# City of Troy

# 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

# TABLE OF CONTENTS

SECTION 1.0 PERMIT APPLICATION FORMS

# List of Appendices

- A. LIST OF CITY OUTFALLS
- B. ENFORCEMENT RESPONSE PROCEDURE
- C. PUBLIC PARTICIPATION/INVOLVEMENT PROGRAM
- D. ROUGE RIVER COLLABORATIVE PUBLIC EDUCATION PROGRAM
- E. ROUGE RIVER COLLABORATIVE ILLICIT DISCHARGE ELIMINATION PROGRAM
- F. CONSTRUCTION STORMWATER RUNOFF CONTROL PROGRAM
- G. POST-CONSTRUCTION STORMWATER RUNOFF CONTROL PROGRAM
- H. POLLUTION PREVENTION AND GOOD HOUSEKEEPING SOPS
  - GENERAL PROCEDURES
  - STREET MAINTENANCE AND WINTER OPERATIONS
  - SPILL RESPONSE
- I. ROUGE RIVER TOTAL MAXIMUM DAILY LOAD IMPLEMENTATION PLAN
- J. CLINTON RIVER COLLABORATIVE PUBLIC EDUCATION PLAN
- K. RED RUN ILLICIT DISCHARGE ELIMINATION PROGRAM
- L. CITY OF TROY ORDINANCES
- M. PUBLIC WORKS FACILITY SWPPP/PIPP
- N. POLICE VEHICLE MAINTENANCE GARAGE SWPPP
- O. CITY OF TROY RED RUN TOTAL MAXIMUM DAILY LOAD PLAN

# City of Troy

# Section 1: Applicant Information City of Troy

Prefix: Mr.	First Name Steve		Last Name Vandette
Title City Engineer	City o	Cor f Troy	npany Name
Phone 248-524-3383	Ext		Fax
Email VandetteSJ@troym	.gov		
Address Line 1 or L 500 W. Big Beaver	ocation Road		
Address Line 2			
City Troy		Postal Code 48084	9
State Michigan		Country United State	es of America
Section 3: MS4 ( Storm Water Billir Storm Water Prog Application Conta	<u>Contacts</u> Ig Contact Iram Manager ct		
Prefix: Mr.	First Name Steve		Last Name Vandette
Title City Engineer		Cor City	npany Name of Troy
Phone 248-524-3383	Ext		Fax
Email VandetteSJ@troym	.gov		
Address Line 1 or L 500 W. Big Beaver	ocation Road		
Address Line 2			
City Troy		Postal Code 48084	)
State Michigan		Country United State	es of America

## Section 4: Regulated Area, Outfalls/Points of Discharge, and Nested Jurisdictions

#### Outfall and Point of Discharge Information

Provide the following information for each of the applicant's MS4 outfalls and points of discharge within the regulated area: identification number, description of whether the discharge is from an outfall or point of discharge, and the surface water of the state that receives the discharge. An outfall means a discharge point from an MS4 directly to surface waters of the state. A point of discharge means a discharge from an MS4 to an MS4 owned or operated by another public body. In the case of a point of discharge, the surface water of the state is the ultimate receiving water from the final outfall. Please note than 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. An example table is available at the link below.

Attachment: *Appendix A - City Outfall List* Comment:

#### **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. None

# Section 5: General SWMP, Enforcement Response Procedure, and Public Participation/Involvement Program

#### STORM WATER MANAGEMENT PROGRAM (SWMP)

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 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. 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. When answering the questions in this section of the Application, the applicant's MS4 encompasses what the applicant identified in Sections 4. 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 the link below.

#### 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 entity 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 violation was resolved. The applicant may keep an electronic file or hard copy file of the enforcement tracking. For best results please upload one document at a time. Attachment: Appendix B - Enforcement Response Procedure

Comment: The City currently has a complaint response system in place. Complaints or concerns may be reported by the public through the City's Service Request Portal available on the City's website. The City will draft new ordinance/regulatory mechanism within six months of issuance and review of Oakland County standards.

#### 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. The responses shall reflect the nested MS4s identified in Section 4.

Proposing to work collaboratively on any or all activities in the PPP during the permit cycle? Yes

#### **PPP Procedures**

Provide the procedures that describe the current and proposed BMPs to meet the minimum control measure requirements for the PPP to the maximum extent practicable as required below. It is recommended that files be separated and then converted to a PDF format before being attached below to meet the file size limit. For best results please upload one document at a time.

Attachment: Appendix C – Rouge River Collaborative Public Participation/Involvement Program Comment:

2. Provide the reference to the procedure submitted above 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. (page and paragraph of attachments): e.g., Attachment A, Page 3, Section b.

Appendix C - Collaborative Public Participation/Involvement Program, Section B

3. Provide the reference to the procedure submitted above for inviting public involvement and participation in the implementation and periodic review of the SWMP. (page and paragraph of attachments): Appendix C - Collaborative Public Participation/Involvement Program, Section D

#### Section 6: Public Education Program

The applicant shall describe the current and proposed BMPs to meet the minimum control measure requirements for the Public Education Program (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 4.

#### **PEP Procedures**

Provide the procedures that describe the current and proposed BMPs to meet the minimum control measure requirements for the PEP to the maximum extent practicable as required below. For best results please upload one document at a time.

Attachment: Appendix D – Rouge River Collaborative Public Education Program, Appendix J – Clinton River Collaborative Public Education Plan

Comment:

4. PEP activities may be prioritized based on the assessment of high priority, community-wide issues and targeted issues to reduce pollutants in storm water runoff. If prioritizing PEP activities, provide the reference to the procedure submitted above with the assessment and list of the priority issues (e.g., Attachment A, Section 1). Appendix D - Rouge River Collaborative Public Education Program, Section A. Appendix J - Clinton River Collaborative Public Education Plan, Appendix A.

The City of Troy participates in both the Rouge River and Clinton River Collaborative Plans.

5. Provide the reference to the procedure submitted above identifying applicable PEP topics and the activities to be implemented during the permit cycle. If prioritizing, prioritize each applicable PEP topics as high, medium, or low based on the assessment in Question 4. For each applicable PEP topic below, identify in the procedure the target audience; key message; delivery mechanism; year and frequency the BMP will be implemented; and the responsible party. If a PEP topic is determined to be not applicable or a priority issue, provide an explanation. An example PEP table is available at the link below.

- A. Promote public responsibility and stewardship in the applicant's watershed(s). Provide the reference to the procedure submitted above or explanation as to why the topic is not applicable. High. Appendix D - Rouge River Collaborative Public Education Program, Table 2, Page 3
- 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. Provide the reference to the procedure submitted above or explanation as to why the topic is not applicable. High. Appendix D - Rouge River Collaborative Public Education Program, Table 2, Page 3
- C. Educate the public on illicit discharges and promote public reporting of illicit discharges and improper disposal of materials into the MS4. Provide the reference to the procedure submitted above or explanation as to why the topic is not applicable. High. Appendix D - Rouge River Collaborative Public Education Program, Table 2, Page 3
- D. Promote preferred cleaning materials and procedures for car, pavement, and power washing. Provide the reference to the procedure submitted above or explanation as to why the topic is not applicable. Medium. Appendix D - Rouge River Collaborative Public Education Program, Table 2, Page 3
- E. Inform and educate the public on proper application and disposal of pesticides, herbicides, and fertilizers. Provide the reference to the procedure submitted above or explanation as to why the topic is not applicable. High. Appendix D - Rouge River Collaborative Public Education Program, Table 2, Page 3
- F. Promote proper disposal practices for grass clippings, leaf litter, and animal wastes that may enter into the MS4. Provide the reference to the procedure submitted above or explanation as to why the topic is not applicable.

High. Appendix D - Rouge River Collaborative Public Education Program, Table 2, Page 3

- G. Identify and promote the availability, location, and requirement of facilities for collection or disposal of household hazardous wastes, travel trailer sanitary wastes, chemicals, and motor vehicle fluids. Provide the reference to the procedure submitted above or explanation as to why the topic is not applicable. High. Appendix D - Rouge River Collaborative Public Education Program, Table 2, Page 3
- H. Inform and educate the public on proper septic system care and maintenance, and how to recognize system failure. Provide the reference to the procedure submitted above or explanation as to why the topic is not applicable.

High. Appendix D - Rouge River Collaborative Public Education Program, Table 2, Page 3

- I. Educate the public on, and promote the benefits of, green infrastructure and low impact development. Provide the reference to the procedure submitted above or explanation as to why the topic is not applicable. High. Appendix D - Rouge River Collaborative Public Education Program, Table 2, Page 3
- J. Identify and educate commercial, industrial, and institutional entities likely to contribute pollutants to storm water runoff. Provide the reference to the procedure submitted above or explanation as to why the topic is not applicable.

Low. Appendix D - Rouge River Collaborative Public Education Program, Table 2, Page 3

6. Provide the reference to the procedure submitted above 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. e.g., Attachment A, Page 3, Section b.

Appendix D - Rouge River Collaborative Public Education Program, Section D, Page 13 Appendix J - Clinton River Collaborative Public Education Plan, Appendix A.

#### Section 7: Illicit Discharge Elimination Program

The applicant shall describe the current and proposed BMPs to meet the minimum control measure requirements for the Illicit Discharge Elimination Program (IDEP) to the Maximum Extent Practicable, which shall be incorporated into the SWMP. 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 4. 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 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 nonstorm 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.

Proposing to work collaboratively on any or all BMPs in the IDEP during the permit cycle? Yes

#### **Illicit Discharge Elimination Program Procedures**

Provide the procedure that describes the current and proposed BMPs to meet the minimum control measure requirements for the IDEP to the maximum extent practicable as required below.

Attachments: Appendix E – Rouge River Collaborative IDEP, Appendix K – Red Run IDEP, Appendix H – P2GH Spill Response

Comment:

#### 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. (e.g., The Department of Public Works office)

Comment: Appendix E - Rouge River Collaborative IDEP, Section D. The Master Storm Sewer Map is updated regularly by the City and current maps are available at City Hall. As-built plans for utilities and developments are also maintained by the City.

#### Illicit Discharge Identification and Investigation

8. The MS4 may be prioritized for detecting non-storm water discharges during the permit cycle. The goal of the prioritization process is to target areas with high illicit discharge potential. If prioritizing, provide the reference to the procedure submitted above with the process for selecting each priority area using the list below. (e.g., Attachment A, page 3, Section b.)

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

Provide the reference to the procedure submitted above (page and paragraph of attachments): e.g., Attachment A, Section b

Appendix E - Rouge River Collaborative IDEP, Section C. The Red Run IDEP will not be prioritized.

9. If prioritizing dry-weather screening, provide the reference to the document submitted above with 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.

Appendix E - Rouge River Collaborative IDEP, Section C.

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. Areas not covered by the interagency agreement shall be identified with a schedule for performing field observations included in the procedure. The focus of the field observation shall be to observe the following:

- Presence/absence of flow
- Water clarity
- Deposits/stains on the discharge structure or bank
- Color
- Vegetation condition
- Odor
- Structural condition
- Floatable materials

• Biology, such as bacterial sheens, algae, and slimes

Provide the reference to the procedure submitted above (page and paragraph of attachments): e.g., Attachment A, Section b.

Appendix E - Rouge River Collaborative IDEP, Section D, IDEP #2. Appendix K – Red Run IDEP, Task 1a.

11. Provide the reference to the procedure submitted above 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. Appendix E - Rouge River Collaborative IDEP, Section D, IDEP #3.

Appendix K – Red Run IDEP, Task 1a.

12. Provide the reference to the procedure submitted above 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.

Appendix E - Rouge River Collaborative IDEP, Section D, IDEP #3. Appendix K – Red Run IDEP, Task 1b. 13. Provide the reference to the procedure submitted above 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.

