventoried were at relatively low quantities and/or pre-packaged, within an enclosed/contained building, and reported to meet chemical storage requirements. This additional procedure has been added to the revised "Procedure for Updating the Existence, Location, Structural Stormwater Controls, and Potential to Discharge Pollutants to the Surface Waters of the State" (attached).

71.-74. Structural Storm Water Control Operation and Maintenance Activities

"The City's procedure for catch basin cleaning is acceptable only as a preliminary protocol. The prioritization will need to be refined over time as catch basins are identified which need more frequent cleaning. Waiting until these catch basins fill up to the point

that a complaint call is received is not acceptable as a procedure. Please revise the procedure to include a prioritization process for catch basins which are found to need a more frequent inspection and cleaning schedule to insure that cleaning occurs when the sump reaches 30% to 50% of capacity. Also, include a list of currently known problematic catch basins and initial inspection frequencies. This list will need to be refined over time. Also, please explain the protocol for removing sediment from catch basins. Is all accumulated storm water and sediment removed by the vactor truck? Or, is the storm water first decanted? Please add this additional information to the Stormwater System Operation and Maintenance Plan.”

Response:

The comprehensive storm sewer cleaning program will provide information to prioritize catch basins and inlets that may require more frequent cleaning relative to others; subsequently, until the first full cycle of storm sewer cleaning has been completed, the routing storm sewer cleaning program will serve as a preliminary protocol. To supplement the newly acquired information, the City will use its tracking records for requests for storm sewer cleaning (see attached table for query over the last few years). Repeat locations can generally be categorized as priority areas. For example, there are multiple listings for 2232 Crosswind approximately 11 months apart, Greenleaf Blvd., Lay Blvd, etc. This report, along with the information generated from the routing cleanings, will be generated every reporting period so that priority areas can be identified and updated.

The protocol for removing sediment from catch basins is as follows:

1. When a storm sewer complaint is received, a work order is prepared either by a written form and later tracked on a spreadsheet or done directly on a computer using the tracking spreadsheet.
2. The work order is then provided to a Water Resources Division Supervisor to evaluate.
3. If warranted, the Supervisor then assigns a crew to perform a site visit to perform the cleaning.
4. Proper street traffic control signage is placed prior to any actual cleaning as necessary.
5. If sediment exists on the catch basin or inlet, it is cleaned up prior to removing the lid.
6. The catch basin and inlet are then cleaned out of water and sediment by use of a vactor truck. The accumulated material and water is then deposited at the Wastewater Treatment Plant, as described in the Stormwater System Operation and Maintenance Plan.
7. Upon field work completion, the work order is completed with the proper information regarding the problem and solution, the number of the storm sewer asset(s), and turned into the crew's Supervisor. The work order completion information is then logged into the database.

This information was added to revise the Stormwater System Operation and Maintenance Plan (attached).

79. The map “City of Kalamazoo Snow Plowing and Street Sweeping 2016” was referenced, but was missing from the SWMP. Please include this map.”

Response:

The referenced map is enclosed with this submission.