Appendix E - Rouge River Collaborative IDEP, Section D, IDEP #5. Appendix H – P2GH Spill Response, Section B.

14. If prioritizing, provide the reference to the procedure submitted above 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 investigation as appropriate. If not prioritizing, enter "Not Applicable,"

Appendix E - Rouge River Collaborative IDEP, Section D, IDEP #5. The Red Run IDEP is not prioritizing

15. Provide the reference to the procedure submitted above which 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. (Example threshold reporting quantities: a release of 50 pounds of salt in solid form or 50 gallons in liquid form to waters of the state unless authorized by the MDEQ for deicing or dust suppressant.)

Appendix H - P2GH Spill Response SOP, Section C

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

17. Provide the reference to the procedure submitted above 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.

Appendix E - Rouge River Collaborative IDEP, Section E.

Appendix K – Red Run IDEP, Task 1b.

The City will create a schedule for pursuing enforcement actions and will be addressed with IDEP ordinance which will include a submittal of a corrective action plan within 60 days of notification.

#### **IDEP** Training and Evaluation

18. Provide the reference to the program submitted above to train staff employed by the applicant, who, as part of their normal job responsibilities, may come into contact with or otherwise observe an illicit discharge to the regulated MS4, 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.

Provide the reference to the program submitted above (page and paragraph of attachments): e.g., Attachment A. Section b.

Appendix E - Rouge River Collaborative IDEP, Section D, IDEP #4.

19. Provide the reference to the procedure submitted above 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. Appendix E - Rouge River Collaborative IDEP, Section F; Appendix K - Red Run IDEP, Task 3.

#### Illicit Discharge Ordinance or Other Regulatory Mechanism

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

Appendix E – Rouge River Collaborative IDEP, Section D, IDEP #7 and Attachment E. The City is currently reviewing existing IDEP ordinances and will begin drafting an ordinance to comply with the permit requirements.

21. Provide the reference to the ordinance or other regulatory mechanism submitted above that excludes prohibiting the discharges or flows from firefighting activities to the applicant's MS4 and requires 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.

Appendix E – Rouge River Collaborative IDEP, Section D, IDEP #7 and Attachment E. The City is currently reviewing existing IDEP ordinances and will begin drafting an ordinance to comply with the permit requirements.

22. Provide the reference to the ordinance or other regulatory mechanism submitted above that excludes prohibiting 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.)

Provide the reference to the procedure submitted above (page and paragraph of attachments): e.g., Attachment A. Section b.

Appendix E – Rouge River Collaborative IDEP, Section D, IDEP #7 and Attachment E.

23. Provide the reference to the ordinance or regulatory mechanism submitted above that regulates the contribution of pollutants to the applicant's MS4 in the attachment above. Appendix E – Rouge River Collaborative IDEP, Section D, IDEP #7 and Attachment E.

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

in the attachment above.

Appendix E – Rouge River Collaborative IDEP, Section D, IDEP #7 and Attachment E.

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

Appendix E – Rouge River Collaborative IDEP, Section D, IDEP #7 and Attachment E.

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

Appendix E – Rouge River Collaborative IDEP, Section D, IDEP #7 and Attachment E.

## Section 8. 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 (e.g., identify collaborative efforts in the procedures). 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 4.

Proposing to work collaboratively on any or all requirements of the Construction Storm Water Runoff Control Program during the permit cycle? No

#### **Qualifying Local Soil Erosion and Sedimentation Control Programs**

27. Is the applicant a Part 91 Agency? Yes If yes, choose type: Municipal Enforcement Agency

No the applicant relies on the following Qualifying Local Soil Erosion and Sedimentation Control Program (Part 91 Agency)

#### Construction Storm Water Runoff Control

Provide the procedures that 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 as required below. It is recommended that files be separated and then converted to a PDF format before being attached below to meet the file size limit. For best results please upload one document at a time. Attachment: Appendix F - Construction Site Stormwater Runoff Control SOP, Appendix L – Soil Erosion Sedimentation Control Ordinance

Comment:

28. Provide the reference to the procedure submitted above 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, including the notification timeframe. 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.

Appendix F - Construction Site Stormwater Runoff Control SOP, Section C.

Appendix L – Soil Erosion and Sedimentation Control Ordinance, Section 10.

When an issue is discovered the City investigates and enforces the Erosion and Sedimentation Control Ordinance, Permit, and requires clean up.

29. Provide the reference to the procedure submitted above with the requirement to notify the MDEQ when soil, sediment, or other pollutants are discharged to the applicant's MS4 from a construction activity, including the notification timeframe. 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.

Appendix F - Construction Site Stormwater Runoff Control SOP, Section E.

If pollutants like pesticides, petroleum, or construction chemicals are discharged, the MDEQ PEAS Hotline is contacted.

30. Provide the reference to the procedure submitted above 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. Appendix F - Construction Site Stormwater Runoff Control SOP, Section B. Appendix L – Soil Erosion and Sedimentation Control Ordinance, Section 7. The City's Site Improvement Plan Review Application requires that a complete SESC Permit Application be submitted at the time of the site plan.

31. Provide the reference to the procedure submitted above to advise the landowner or recorded easement holder of the property where the construction activity will occur of the State of Michigan Permit by Rule (Rule 323.2190). Appendix F - Construction Site Stormwater Runoff Control SOP, Section F. All permits (through Part 91, Permit By Rule) are required prior to the start of construction.

#### Section 9. Post-Construction Storm Water Runoff Program

#### Post-Construction Storm Water Runoff Program Procedures, Ordinances, and regulatory Mechanisms

Provide the procedures that describes 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 as required below. It is recommended that files be separated and then converted to a PDF format before being attached below to meet the file size limit. For best results please upload one document at a time.

Attachment: Appendix G – Post Construction Stormwater Runoff Control

Comment: Appendix G. The City currently follows its Engineering Standards and Zoning Ordinance for stormwater management. It is the City's understanding that MDEQ is negotiating the development of stormwater design standards with Oakland County to meet the MS4 permit requirements. The City is in the process of reviewing the summary of the draft PCC design standards being proposed by Oakland County Water Resources Commissioner's Office. The City will begin the process of drafting an ordinance to adopt the standards. Once MDEQ has approved Oakland County's stormwater design standards, the City will review them to assess their applicability. If revisions are needed, the City will prepare separate design standards.

#### Ordinance or Other Regulatory Mechanism

32. Provide the reference to the in-effect ordinance or regulatory mechanism submitted above to address postconstruction 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. If not available at this time, provide the date the ordinance or regulatory mechanism will be available.

Appendix G. The City currently follows its Engineering Standards and Zoning Ordinance for stormwater management. Once the OCWRC completes their Engineering Standards for Storm Water Facilities revisions to meet the new permit requirements, the City will review and consider them for adoption.

33. Provide the reference to the ordinance or other regulatory mechanism submitted above that applies 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. If not available at this time, provide the date the ordinance or regulatory mechanism will be available.

Appendix G. The City currently follows its Engineering Standards and Zoning Ordinance for stormwater management. Once the OCWRC completes their Engineering Standards for Storm Water Facilities revisions to meet the new permit requirements, the City will review and consider them for adoption.

#### **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. No

35. Provide the reference to the regulatory mechanism submitted above with the requirement to implement the post-construction storm water runoff control requirements in Section 438 of the Energy Independence and Security Act. If not available at this time, provide the date the regulatory mechanism will be available. Provide the reference to the regulatory mechanism submitted above (page and paragraph of attachments): e.g., Attachment A, Section

#### 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. Provide the ordinance or regulatory mechanism reference in the attachment above (page and paragraph of attachments): e.g., Attachment A, Pages 1-15
- Treat the runoff generated from 90 percent of all runoff-producing storms for the project site. Provide the ordinance or regulatory mechanism reference in the attachment above (page and paragraph of attachments): e.g., Attachment A, Pages 1-15

If no, provide the date the ordinance or regulatory mechanism will be submitted.

Appendix G. The City currently follows its Engineering Standards and Zoning Ordinance for stormwater management. Once the OCWRC completes their Engineering Standards for Storm Water Facilities revisions to meet the new permit requirements, the City will review and consider them for adoption.

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

Appendix G. The City currently follows its Engineering Standards and Zoning Ordinance for stormwater management. Once the OCWRC completes their Engineering Standards for Storm Water Facilities revisions to meet the new permit requirements, the City will review and consider them for adoption.

38. Provide the reference to the ordinance or regulatory mechanism submitted above with the requirement 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 milligrams per liter. If not available at this time, provide the date the ordinance or regulatory mechanism will be available.

Appendix G. The City currently follows its Engineering Standards and Zoning Ordinance for stormwater management. Once the OCWRC completes their Engineering Standards for Storm Water Facilities revisions to meet the new permit requirements, the City will review and consider them for adoption.

#### **Channel Protection Performance Standard**

39. Provide the reference to the ordinance or regulatory mechanism submitted above with the requirement 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. If not available at this time, provide the date the ordinance or regulatory mechanism will be available.

Provide the reference to the ordinance or regulatory mechanism submitted above.

If pursuing an alternative approach, provide the reference to the ordinance or other regulatory mechanism submitted above describing the alternative to meet the minimum requirements, including an explanation as to how the channel protection standard will prevent or minimize water quality impacts.

Appendix G. The City currently follows its Engineering Standards and Zoning Ordinance for stormwater management. Once the OCWRC completes their Engineering Standards for Storm Water Facilities revisions to meet the new permit requirements, the City will review and consider them for adoption.

40. 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). If applicable, provide the reference to the ordinance or regulatory mechanism submitted above that excludes any waterbodies from the channel protection performance standard. If not available at this time, provide the date the ordinance or regulatory mechanism will be available. Not Applicable

#### Site-Specific Requirements

41. Provide the reference to the procedure submitted above 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.

b.

Appendix G. The City currently follows its Engineering Standards and Zoning Ordinance for stormwater management. Once the OCWRC completes their Engineering Standards for Storm Water Facilities revisions to meet the new permit requirements, the City will review and consider them for adoption.

42. Provide the reference to the ordinance or regulatory mechanism submitted above that requires 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 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. If not available at this time, provide the date the ordinance or regulatory mechanism will be available.

Appendix G. The City currently follows its Engineering Standards and Zoning Ordinance for stormwater management. Once the OCWRC completes their Engineering Standards for Storm Water Facilities revisions to meet the new permit requirements, the City will review and consider them for adoption.

#### **Off-Site Mitigation and Payment in Lieu Programs**

43. An applicant may choose to 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 a10-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. If proposing to allow for off-site mitigation, provide the reference to the ordinance or regulatory mechanism submitted above with the off-site mitigation requirements. If not available at this time, provide the date the ordinance or regulatory mechanism will be available.

The City of Troy does not currently have an ordinance or regulatory mechanism that meets the optional requirements. The City will not be pursuing this option.

44. An applicant may choose to 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. If proposing to allow for payment in lieu, provide the reference to the ordinance or regulatory mechanism submitted above with the payment in lieu requirements. If not available at this time, provide the date the ordinance or regulatory mechanism will be available. If not pursuing the options available in Questions 43 and 44, skip to Question 52.

The City of Troy does not currently have an ordinance or regulatory mechanism that meets the optional requirements. The City will not be pursuing this option.

45. Provide the reference the ordinance or regulatory mechanism submitted above that establishes 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. If not available at this time, provide the date the ordinance or regulatory mechanism will be available.

46. Provide the reference to the ordinance or regulatory mechanism submitted above that establishes 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. If not available at this time, provide the date the ordinance or regulatory mechanism will be available.

47. Provide the reference to the ordinance or regulatory mechanism submitted above that requires 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. If not available at this time, provide the date the ordinance or regulatory mechanism will be available.

48. Provide the reference to the ordinance or regulatory mechanism submitted above requiring 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. If not available at this time, provide the date the ordinance or regulatory mechanism will be available.

49. Provide the reference to the ordinance or regulatory mechanism submitted above that requires 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. If not available at this time, provide the date the ordinance or regulatory mechanism will be available.

50. Provide the reference to the ordinance or regulatory mechanism submitted above that requires that offsets and in-lieu projects be preserved and maintained in perpetuity, such as deed restrictions and long-term operation and maintenance. If not available at this time, provide the date the ordinance or regulatory mechanism will be available.

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

52. If there are 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, provide the reference to the document submitted above describing the exception(s). The applicant shall demonstrate how the exception provides an equivalent or greater level of protection as the performance standards.

#### Site Plan Review

53. Provide the reference to the ordinance or regulatory mechanism submitted above that includes a requirement to submit a site plan for review and approval of post-construction storm water runoff BMPs. If not available at this time, provide the date the ordinance or regulatory mechanism will be available.

Appendix G. The City currently follows its Engineering Standards and Zoning Ordinance for stormwater management. Once the OCWRC completes their Engineering Standards for Storm Water Facilities revisions to meet the new permit requirements, the City will review and consider them for adoption.

54. Provide the reference to the procedure submitted above for site plan review and approval. If not available at this time, provide the date the procedure will be available.

Appendix G. The City currently follows its Engineering Standards and Zoning Ordinance for stormwater management. Once the OCWRC completes their Engineering Standards for Storm Water Facilities revisions to meet the new permit requirements, the City will review and consider them for adoption.

55. Provide the reference to the site plan review and approval procedure submitted above describing the process for determining how the developer meets the performance standards and ensures long-term operation and maintenance of BMPs in the attachment above. If not available at this time, provide the date the procedure will be available.

Appendix G. The City currently follows its Engineering Standards and Zoning Ordinance for stormwater management. Once the OCWRC completes their Engineering Standards for Storm Water Facilities revisions to meet the new permit requirements, the City will review and consider them for adoption.

#### Long-term Operation and Maintenance BMPs

56. Provide the reference to the ordinance or regulatory mechanism submitted above that requires the long-term operation and maintenance of all structural and vegetative BMPs installed and implemented to meet the performance standards in perpetuity. If not available at this time, provide the date the procedure will be available. Appendix G. The City currently follows its Engineering Standards and Zoning Ordinance for stormwater management. Once the OCWRC completes their Engineering Standards for Storm Water Facilities revisions to meet the new permit requirements, the City will review and consider them for adoption.

57. Provide the reference to the ordinance or regulatory mechanism submitted above that requires 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. If not available at this time, provide the date the procedure will be available.

Appendix G. The City currently follows its Engineering Standards and Zoning Ordinance for stormwater management. Once the OCWRC completes their Engineering Standards for Storm Water Facilities revisions to meet the new permit requirements, the City will review and consider them for adoption.

58. Does the maintenance agreement or other legal mechanism allow the applicant to complete the following?

- 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.

Appendix G. The City currently follows its Engineering Standards and Zoning Ordinance for stormwater management. Once the OCWRC completes their Engineering Standards for Storm Water Facilities revisions to meet the new permit requirements, the City will review and consider them for adoption.

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

Appendix G. The City currently follows its Engineering Standards and Zoning Ordinance for stormwater management. Once the OCWRC completes their Engineering Standards for Storm Water Facilities revisions to meet the new permit requirements, the City will review and consider them for adoption.

## Section 10. 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, vactor 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 4.

#### Pollution Prevention and Good Housekeeping Procedures

Provide the procedures that 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 as required below. It is recommended that files be separated and then converted to a PDF format before being attached below to meet the file size limit. For best results please upload one document at a time.

Attachment: Appendix H - P2GH General Procedures SOP, Appendix H - Street and Parking Lot Maintenance SOP, Appendix M - DPW Facility SWPPP/PIPP, Appendix N - Police Vehicle Maintenance Garage SWPPP Comment:

#### Municipal Facility and Structural Storm Water Control Inventory

60. Provide the reference to the up-to-date inventory submitted above identifying 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). For example, Attachment A, Page 3, Section B. Appendix H - P2GH General Procedures SOP, Table 1.

Facilities that may have the high potential to discharge pollutants: Fleet Maintenance Facilities Materials storage and Public Works Yards Salt storage facilities

Check all applicant-owned or operated facilities with a discharge of storm water to surface waters of the state: Administration buildings and libraries Police Stations Public parking lots Cemeteries Fire Stations Parks Public golf courses

Check all applicant-owned or operated structural storm water controls with a discharge of storm water to surface waters of the state: Catch Basins Detention Basins Pump Stations Secondary Containment Stormwater Treatment Units Vegetated Swales

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: (e.g., The Department of Public Works office)

The Master Storm Sewer Map is updated regularly and current maps are available at City Hall. As-built plans for utilities and developments are also maintained by the City.

62. Provide the reference to the procedure submitted above 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 in the attachment above. A suggested timeframe for updating/revising the inventory and map(s) is 30 days following adding/removing a facility or structural storm water control.

Appendix H - P2GH General Procedures SOP, Section C

#### Facility-Specific Storm Water Management

63. Provide the reference to the procedure submitted above 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

If the applicant does not own a facility that discharges storm water to surface waters of the state in the urbanized area, skip to Question 71.

Provide the reference to the procedure submitted above (page and paragraph of attachments): e.g., Attachment A, Section b.

Appendix H - P2GH General Procedures SOP, Section B

64. Provide the reference to the list of prioritized facilities submitted above 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 choose to demonstrate how a fleet maintenance/storage yard has the low potential to discharge pollutants to surface waters of the state. If demonstrating a low potential, provide the reference to the demonstration submitted above for the fleet maintenance and/or storage yard.

Appendix H - P2GH General Procedures SOP, Section D

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 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.

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 Example: DPW Yard SOP – Section 2)

Appendix M - DPW Facility SWPPP/PIPP, Chapter 4 Appendix N - Police Vehicle Maintenance Garage SWPPP, Chapter 4.

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 Example: DPW Yard SOP – Section 2)

Appendix M - DPW Facility SWPPP/PIPP, Chapter 5

Appendix N - Police Vehicle Maintenance Garage SWPPP, Chapter 5.

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 Example: DPW Yard SOP – Section 2)

Appendix M - DPW Facility SWPPP/PIPP, Chapter 5 Appendix N - Police Vehicle Maintenance Garage SWPPP, Chapter 5. 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 Example: DPW Yard SOP – Section 2) Appendix M - DPW Facility SWPPP/PIPP, Chapter 5 Appendix N - Police Vehicle Maintenance Garage SWPPP, Chapter 5.

70. Provide the reference to the procedure submitted above 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.

Appendix H - P2GH General Procedures SOP, Section D

#### Structural Storm Water Control Operation and Maintenance Activities

71. Provide the reference to the procedure submitted above 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 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. If the applicant does not own or operate catch basins skip to Question 75. Appendix H - P2GH General Procedures SOP, Section G

72. Provide the reference to the narrative description or map submitted above with the geographic location of the catch basins in each priority level.

Appendix H - P2GH General Procedures SOP, Section F.

Emerald Lakes Subdivision and DPW property catch basins high priority with remaining City catch basins being at a low priority.

73. Provide the reference to the procedure submitted above 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. An MDEQ Catch Basin Cleaning Activities guidance document is available at the following link.

Provide the reference to the procedure submitted above (page and paragraph of attachments): e.g., Attachment A, Section b.

Appendix H - P2GH General Procedures SOP, Section G

74. Provide the reference to the procedure submitted above for dewatering, storage, and disposal of materials extracted from catch basins. An MDEQ Catch Basin Cleaning Activities guidance document is available at the following link.

Provide the reference to the procedure submitted above (page and paragraph of attachments): e.g., Attachment A, Section b.

Appendix H - P2GH General Procedures SOP, Section H

75. If the applicant owns or operates 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, provide the reference to the procedure submitted above for inspecting and maintaining the structural storm water controls. The procedure shall include a description and schedule for inspecting and maintaining each structural storm water 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. Appendix H - P2GH General Procedures SOP, Section J

76. Provide the reference to the procedure submitted above 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.

Appendix H - P2GH General Procedures SOP, Section K

#### **Municipal Operations and Maintenance Activities**

77. Provide the reference to the procedure(s) submitted above with the assessment of the following operation and maintenance activities, if applicable, 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.

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, no salt zones) Vehicle washing and maintenance of applicant-owned vehicles (e.g., police, fire, school bus, public works)

Provide the reference to the procedure submitted above (page and paragraph of attachments): e.g., Attachment A, Section b.

Appendix H - P2GH Street Maintenance and Winter Operations SOP, Section D. Appendix M - DPW Facility SWPPP/PIPP, Chapter 6

78. Provide the reference to the procedure submitted above 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. If the applicant does not own or operate any streets, parking lots, or other impervious infrastructure, skip to Question 82. Appendix H - P2GH General Procedures SOP, Section I

79. Provide the reference to the narrative description or map submitted above with the geographic location of the streets, parking lots, and other impervious surfaces in each priority level. Appendix H - P2GH General Procedures SOP, Section I

80. Provide the reference to the procedure submitted above 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.

Appendix H - P2GH General Procedures SOP, Section I

81. Provide the reference to the procedure submitted above for dewatering, storage, and disposal of street sweeper waste material. An MDEQ Catch Basin Cleaning Activities guidance document is available at the following link and includes information on street sweeping requirements. Provide the reference to the procedure submitted above (page and paragraph of attachments): e.g., Attachment A, Section b. Appendix H - P2GH General Procedures SOP, Section H

#### Managing Vegetated Properties

82. If the applicant's pesticide applicator does not exclusively use ready-to-use products from the original container, provide the reference to the procedure submitted above 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 certified applicator categories is available at the following link. If

the applicant only applies ready-to-use products from the original container, enter "Not Applicable." Provide the reference to the procedure submitted above (page and paragraph of attachments): e.g., Attachment A, Section b. Appendix H - P2GH General Procedures SOP, Section L. Several City staff employees are applicator certified.

#### **Contractor Requirements and Oversight**

83. Provide the reference to the procedure submitted above 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.

Appendix H - P2GH General Procedures SOP, Section N

#### Employee Training

84. Provide the reference to the employee training program submitted above 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.

Appendix H - P2GH General Procedures SOP, Section M. Appendix M - DPW Facility SWPPP/PIPP, Chapter 5 Appendix N - Police Vehicle Maintenance Garage SWPPP, Chapter 5.

#### Section 11. Total Maximum Daily Load Implementation Plan

The following questions address discharges to impaired waters with a United States Environmental Protection Agency (USEPA) approved Total Maximum Daily Load (TMDL) that includes a pollutant load allocation assigned to the applicant'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 4.

#### **Total Maximum Daily Load Implementation Plan**

Provide the procedures that describe the current and proposed BMPs to meet the minimum control measure requirements for the TMDL Implementation Plan to the maximum extent practicable as required below. It is recommended that files be separated and then converted to a PDF format before being attached below to meet the file size limit. For best results please upload one document at a time.

Attachment: Appendix I – Rouge River Collaborative TMDL Implementation Plan, Appendix O – City of Troy Red Run TMDL

Comment:

Proposing to work collaboratively on any or all activities in the TMDL Implementation Plan during the permit cycle. Yes

85. If a TMDL(s) was included in the applicant's application notice, provide the name(s) below. If no TMDL was identified, skip to the next section.

Appendix I - Rouge River Collaborative TMDL, Section A Appendix O – City of Troy Red Run TMDL Rouge River Watershed – E. coli Rouge River Watershed – Biota Red Run Drain – E. coli 86. Provide the reference to the procedure submitted above describing the process 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.

Appendix I - Rouge River Collaborative TMDL, Section C. Appendix O - City of Troy Red Run Drain TMDL, Section I

87. Provide the reference to the TMDL BMP Priority List submitted above with 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.

Appendix I - Rouge River Collaborative TMDL, Section D. Appendix O - City of Troy Red Run Drain TMDL, Section I

88. Provide the reference to the TMDL Monitoring Plan submitted above 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.

Appendix I - Rouge River Collaborative TMDL, Section E. Appendix O - City of Troy Red Run Drain TMDL, Section II APPENDIX A Outfall and Point of Discharge Information

Structure No.	Туре	Receiving Water
D02790	Outfall	Rouge River, Main 1-2
D02793	Outfall	Rouge River, Main 1-2
D02795	Outfall	Rouge River, Main 1-2
D02796	Outfall	Clinton River, Red Run
D02801	Outfall	Rouge River, Main 1-2
D02802	Outfall	Clinton River, Red Run
D02803	Outfall	Rouge River, Main 1-2
D02804	Outfall	Rouge River, Main 1-2
D02815	Outfall	Clinton River, Red Run
D02818	Outfall	Clinton River, Red Run
D02822	Outfall	Clinton River, Red Run
D02843	Outfall	Rouge River, Main 1-2
D02848	Outfall	Clinton River, Red Run
D02852	Outfall	Clinton River, Red Run
D02857-A	Outfall	Rouge River, Main 1-2
D02857-B	Outfall	Rouge River, Main 1-2
D02857-C	Outfall	Rouge River, Main 1-2
D02872	Outfall	Rouge River, Main 1-2
D02872-A	Outfall	Clinton River, Red Run
D02874	Outfall	Rouge River, Main 1-2
D02877	Outfall	Rouge River, Main 1-2
D02885	Outfall	Clinton River, Red Run
D02890	Outfall	Clinton River, Red Run
D02895	Outfall	Rouge River, Main 1-2
D02925	Outfall	Rouge River, Main 1-2
D02969	Outfall	Clinton River, Red Run
D02970	Outfall	Clinton River, Red Run
D02985	Outfall	Clinton River, Red Run
D02989	Outfall	Clinton River, Red Run
D02997	Outfall	Clinton River, Red Run
D02998	Outfall	Clinton River, Red Run
D03000	Outfall	Rouge River, Main 1-2
D03026	Outfall	Clinton River, Red Run
D03042	Outfall	Rouge River, Main 1-2
D03044	Outfall	Rouge River, Main 1-2
D03046	Outfall	Rouge River, Main 1-2
D03047	Outfall	Rouge River, Main 1-2
D03067	Outfall	Rouge River, Main 1-2
D03069	Outfall	Clinton River, Red Run
D03072	Outfall	Clinton River, Red Run
D03083	Outfall	Clinton River, Red Run
D03084	Outfall	Clinton River, Red Run
D03094	Outfall	Clinton River, Red Run
D03095	Outfall	Clinton River, Red Run

Structure No.	Туре	Receiving Water
D03096	Outfall	Rouge River, Main 1-2
D03098	Outfall	Clinton River, Red Run
D03111	Outfall	Rouge River, Main 1-2
D03121	Outfall	Clinton River, Red Run
D03139	Outfall	Clinton River, Red Run
D03142	Outfall	Clinton River, Red Run
D03150	Outfall	Rouge River, Main 1-2
D03154	Outfall	Clinton River, Red Run
D03204	Outfall	Clinton River, Red Run
D03206	Outfall	Rouge River, Main 1-2
D03213	Outfall	Clinton River, Red Run
D03214	Outfall	Rouge River, Main 1-2
D03214-B	Outfall	Clinton River, Red Run
D03216	Outfall	Rouge River, Main 1-2
D03225	Outfall	Clinton River, Red Run
D03249	Outfall	Rouge River, Main 1-2
D03250	Outfall	Clinton River, Red Run
D03252	Outfall	Rouge River, Main 1-2
D03254	Outfall	Rouge River, Main 1-2
D03282	Outfall	Rouge River, Main 1-2
D03283	Outfall	Rouge River, Main 1-2
D03292	Outfall	Rouge River, Main 1-2
D03293	Outfall	Clinton River, Red Run
D03351	Outfall	Clinton River, Red Run
D03356	Outfall	Clinton River, Red Run
D03397	Outfall	Clinton River, Red Run
D03422	Outfall	Clinton River, Red Run
D03424	Outfall	Rouge River, Main 1-2
D03428	Outfall	Rouge River, Main 1-2
D03430	Outfall	Rouge River, Main 1-2
D03455	Outfall	Clinton River, Red Run
D03456	Outfall	Clinton River, Red Run
D03465	Outfall	Clinton River, Red Run
D03467	Outfall	Rouge River, Main 1-2
D03476	Outfall	Clinton River, Red Run
D03484	Outfall	Clinton River, Red Run
D03494	Outfall	Clinton River, Red Run
D03498	Outfall	Rouge River, Main 1-2
D03506	Outfall	Clinton River, Red Run
D03515	Outfall	Clinton River, Red Run
D03527	Outfall	Clinton River, Red Run
D03537	Outfall	Clinton River, Red Run
D03552	Outfall	Rouge River, Main 1-2
D03556	Outfall	Clinton River, Red Run

Structure No.	Туре	Receiving Water
D03557	Outfall	Rouge River, Main 1-2
D03559	Outfall	Rouge River, Main 1-2
D03565	Outfall	Clinton River, Red Run
D03566	Outfall	Rouge River, Main 1-2
D03567	Outfall	Clinton River, Red Run
D03599	Outfall	Clinton River, Red Run
D03600	Outfall	Clinton River, Red Run
D03612	Outfall	Clinton River, Red Run
D03647	Outfall	Clinton River, Red Run
D03649	Outfall	Clinton River, Red Run
D03679	Outfall	Rouge River, Main 1-2
D03680	Outfall	Clinton River, Red Run
D03704	Outfall	Clinton River, Red Run
D03712	Outfall	Rouge River, Main 1-2
D03713	Outfall	Clinton River, Red Run
D03715	Outfall	Clinton River, Red Run
D03720	Outfall	Clinton River, Red Run
D03723	Outfall	Rouge River, Main 1-2
D03768	Outfall	Clinton River, Red Run
D03782	Outfall	Rouge River, Main 1-2
D03789	Outfall	Rouge River, Main 1-2
D03793	Outfall	Clinton River, Red Run
D03794	Outfall	Rouge River, Main 1-2
D03795	Outfall	Clinton River, Red Run
D03796	Outfall	Clinton River, Red Run
D03830	Outfall	Clinton River, Red Run
D03833	Outfall	Clinton River, Red Run
D03836	Outfall	Clinton River, Red Run
D03846	Outfall	Clinton River, Red Run
D03848	Outfall	Clinton River, Red Run
D03849	Outfall	Rouge River, Main 1-2
D03855	Outfall	Clinton River, Red Run
D03868	Outfall	Clinton River, Red Run
D03889	Outfall	Clinton River, Red Run
D03905	Outfall	Rouge River, Main 1-2
D03912	Outfall	Clinton River, Red Run
D03917	Outfall	Clinton River, Red Run
D03917-D	Outfall	Clinton River, Red Run
D03928	Outfall	Rouge River, Main 1-2
D03952	Outfall	Clinton River, Red Run
D03968	Outfall	Rouge River, Main 1-2
D03978	Outfall	Rouge River, Main 1-2
D03981	Outfall	Rouge River, Main 1-2
D03984	Outfall	Clinton River, Red Run

Structure No.	Туре	<b>Receiving Water</b>
D03985	Outfall	Rouge River, Main 1-2
D03989	Outfall	Clinton River, Red Run
D03995	Outfall	Clinton River, Red Run
D04000	Outfall	Clinton River, Red Run
D04004	Outfall	Clinton River, Red Run
D04019	Outfall	Clinton River, Red Run
D04021	Outfall	Rouge River, Main 1-2
D04022	Outfall	Rouge River, Main 1-2
D04044	Outfall	Clinton River, Red Run
D04125	Outfall	Rouge River, Main 1-2
D04135	Outfall	Clinton River, Red Run
D04156	Outfall	Clinton River, Red Run
D04168	Outfall	Clinton River, Red Run
D04184	Outfall	Rouge River, Main 1-2
D04190	Outfall	Rouge River, Main 1-2
D04192	Outfall	Clinton River, Red Run
D04193	Outfall	Clinton River, Red Run
D04196	Outfall	Clinton River, Red Run
D04199	Outfall	Clinton River, Red Run
D04212	Outfall	Rouge River, Main 1-2
D04213	Outfall	Clinton River, Red Run
D04276	Outfall	Clinton River, Red Run
D04285	Outfall	Rouge River, Main 1-2
D04293	Outfall	Rouge River, Main 1-2
D04302	Outfall	Clinton River, Red Run
D04307	Outfall	Clinton River, Red Run
D04328	Outfall	Clinton River, Red Run
D04331	Outfall	Rouge River, Main 1-2
D04332	Outfall	Rouge River, Main 1-2
D04333	Outfall	Rouge River, Main 1-2
D04334	Outfall	Rouge River, Main 1-2
D04336	Outfall	Rouge River, Main 1-2
D04340	Outfall	Clinton River, Red Run
D04341	Outfall	Clinton River, Red Run
D04342	Outfall	Clinton River, Red Run
D04343	Outfall	Rouge River, Main 1-2
D04344	Outfall	Clinton River, Red Run
D04345	Outfall	Clinton River, Red Run
D04348	Outfall	Clinton River, Red Run
D04349-A	Outfall	Clinton River, Red Run
D04349-B	Outfall	Clinton River, Red Run
D04350	Outfall	Rouge River, Main 1-2
D04351	Outfall	Clinton River, Red Run
D04352	Outfall	Clinton River, Red Run

Structure No.	Туре	Receiving Water
D04353	Outfall	Clinton River, Red Run
D04355	Outfall	Clinton River, Red Run
D04358	Outfall	Rouge River, Main 1-2
D04359	Outfall	Rouge River, Main 1-2
D04360	Outfall	Rouge River, Main 1-2
D04362	Outfall	Rouge River, Main 1-2
D04363	Outfall	Rouge River, Main 1-2
D04366	Outfall	Rouge River, Main 1-2
D04367	Outfall	Rouge River, Main 1-2
D04369	Outfall	Rouge River, Main 1-2
D04370	Outfall	Rouge River, Main 1-2
D04372	Outfall	Rouge River, Main 1-2
D04373	Outfall	Rouge River, Main 1-2
D04375	Outfall	Rouge River, Main 1-2
D04376	Outfall	Rouge River, Main 1-2
D04377	Outfall	Rouge River, Main 1-2
D04381	Outfall	Rouge River, Main 1-2
D04382	Outfall	Rouge River, Main 1-2
D04383	Outfall	Rouge River, Main 1-2
D04384	Outfall	Rouge River, Main 1-2
D04387	Outfall	Clinton River, Red Run
D04388	Outfall	Clinton River, Red Run
D04389	Outfall	Clinton River, Red Run
D04390	Outfall	Clinton River, Red Run
D04392	Outfall	Clinton River, Red Run
D04393	Outfall	Clinton River, Red Run
D04395	Outfall	Clinton River, Red Run
D04396	Outfall	Clinton River, Red Run
D04403	Outfall	Clinton River, Red Run
D04405	Outfall	Clinton River, Red Run
D04406	Outfall	Clinton River, Red Run
D04407	Outfall	Clinton River, Red Run
D04408	Outfall	Rouge River, Main 1-2
D04409	Outfall	Rouge River, Main 1-2
D04410	Outfall	Clinton River, Red Run
D04411	Outfall	Rouge River, Main 1-2
D04415	Outfall	Clinton River, Red Run
D04417	Outfall	Clinton River, Red Run
D04418	Outfall	Rouge River, Main 1-2
D04424	Outfall	Clinton River, Red Run
D04428	Outfall	Clinton River, Red Run
D04428-A	Outfall	Clinton River, Red Run
D04429	Outfall	Clinton River, Red Run
D04433	Outfall	Clinton River, Red Run

Structure No.	Туре	Receiving Water
D04434	Outfall	Clinton River, Red Run
D04439-A	Outfall	Clinton River, Red Run
D04339-B	Outfall	Clinton River, Red Run
D04441	Outfall	Clinton River, Red Run
D04442	Outfall	Rouge River, Main 1-2
D04444	Outfall	Clinton River, Red Run
D04445	Outfall	Clinton River, Red Run
D04446	Outfall	Clinton River, Red Run
D04447	Outfall	Clinton River, Red Run
D04448	Outfall	Clinton River, Red Run
D04452	Outfall	Clinton River, Red Run
D04462	Outfall	Rouge River, Main 1-2
D04465	Outfall	Rouge River, Main 1-2
D04467	Outfall	Clinton River, Red Run
D04469	Outfall	Rouge River, Main 1-2
D04470	Outfall	Rouge River, Main 1-2
D04473	Outfall	Rouge River, Main 1-2
D04478	Outfall	Rouge River, Main 1-2
D04479	Outfall	Clinton River, Red Run
D04483	Outfall	Clinton River, Red Run
D04490	Outfall	Clinton River, Red Run
D04492	Outfall	Clinton River, Red Run
D04500	Outfall	Clinton River, Red Run
D04501	Outfall	Clinton River, Red Run
D04502	Outfall	Clinton River, Red Run
D04503	Outfall	Clinton River, Red Run
D04506	Outfall	Clinton River, Red Run
D04516	Outfall	Clinton River, Red Run
D04524	Outfall	Clinton River, Red Run
D04525	Outfall	Clinton River, Red Run
D04530	Outfall	Clinton River, Red Run
D04535	Outfall	Clinton River, Red Run
D04558	Outfall	Rouge River, Main 1-2
D04560	Outfall	Clinton River, Red Run
D04568	Outfall	Clinton River, Red Run
D04576	Outfall	Clinton River, Red Run
D04577	Outfall	Rouge River, Main 1-2
D04582	Outfall	Clinton River, Red Run
D04588	Outfall	Rouge River, Main 1-2
D04600	Outfall	Clinton River, Red Run
D04603	Outfall	Clinton River, Red Run
D04609	Outfall	Clinton River, Red Run
D04616	Outfall	Clinton River, Red Run
D04619	Outfall	Clinton River, Red Run

Structure No.	Туре	Receiving Water
D04620	Outfall	Clinton River, Red Run
D04621	Outfall	Clinton River, Red Run
D04627	Outfall	Clinton River, Red Run
D04628	Outfall	Clinton River, Red Run
D04629	Outfall	Clinton River, Red Run
D04630	Outfall	Clinton River, Red Run
D04631	Outfall	Clinton River, Red Run
D04632	Outfall	Clinton River, Red Run
D04653	Outfall	Clinton River, Red Run
D04661	Outfall	Clinton River, Red Run
D04669	Outfall	Clinton River, Red Run
D04690	Outfall	Clinton River, Red Run
D04695	Outfall	Clinton River, Red Run
D04698	Outfall	Clinton River, Red Run
D04701	Outfall	Rouge River, Main 1-2
D04704	Outfall	Clinton River, Red Run
D04709	Outfall	Clinton River, Red Run
D04713	Outfall	Rouge River, Main 1-2
D04722	Outfall	Clinton River, Red Run
D04732	Outfall	Clinton River, Red Run
D04734	Outfall	Rouge River, Main 1-2
D04753	Outfall	Rouge River, Main 1-2
D04761	Outfall	Clinton River, Red Run
D36959	Outfall	Rouge River, Main 1-2
D36980	Outfall	Rouge River, Main 1-2
D36992	Outfall	Rouge River, Main 1-2
D37064	Outfall	Clinton River, Red Run
D37144	Outfall	Clinton River, Red Run
D37403	Outfall	Clinton River, Red Run
D37504	Outfall	Clinton River, Red Run
D37531	Outfall	Clinton River, Red Run
D37689	Outfall	Clinton River, Red Run
D37853	Outfall	Rouge River, Main 1-2
D38020	Outfall	Rouge River, Main 1-2
D38059	Outfall	Clinton River, Red Run
D38062	Outfall	Rouge River, Main 1-2
D38444	Outfall	Clinton River, Red Run
D38471	Outfall	Clinton River, Red Run
D39321	Outfall	Clinton River, Red Run
D39322	Outfall	Clinton River, Red Run
D39323	Outfall	Clinton River, Red Run
D39324	Outfall	Clinton River, Red Run
D39373	Outfall	Clinton River, Red Run
D39376	Outfall	Clinton River, Red Run

Structure No.	Туре	Receiving Water
D40601	Outfall	Clinton River, Red Run
D40619	Outfall	Clinton River, Red Run
D40745	Outfall	Rouge River, Main 1-2
D40811	Outfall	Clinton River, Red Run
D40820	Outfall	Clinton River, Red Run
D40851	Outfall	Clinton River, Red Run
D40872	Outfall	Clinton River, Red Run
D41052	Outfall	Clinton River, Red Run
D41053	Outfall	Clinton River, Red Run
D41843	Outfall	Clinton River, Red Run
D43051	Outfall	Rouge River, Main 1-2
D43052	Outfall	Rouge River, Main 1-2
STMH00052	Discharge Point	Clinton River, Red Run
STMH00056	Discharge Point	Clinton River, Red Run
STMH00254	Discharge Point	Clinton River, Red Run
STMH00306	Discharge Point	Clinton River, Red Run
STMH00308	Discharge Point	Clinton River, Red Run
STMH00424	Discharge Point	Clinton River, Red Run
STMH01489	Discharge Point	Clinton River, Red Run
STMH01490	Discharge Point	Clinton River, Red Run
STMH07352	Discharge Point	Clinton River, Red Run
STMH01770	Discharge Point	Clinton River, Red Run
STMH01831	Discharge Point	Clinton River, Red Run
STMH01942	Discharge Point	Clinton River, Red Run
STMH02109	Discharge Point	Clinton River, Red Run
STMH02150	Discharge Point	Clinton River, Red Run
STMH02191	Discharge Point	Clinton River, Red Run
STMH02332	Discharge Point	Clinton River, Red Run
STMH03735	Discharge Point	Clinton River, Red Run
STMH03817	Discharge Point	Clinton River, Red Run
STMH06234	Discharge Point	Clinton River, Red Run
STMH06371	Discharge Point	Clinton River, Red Run
STMH06614	Discharge Point	Clinton River, Red Run
STMH06728	Discharge Point	Clinton River, Red Run
STMH06749	Discharge Point	Clinton River, Red Run
STMH06762	Discharge Point	Clinton River, Red Run
STMH06844	Discharge Point	Clinton River, Red Run
STMH06954	Discharge Point	Clinton River, Red Run
STMH06994	Discharge Point	Clinton River, Red Run
STMH07003	Discharge Point	Clinton River, Red Run
STMH07034	Discharge Point	Clinton River, Red Run
STMH07163	Discharge Point	Clinton River, Red Run
STMH07403	Discharge Point	Clinton River, Red Run
STMH07415	Discharge Point	Clinton River, Red Run

Structure No.	Туре	Receiving Water
STMH07523	Discharge Point	Clinton River, Red Run
STMH07821	Discharge Point	Clinton River, Red Run
STMH07866	Discharge Point	Clinton River, Red Run
STMH07929	Discharge Point	Clinton River, Red Run
STMH37294	Discharge Point	Clinton River, Red Run
STIN03591	Discharge Point	Clinton River, Red Run
STIN05202	Discharge Point	Clinton River, Red Run
STIN07073	Discharge Point	Clinton River, Red Run
STIN18204	Discharge Point	Clinton River, Red Run
STIN09456	Discharge Point	Clinton River, Red Run
STIN10487	Discharge Point	Clinton River, Red Run
STIN10557	Discharge Point	Clinton River, Red Run
STIN11084	Discharge Point	Clinton River, Red Run
STIN14546	Discharge Point	Clinton River, Red Run
STIN15170	Discharge Point	Clinton River, Red Run
STIN15567	Discharge Point	Clinton River, Red Run
STIN16275	Discharge Point	Clinton River, Red Run
STIN17642	Discharge Point	Clinton River, Red Run
STIN17787	Discharge Point	Clinton River, Red Run
STIN18689	Discharge Point	Clinton River, Red Run
STIN18815	Discharge Point	Clinton River, Red Run
STIN37334	Discharge Point	Clinton River, Red Run

APPENDIX B Enforcement Response Procedure

# STANDARD OPERATING PROCEDURE ENFORCEMENT RESPONSE

The city of troy 500 w. big beaver road, troy, Michigan 48084



MARCH 2016

# **SECTION A – PURPOSE**

The Michigan Department Environmental Quality (MDEQ) National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Phase II Stormwater Discharge Permit Application requires a procedure for Enforcement Response to address violations of the ordinance(s) or regulatory mechanism(s) identified in the Stormwater Management Plan.

## **SECTION B – GENERAL PENALTY**

Chapter 202 Codified Ordinances of the City of Troy's Code of Ordinances defines the penalties levied by the City for ordinance violations. The section specifically defines penalties for violations of ordinances.

## Chapter 1, Section 1.13 – Penalty

<u>Penalty.</u> Unless another penalty is expressly provided by this Code for any particular provision or section, every person convicted of a violation of any provision of this Code or any rule or regulation adopted or issued in pursuance thereof, shall be punished by a fine of not more than five hundred (\$500.00) dollars and costs or prosecution or by imprisonment for not more than ninety (90) days, or by both such fine and imprisonment. Each act of violation and every day upon which any such violation shall occur shall constitute a separate offense. The penalty provided by this section, unless another penalty is expressly provided, shall apply to the amendment of any section of this Code whether or not such penalty is re-enacted in the amendatory ordinance.

## **Chapter 1, Section 1.14 – Severability**

<u>Severability.</u> It is the legislative intent of the Council in adopting this Code, that all provisions and sections of this ordinance be liberally construed to protect and preserve the peace, health, safety and welfare of the inhabitants of the City of Troy and should any provision or section of this ordinance be held unconstitutional or invalid, such holding shall not be construed as affecting the validity of any of the remaining provisions or sections, it being the intent that this ordinance shall stand, notwithstanding the invalidity of any provision or section thereof.

The provisions of this section shall apply to the amendment of any section of this Code whether or not the wording of this section is set forth in the amendatory ordinance.

# SECTION C – PART 91 MUNICIPAL ENFORCEMENT AGENCY

The City of Troy is an approved Municipal Enforcement Agency under the Part 91 of the Natural Resources and Environmental Protection Act (NREPA), 1994 PA 451, as Amended. As an enforcing agency, the City is responsible for implementing and enforcing their Grading and Soil Erosion Control Ordinance.

# C.1 Chapter 86, Section 2 – Purpose and Authority

- A. The purpose of this ordinance is to control accelerated soil erosion and sedimentation in all construction practices and other earth change activities within the City, and protect the Waters of the State.
- B. This ordinance is enacted pursuant to MCL 324.9106. Part 91, Soil Erosion and Sedimentation Control of the Natural Resources and Environmental Protection Act, Act 451 of the Public Acts of 1994, being Sections 324.9101 to 324.9123a of the Michigan Compiled Laws Annotated, and any amendment thereto, and Rules promulgated under Part 91, and any amendments thereto, are hereby incorporated into this ordinance and adopted by reference as part of this ordinance.
- C. The City of Troy Engineering Design Standards and Details for Soil Erosion and Sedimentation Control as developed by the City Engineer and contained in the City of Troy Development Standards and Standard Detail Sheets are incorporated into this ordinance as the control measures and practices which must be complied with under this ordinance. In addition, the specifications and recommendations regarding soil erosion and sedimentation control measures and practices as provided by the "Guidebook of Best Management Practices for Michigan Watersheds", published by the Water Bureau, Michigan Department of Environmental Quality ("BMP guidebook") or subsequent version may be used for additional information. A complete copy of the BMP guidebook shall be kept available for public inspection at the Engineering Department at City Hall.
- D. The City of Troy Engineering Department is hereby designated as the municipal enforcing agency responsible for the administration and enforcement of Part 91, the Rules and this ordinance. The Troy City Engineer is authorized to administer and enforce Part 91, the Rules and this ordinance.
- E. The Troy City Engineer and/or his designees shall be the enforcement agents for this ordinance and are authorized to issue civil infraction tickets, stop work orders or to take any other actions allowed under Part 91, the Rules and this ordinance. The City Engineer and the person(s) designated shall have completed the entire Part 91 soil erosion and sedimentation control training and valid certificate issued by the Michigan Department of Environmental Quality.

# C.2 Chapter 86, Section 4 – Soil Erosion and Sedimentation Control Requirements

- A. It shall be a violation of this ordinance for any person to engage in and/or maintain any earth change activity in such a manner as to allow uncontrolled accelerated soil erosion and sedimentation to be transported off site onto adjacent properties and into the Waters of the State.
- B. It shall be a violation of this ordinance for any person to engage in and/or maintain any earth change activity, which is not in compliance with Part 91, the Rules and/or the provisions of this ordinance.
- C. Soil erosion and sedimentation control measures ("SESC") shall be included with plans and specifications for a project, and submitted to the City with site plans and the soil erosion permit application for review. A copy of the approved plans will be kept at the site where it will be available for inspection. SESC plans will contain all

*Rule 1703 information and comply with Part 91 Rule requirements and design standards prepared by the City Engineer.* 

- D. No person shall engage in and/or maintain an earth change activity which will disturb more than 1 acre of land, or which lies within 500 feet of the water's edge of a lake or stream, regardless of the amount of land disturbed, without a valid SESC permit issued under this ordinance.
  - 1. To assure compliance, all building permit applications will require any construction project to apply for a soil erosion permit. Upon submittal of application, the City Engineer or his/her designee will issue a soil erosion permit, if they meet the requirements found in this subsection.
- C.3 Chapter 86, Section 5 Permit Applications, Soil Erosion & Sedimentation Control (SESC) Plans; Review Procedures and Requirements
- A. After the effective date of this ordinance, no person shall maintain or undertake an earth change on any land within the City that requires a soil erosion permit without a soil erosion permit and approved soil erosion and sedimentation control plan as provided by Part 91, the Rules, and this ordinance.
  - 1. An application for a soil erosion permit shall be submitted to the City engineer by the owner of the land upon which the earth change is proposed to be made or by the owner's designated agent. The applicant, if not the owner, shall have written authorization from the landowners to sign the soil erosion permit application and secure a soil erosion permit in the landowners' name.
  - 2. The application shall be on forms provided by the Engineering Department and accompanied by an application review and inspection fee made payable to the City of Troy in the amount provided in the Development Standards adopted by the resolution of the City Council.
  - 3. The application shall also be accompanied by a soil erosion and sedimentation control plan that includes the following required data:
    - a. A vicinity sketch of the site location and the proximity of any proposed earth change to the surface Waters of the State or to drains or storm water inlets leading directly to the surface Waters of the State.
    - b. A boundary line survey or legal description of the site.
    - c. The name, address, and telephone number of the landowner or designated agent, and of the developer, if different form the landowner.
    - d. A plan of the site at a scale of not more than 100 feet to an inch or as otherwise determined adequate by the City Engineer, showing existing topography or slope description at five-foot intervals.
    - e. A soil survey map or written description of the soil types of the exposed land area contemplated for the earth change.
    - f. Details for the proposed each change including:
      - 1) A description of the location of the physical limits of each proposed earth change.
      - 2) A description of the location of all existing and proposed onsite drainage and dewatering facilities.
- 3) The timing sequence of each proposed earth change, such as starting and completion dates of the development sequence and time exposure of each area prior to the completion of effective soil erosion and sediment control measures.
- 4) The location and description for installing and removing all proposed temporary soil erosion and sedimentation control measures and their established cost.
- 5) A description and the location of all proposed permanent soil erosion and sedimentation control measures and their estimated cost.
- *6)* A statement of the quantity of the excavation and fill involved.
- 7) A program proposal for the continued maintenance of all permanent soil erosion and sedimentation control measures which remain after the project completion, including the designation of the person or organization responsible for the maintenance. Maintenance responsibilities shall become a part of any sales or exchange agreement for the land on which the permanent soil erosion and sedimentation control measures are located.
- 4. The soil erosion and sedimentation plan shall be reviewed by the city Engineer and/or his designee.
- 5. All earth changes shall be designed, constructed, implemented and maintained in accordance with the minimum requirements for earth changes as provided by Part 91, the Rules, and this ordinance, and shall also comply with any structural, vegetative, or managerial practices to effectively prevent or reduce soil erosion and sedimentation as determined necessary by the City Engineer. In determining the adequacy and effectiveness of the design, implementation and maintenance of proposed soil erosion and sedimentation control measures for purposes of this ordinance the City Engineer shall consider:
  - a. Site-specific factors and information of the type required to be included in the soil erosion and sedimentation control plan for the property; and
  - b. The specifications and recommendations regarding soil erosion and sedimentation control measures and practices as provided by the "Guidebook of Best Management Practices for Michigan Watersheds", published by the Water Bureau, Michigan Department of Environmental Quality ("BMP guidebook") or subsequent version. A complete copy of the BMP guidebook shall be kept available for public inspection at the Engineering Department at City Hall.
- 6. The City Engineer shall approve, disapprove or require modification of the application for the soil erosion permit and accompanying SESC plan within 30 calendar days following receipt of a complete application. Notification of disapproval shall be made by certified mail. If the application is disapproved, the City Engineer shall advise the applicant of the reasons for disapproval and conditions required for approval. The requirement of notification by certified mail is not necessary if the applicant is personally given written approval or disapproval of the application.

- 7. A soil erosion permit shall not be issued where:
  - a. The proposed work would cause uncontrolled soil erosion and sedimentation; or
  - b. The proposed work would cause hazards to the public safety and welfare; or
  - c. The work, as proposed by the applicant, will damage any public or private property or interfere with any existing drainage course in such a manner as to cause damage to any adjacent property or result in the deposition of debris or sediment on any public way or into any Waters of the State or create an unreasonable hazard to persons or property; or
  - d. The land area for which work is subject to geological hazard to the extent that no reasonable amount of corrective work can eliminate or sufficiently reduce settlement, slope instability or any other such hazard to persons or property; or the land area for which the work is proposed lies within the one hundred (100) year floodplain of any stream, unless a permit from the Michigan Department of Environmental Quality accompanies the application and a hydrologic report prepared by a licensed an professional engineer is submitted to certify that the proposed work will have, in the City Engineer's opinion, no detrimental influence on the public welfare or upon the total development of the watershed.
- 8. No soil erosion permit shall be issued until the applicant has paid applicable permit and inspection fees to the City Treasurer in accordance with the fee schedule adopted by resolution of the City Council. The City Engineer shall calculate the fee after reviewing the application and plan.
- 9. Upon a determination by the City Engineer that an applicant has met all applicable requirements under this ordinance and other applicable laws and regulations, and that the applicant has paid all applicable fees, the City Engineer shall issue a permit for the proposed earth change. The permit shall be kept available on the site of the proposed earth change at all times for inspection by the City.
- 10. If the earth change for which a permit has been issued has not been commenced within one year from the date of issuance of the permit, the permit shall lapse, provided that the City Engineer may extend the time for commencement of the earth change if the permitee requires an extension prior to the expiration of the initial period and no material change of circumstances has occurred.
- 11. A soil erosion permit issued under this ordinance shall not relieve the permitee from complying with any other applicable statutes, ordinances, rules or regulations.
- 12. The failure to comply with any term or condition of an approved permit or to timely complete all work as set forth in an approved plan constitutes a violation of this ordinance.
- 13. An "authorized public agency" as defined by Part 91 is exempt from obtaining a soil erosion permit but shall notify the City Engineering Department in advance of such proposed earth change.
- 14. An earth change activity that does not require a permit under this ordinance is not exempt from enforcement procedures under this ordinance, Part 91 & the

*Rules, if the activity exempted by Part 91, the Rules and/or this ordinance causes or results in a violation of Part 91, the Rules and/or this ordinance.* 

#### C.4 Chapter 86, Section 6 – Inspections

- A. The City Engineer or his designee shall inspect all work covered by a soil erosion permit issued pursuant to this ordinance and is hereby authorized to enter property in the City covered by a permit for the purpose of performing any duties under this ordinance. Inspection fees shall be paid as provided according to the fee schedule.
- B. The City Engineer or his designee may enter at all reasonable times in or upon any private or public property for the purpose of inspection and investigating conditions or practices that may be a violation of Part 91, the Rules, or this ordinance.

#### C.5 Chapter 86, Section 11 – Enforcement Authority

Upon a finding that there has been a violation of a provision, requirement or condition of this ordinance or of any permit or plan issued or approved under this ordinance, the City may take any enforcement action authorized by Part 91, the Rules, this ordinance, or by other applicable laws, regulations and ordinances. In addition to other remedies provided in this ordinance, the City Engineer's enforcement authority and/or his designees also includes, without limitation, the ability to issue cease and desist orders and to revoke soil erosion permits. Failure to comply with a cease and desist order or revocation of a soil erosion permit shall constitute a violation of this ordinance.

#### C.6 Chapter 23, Draft Municipal Separate Storm Sewer System

Illicit discharges and connections are to be corrected within 30 days of notice of violation (as practicable) as will be identified in city's IDEP draft ordinance.

#### C.8 Post-Construction Ordinance

The City intends to adopt the Oakland County Water Resources Commissioner (OCWRC) Engineering Standards for Storm Water Facilities (storm water management and water quality) once they have been revised and approved by EGLE. The OCWRC standards would take effect at the time the MS4 Permit goes into effect.

#### **SECTION D – ENFORCEMENT TRACKING**

City will track all violations and issued permits. The following information will be collected and used for tracking records for each violation that is imposed by the City.

- 1. Name
- 2. Date
- 3. Location of the Violation (address, cross streets, etc.)
- 4. Business, Agency, Organization as applicable
- 5. Description of the Violation
- 6. Applicable Correspondence
- 7. Follow-up Actions

- 8. Key Dates
- 9. Descriptions of the City's Enforcement Response
- 10. Schedules for Achieving Compliance
- 11. Date the Violation was Resolved

In addition to the enforcement mechanisms that will be noted in the IDEP ordinance, additional tracking of instances of noncompliance occurs and includes information identified in the Spill Notification/Complaint/Outfall Investigation Reporting Form, attachments included.

#### **SECTION E – PROCESS FOR REVISION**

Any questions on this policy and procedure should be directed to the City Engineering Department or the City Manager. This procedure shall be reviewed once per permit cycle by the Stormwater Manager for any updates to streamline the requirements.

# **APPENDIX C**

Collaborative Public Participation/Involvement Program (PPP) Click here for link to Collaborative PPP Plan

# **APPENDIX D**

Collaborative Public Education Program (PEP) Click here for link to Collaborative PEP Plan

# APPENDIX E

Collaborative Illicit Discharge Elimination Plan (IDEP) Click here for link to Collaborative IDEP APPENDIX F Construction Stormwater Runoff Control

# STANDARD OPERATING PROCEDURE CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

The City of troy 500 w. big beaver road, troy, Michigan 48084



MARCH 2016

#### **SECTION A – PURPOSE**

The Michigan Department of Environmental Quality (MDEQ) National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Phase II Stormwater Discharge Permit Application requires a description of current and proposed BMPs to meet the minimum control measure requirements for the construction stormwater runoff control program to the maximum extent practicable. The City of Troy does administer a Part 91 program and is a designated municipal enforcement agency. The following standard operating procedure provides a description of the procedures the City employs for construction site runoff control that includes notification procedures and ensuring proper permits are obtained by those disturbing greater than one acre of soil.

#### **SECTION B – APPLICATION PROCEDURE**

Prior to any earth disturbance, the City of Troy will ensure that construction activity one acre or greater in total earth disturbance with the potential to discharge to the MS4 does obtain a Part 91 Permit and/or a State of Michigan Permit by Rule or is reviewed by an approved Authorized Public Agency through the site plan review process. These requirements are documented in both the City's Building Code and Grading and Soil Erosion Control Ordinances.

- B.1 Chapter 86, Section 5 Permit Applications, Soil Erosion & Sedimentation Control (SESC) Plans; Review Procedures and Requirements
- A. After the effective date of this ordinance, no person shall maintain or undertake an earth change on any land within the City that requires a soil erosion permit without a soil erosion permit and approved soil erosion and sedimentation control plan as provided by Part 91, the Rules, and this ordinance.
  - 1. An application for a soil erosion permit shall be submitted to the City engineer by the owner of the land upon which the earth change is proposed to be made or by the owner's designated agent. The applicant, if not the owner, shall have written authorization from the landowners to sign the soil erosion permit application and secure a soil erosion permit in the landowners' name.
  - 2. The application shall be on forms provided by the Engineering Department and accompanied by an application review and inspection fee made payable to the City of Troy in the amount provided in the Development Standards adopted by the resolution of the City Council.
  - 3. The application shall also be accompanied by a soil erosion and sedimentation control plan that includes the following required data:
    - a. A vicinity sketch of the site location and the proximity of any proposed earth change to the surface Waters of the State or to drains or storm water inlets leading directly to the surface Waters of the State.
    - b. A boundary line survey or legal description of the site.
    - c. The name, address, and telephone number of the landowner or designated agent, and of the developer, if different form the landowner.
    - d. A plan of the site at a scale of not more than 100 feet to an inch or as otherwise determined adequate by the City Engineer, showing existing topography or slope description at five-foot intervals.

- e. A soil survey map or written description of the soil types of the exposed land area contemplated for the earth change.
- f. Details for the proposed each change including:
  - 1) A description of the location of the physical limits of each proposed earth change.
  - 2) A description of the location of all existing and proposed onsite drainage and dewatering facilities.
  - 3) The timing sequence of each proposed earth change, such as starting and completion dates of the development sequence and time exposure of each area prior to the completion of effective soil erosion and sediment control measures.
  - 4) The location and description for installing and removing all proposed temporary soil erosion and sedimentation control measures and their established cost.
  - 5) A description and the location of all proposed permanent soil erosion and sedimentation control measures and their estimated cost.
  - *6)* A statement of the quantity of the excavation and fill involved.
  - 7) A program proposal for the continued maintenance of all permanent soil erosion and sedimentation control measures which remain after the project completion, including the designation of the person or organization responsible for the maintenance. Maintenance responsibilities shall become a part of any sales or exchange agreement for the land on which the permanent soil erosion and sedimentation control measures are located.
- 4. The soil erosion and sedimentation plan shall be reviewed by the city Engineer and/or his designee.
- 5. All earth changes shall be designed, constructed, implemented and maintained in accordance with the minimum requirements for earth changes as provided by Part 91, the Rules, and this ordinance, and shall also comply with any structural, vegetative, or managerial practices to effectively prevent or reduce soil erosion and sedimentation as determined necessary by the City Engineer. In determining the adequacy and effectiveness of the design, implementation and maintenance of proposed soil erosion and sedimentation control measures for purposes of this ordinance the City Engineer shall consider:
  - a. Site-specific factors and information of the type required to be included in the soil erosion and sedimentation control plan for the property; and
  - b. The specifications and recommendations regarding soil erosion and sedimentation control measures and practices as provided by the "Guidebook of Best Management Practices for Michigan Watersheds", published by the Water Bureau, Michigan Department of Environmental Quality ("BMP guidebook") or subsequent version. A complete copy of the BMP guidebook shall be kept available for public inspection at the Engineering Department at City Hall.

- 6. The City Engineer shall approve, disapprove or require modification of the application for the soil erosion permit and accompanying SESC plan within 30 calendar days following receipt of a complete application. Notification of disapproval shall be made by certified mail. If the application is disapproved, the City Engineer shall advise the applicant of the reasons for disapproval and conditions required for approval. The requirement of notification by certified mail is not necessary if the applicant is personally given written approval or disapproval of the application.
- 7. A soil erosion permit shall not be issued where:
  - a. The proposed work would cause uncontrolled soil erosion and sedimentation; or
  - b. The proposed work would cause hazards to the public safety and welfare; or
  - c. The work, as proposed by the applicant, will damage any public or private property or interfere with any existing drainage course in such a manner as to cause damage to any adjacent property or result in the deposition of debris or sediment on any public way or into any Waters of the State or create an unreasonable hazard to persons or property; or
  - d. The land area for which work is subject to geological hazard to the extent that no reasonable amount of corrective work can eliminate or sufficiently reduce settlement, slope instability or any other such hazard to persons or property; or the land area for which the work is proposed lies within the one hundred (100) year floodplain of any stream, unless a permit from the Michigan Department of Environmental Quality accompanies the application and a hydrologic report prepared by a licensed an professional engineer is submitted to certify that the proposed work will have, in the City Engineer's opinion, no detrimental influence on the public welfare or upon the total development of the watershed.
- 8. No soil erosion permit shall be issued until the applicant has paid applicable permit and inspection fees to the City Treasurer in accordance with the fee schedule adopted by resolution of the City Council. The City Engineer shall calculate the fee after reviewing the application and plan.
- 9. Upon a determination by the City Engineer that an applicant has met all applicable requirements under this ordinance and other applicable laws and regulations, and that the applicant has paid all applicable fees, the City Engineer shall issue a permit for the proposed earth change. The permit shall be kept available on the site of the proposed earth change at all times for inspection by the City.
- 10. If the earth change for which a permit has been issued has not been commenced within one year from the date of issuance of the permit, the permit shall lapse, provided that the City Engineer may extend the time for commencement of the earth change if the permitee requires an extension prior to the expiration of the initial period and no material change of circumstances has occurred.
- 11. A soil erosion permit issued under this ordinance shall not relieve the permitee from complying with any other applicable statutes, ordinances, rules or regulations.

- 12. The failure to comply with any term or condition of an approved permit or to timely complete all work as set forth in an approved plan constitutes a violation of this ordinance.
- 13. An "authorized public agency" as defined by Part 91 is exempt from obtaining a soil erosion permit but shall notify the City Engineering Department in advance of such proposed earth change.
- 14. An earth change activity that does not require a permit under this ordinance is not exempt from enforcement procedures under this ordinance, Part 91 & the Rules, if the activity exempted by Part 91, the Rules and/or this ordinance causes or results in a violation of Part 91, the Rules and/or this ordinance.
- B.2 Chapter 86, Section 7 Permit Required Prior to Issuance of Building Permit
- A. A building permit shall not be issued for any property upon which a soil erosion permit is required until the soil erosion permit has been issued for the property as provided by this ordinance.

### SECTION C – INSPECTIONS/COMPLAINTS

As the Part 91 regulating authority, the City will inspect active construction sites that have obtained a Soil Erosion and Sedimentation Control Permit from the City.

#### C.1 Chapter 86, Section 6 – Inspections

- A. The City Engineer or his designee shall inspect all work covered by a soil erosion permit issued pursuant to this ordinance and is hereby authorized to enter property in the City covered by a permit for the purpose of performing any duties under this ordinance. Inspection fees shall be paid as provided according to the fee schedule.
- B. The City Engineer or his designee may enter at all reasonable times in or upon any private or public property for the purpose of inspection and investigating conditions or practices that may be a violation of Part 91, the Rules, or this ordinance.

Complaints regarding soil erosion and sedimentation issues made by the public will be forwarded to the City Engineering Department. At that time, the City Engineering Department will direct a site inspection to document any violations of the soil erosion and sedimentation/grading permit within 48 hours and pursue enforcement actions as appropriate. See the Enforcement Response Procedure for a summary of the enforcement protocols to ensure compliance with the City's Part 91 program.

#### **SECTION D – MEASUREABLE GOALS**

To demonstrate the effectiveness of the Village's Part 91 program, the following metrics will be tracked for reporting purposes:

- Number of Part 91 related complaints received.
- Number of Part 91 permits issued.
- Number of enforcement actions taken to achieve compliance with the Part 91 program.

These metrics will be tracked over the reporting cycle that is specified in the City's Certificate of Coverage for the MS4 Permit.

### **SECTION E – REPORTABLE DISCHARGES**

The City will not report instances of *de minimis* soil discharges to MDEQ. For instances where the discharge of sediment cannot be immediately contained on site, or if there are other pollutants that include pesticides, petroleum derivatives, construction chemicals, and solid waste associated with the discharge in quantities that are consistent with the spill response plan as defined in Appendix H of the Storm Water Management Plan (SWMP), the City will notify the MDEQ through the Pollution Emergency Alert System (PEAS) at 1-800-292-4706.

### SECTION F – STATE OF MICHIGAN PERMIT BY RULE

The City shall advise the landowner or recorded easement holder of the State of Michigan Permit by Rule (Rule 323.2190) for storm water discharge from construction activity if the area of the disturbance is greater than 5 acres. These criteria will be identified during the site plan review process and will be included in correspondence with the landowner as appropriate.

#### **SECTION G – PROCESS FOR REVISION**

Any questions on this policy and procedure should be directed to the City Engineering Department or the City Manager. This procedure shall be reviewed once per permit cycle by the City Engineering Department for any updates to streamline the requirements.

APPENDIX G Post-Construction Stormwater Runoff Program

# STANDARD OPERATING PROCEDURE POST CONSTRUCTION STORMWATER RUNOFF CONTROL

PREPARED FOR:

The City of troy 500 w. big beaver road, troy, Michigan 48084



MARCH 2016

#### **SECTION A – PURPOSE**

The Michigan Department of Environmental Quality (MDEQ) National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Phase II Stormwater Discharge Permit Application requires a description of current and proposed BMPs to meet the minimum control measure requirements for the post-construction stormwater runoff control program to the maximum extent practicable. Post-construction stormwater 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 site that undergo development or significant redevelopment.

#### **SECTION B – ADOPTION OF COUNTY STANDARDS**

The City of Troy currently follows its Development/Engineering Standards for stormwater management. Once the Oakland County Water Resources Commissioner (OCWRC) has completed the revision to the OCWRC Engineering Standards for Storm Water Facilities to meet the new permit requirements, the City will review and consider them for adoption.

#### **SECTION C – MEASURABLE GOALS**

To demonstrate the effectiveness of the post construction stormwater runoff control program, the following metrics will be tracked for reporting purposes:

- Number of stormwater site plan reviews requested and completed
- Number of maintenance violations of constructed BMPs
- Number of instances where the City had to undertake corrective measures

These metrics will be tracked over the reporting cycle that is specified in the City's Certificate of Coverage.

#### SECTION D – PROCESS FOR REVISION

This procedure shall be reviewed every two years by the City Engineering Department for any updates to streamline the requirements.

APPENDIX H Pollution Prevention and Good Housekeeping

# STANDARD OPERATING PROCEDURE POLLUTION PREVENTION AND GOOD HOUSEKEEPING

**GENERAL PROCEDURES** 

THE CITY OF TROY 500 W. BIG BEAVER ROAD, TROY, MICHIGAN 48084



REVISED JULY 2018

#### **SECTION A – PURPOSE**

The Michigan Department of Environmental Quality (MDEQ) National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Phase II Stormwater Discharge Permit Application requires a description of current and proposed BMPs to meet the minimum control measure requirements for the Pollution Prevention and Good Housekeeping Program to the maximum extent practicable to prevent or reduce the discharge of pollutants from municipal facilities and operations.

#### SECTION B – FACILITY ASSESSMENT AND PRIORITIZATION

City owned and operated facilities have been assessed for their potential to discharge pollutants to the waters of the state. Each facility was evaluated based on the following criteria:

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

Based on these criteria, the potential for each facility to discharge pollutants to the waters of the state were rated high, medium, or low. For "low" priority facilities where no assessment factors are present, catch basin cleaning and street sweeping will be performed as indicated in the applicable procedures for these activities. For "medium" priority facilities, appropriate BMPs are considered based on the assessment factors present to prevent or minimize the potential for pollutants from entering surface waters of the state. "High" priority facilities have specific procedures that are included in Appendices M and N of the Storm Water Management Plan (SWMP).

#### **SECTION C- UPDATES AND PRIORITY REVISION**

This inventory shall be updated within 120 days as facilities and structural stormwater controls are added, removed, or no longer owned or operated by the applicant. Priority level assessments shall be revised within 120 days prior to discharging stormwater at a new facility, or when new the storage of materials, equipment, or vehicles changes at a facility.

#### SECTION D – MUNICIPAL INVENTORY AND ASSESSMENT

The following table identifies the City's owned or operated facilities with a discharge of stormwater to surface waters of the state. **Table 1** includes a list of properties owned or operated by the City that has stormwater controls on site and provides the estimated number of stormwater structural controls (i.e. catch basins, detention basins, etc.) at each site, along with the priority level of potential discharge of pollutants to waters of the state. **Table 2** provides a listing of other properties that are owned and operated by the City but do not have any

stormwater controls. In general, sites listed on Table 2 are parks or properties that are green space and do not contain any structures or parking lots.

Facility Name	Location	Structural Controls	Priorit y Level	Assessment Factors	BMP's Implemented
City Hall	500 W. Big Beaver Rd.	Catch Basins (5)	Low	0	Catch Basin Cleaning Street Sweeping
Public Works Facility	4693 Rochester Rd.	Catch Basins (24) Detention Basin (1)	High	1, 3	See Section E See SWPPP/PIPP
Aquatic Center	3425 Civic Center Dr.	Catch Basins (24)	Low	0	Catch Basin Cleaning Street Sweeping
Community Center	3179 Livernois Rd.	Catch Basins (31) Detention Basin (1)	Low	0	Catch Basin Cleaning Street Sweeping
Library	510 W. Big Beaver Rd.	Catch Basins (24)	Low	0	Catch Basin Cleaning Street Sweeping
Police Administration and Maint. Garage	500 W. Big Beaver Rd.	Catch Basins (7)	High	1, 3	See Section E See SWPPP/PIPP
Fire/Police Training Center	4850 John R. Rd.	Catch Basins (3) Detention Basin (1)	Low	0	Catch Basin Cleaning Street Sweeping
Fire Station No. 1	1019 E. Big Beaver Rd.	Catch Basins (4) Detention Basin (1)	Low		Catch Basin Cleaning Street Sweeping
Fire Station No. 2	5600 Livernois Rd.	Catch Basins (5) Detention Basin (1)	Low		Catch Basin Cleaning Street Sweeping
Fire Station No. 3	2400 W. Big Beaver Rd.	Catch Basins (14) Detention Basin (1)	Low		Catch Basin Cleaning Street Sweeping
Fire Station No. 4	2103 E. MapleRd.	Catch Basins (6) Detention Basin (1)	Low		Catch Basin Cleaning Street Sweeping
Fire Station No. 5	6399 John R Rd.	Catch Basins (6)	Low		Catch Basin Cleaning Street Sweeping
Fire Station No. 6	5901 Coolidge Hwy.	None	Low	0	Street Sweeping
Troy Historic Village	60 W. Wattles Rd.	Catch Basins (30) Vegetated Swale (1)	Low		Catch Basin Cleaning Street Sweeping
Sylvan Glen Golf Course	5725 Rochester Rd.	Catch Basins (5)	Med	0	Catch Basin Cleaning Street Sweeping
Sanctuary Lake Golf Course	1450 South Blvd.	Catch Basins (4) Detention Basin (1)	Med	0	Catch Basin Cleaning Street Sweeping
Sylvan Glen Lake Park	5501 Rochester Rd.	None	Low	0	None
Fire Fighters Park	1300 W. Square Lake Rd.	Catch Basins (20) Detention Basins (2)	Low	0	Catch Basin Cleaning Street Sweeping
Boulan Park	3671 Crooks Road	Catch Basins (21)	Low	0	Catch Basin Cleaning Street Sweeping
Beach Road Park	Beach Rd/Long Lake Rd.	None	Low	0	Street Sweeping
Phillip J. Huber Park	3500 Civic Center Dr.	None	Low	0	Street Sweeping

# Table 1

Robinwood Park	640 Robinwood	Catch Basins (10)		Low	0	Catch Basin Cleaning
Milverton Park	2384 E. Maple Rd.	No	ne	Low	0	Street Sweeping
Brinston Park	2262 Brinston	Catch Ba	asins (5)	Low	0	Catch Basin Cleaning Street Sweeping
Raintree Park	3775 John R Rd.	Catch Ba	sins (13)	Low	0	Catch Basin Cleaning Street Sweeping
Jaycee Park	1755 E. Long Lake Rd.	Catch Basins (4)		Low	0	Catch Basin Cleaning Street Sweeping
Beaver Trail Park	3458 Pasadena	Detention	Basin (1)	Low	0	None
Donald J. Flynn Park	1710 E. South Blvd.	Vegetated Swale (1)		Low	0	Street Sweeping
Gateway Park	1019 E. Big Beaver Rd.	Catch Basins (4)		Low	0	Catch Basin Cleaning
Troy Skate Park	3179 Livernois Rd.	Catch Basins (3)		Low	0	Catch Basin Cleaning Street Sweeping
Lloyd Stage Nature Center	6685 Coolidge Hwy.	None		Low	0	Street Sweeping
Troy Farm	Beach Rd./W. South Blvd	None		Low	0	Street Sweeping
Beach Road Cemetery	5360 Beach Rd.	None		Low	0	None
Crooks Road Cemetery	3701 Crooks Rd.	None		Low	0	None
Perrin Cemetery	1050 Coolidge Hwy.	None		Low	0	None
Troy Union Corners Cemetery	1199 E. Square Lake Rd.	None		Low	0	None
Structural Storm Water Controls					Quantity	
City Catch Basins			19,000			
City Outfalls			374			
City Detention Basins			127 City Owned, 130 City Maintained			
City Stormwater Treatment Units			2			
City Pump Stations			20			
City Secondary Containment			2 (DPW Brine Tanks)			
City Vegetated Swales			2			

# Table 2

Facility Name	Address/Crossroads
North Glen Park	6500 Elmoor Drive
Schroeder Park	3500 Beach Road
Redwood Park	750 Redwood Drive

#### **SECTION E –SITE SPECIFIC SOP FOR HIGH PRIORITY SITES**

The MDEQ NPDES Phase II Stormwater Discharge Permit Application requires a standard operating procedure (SOP) for identifying the structural and non-structural stormwater controls implemented and maintained to prevent or reduce pollutant runoff at each facility with the high potential for pollutant runoff.

#### E.1 Inventory and Description of Materials and Activities

The City of Troy's public works operations are conducted at their 4693 Rochester Road facility. The City also operates a vehicle maintenance garage at their police administration office located at 500 W. Big Beaver Road. These sites are considered high priority sites due the following operations:

#### DPW Facility – 4693 Rochester Road

- Salt Storage
- Brine Storage
- Stockpiled materials
- Underground Storage Tanks
- Maintenance and cleaning of vehicles and equipment

#### Police Vehicle Maintenance Garage – 500 West Big Beaver Road

- Maintenance and cleaning of vehicles and equipment
- Underground Storage Tanks

#### E.2 Vehicle Washing and Maintenance

Minor vehicle maintenance activities are conducted by DPW staff for the City's DPW and police vehicle fleet. Maintenance activities conducted by DPW staff include, but are not limited to, oil changes and other vehicle fluids, tune ups, etc. These activities are carried out indoors where floor drains are connected to the sanitary sewer system. More complicated maintenance and repairs are conducted by a private maintenance facility. A maintenance log is maintained to document all vehicle maintenance and repair activities.

Vehicle washing activities are conducted at either a commercial car wash or indoors at the DPW and Police Maintenance facilities where the floor drains discharge to the sanitary sewer system.

Site specific standard operating procedures have been developed for these facilities and are included as separate documents in Appendices M and N of the Storm Water Management Plan (SWMP). Please see the Department of Public Works Facility Storm Water Pollution Prevention and Pollution Incident Prevention Plan (SWPPP/PIPP) in Appendix M, and the Police Vehicle Maintenance Garage Storm Water Pollution Prevention Plan (SWPPP) in Appendix N.

# SECTION F –CATCH BASIN MAINTENANCE PRIORITY

Catch basins that are inspected and maintained by the City have been prioritized for routine inspection, maintenance, and cleaning. The criteria for the priority levels that include low, medium, and high are defined as follows:

*Low Priority* – Catch basins that are of low priority have very little sediment accumulation and do not require routine maintenance. Low priority catch basins are inspected on an as needed basis based on complaints.

*Medium Priority* – Catch basins that are of medium priority have a higher rate of sediment accumulation and will require maintenance more frequently than low priority catch basins.

**High Priority** – Catch basins that are of high priority have a high rate of sediment accumulation and will require regular routine maintenance and inspection. These catch basins are typically located in areas where sediment is easily mobilized and transported by runoff.

Catch basins at the DPW property and Emerald Lakes Subdivision are considered high priority with the remaining of the City's catch basins having very little sediment accumulation rates, require little maintenance and are of low priority. There are currently no catch basins that have been assigned a medium priority rating. The City Village will inspect 20% of it catch basins a year and will proceed to clean them if the sediment in the sump is no more than 50% full. Catch basins that prompt resident complaints or are subject to isolated instances where structures are plugged or damaged will be maintained and inspected by the City contractor as needed. At that time, it will be determined if the catch basin will require maintenance on a more frequent interval and warrants a reclassification to a medium priority rating. In the event the priority rating of a catch basin is changed, or new catch basins are constructed, this procedure will be updated and revised to reflect the change in priority within 120 days.

# SECTION G – CATCH BASIN INSPECTION, MAINTENANCE, AND CLEANING

Catch basins are visually inspected during normal work activities or if a complaint is registered by a resident. A visual inspection of the structure will identify any structural defects which may include collapse, cracking, frame damage, pipe collapse, blockage, etc. and will be documented. Catch basin structures in need of structural repairs are identified during the inspection and regular maintenance process based on the results of visual assessments conducted by the City. Structure repairs are prioritized based on public safety concerns. City owned catch basins are inspected concurrently with cleaning activities between April and November. A vactor truck is used to remove all solids and liquids from the structure to the extent possible. At no time is collected sediment and water allowed to be discharged back into the storm sewer system during the cleaning process. Catch basins that are located on private property are not inspected, cleaned, or maintained by the City.

# SECTION H – DISPOSAL OF COLLECTED MATERIAL

Collected material from catch basin cleaning and street sweeping activities is transported to a local landfill for disposal.

#### SECTION I – STREET SWEEPING PRIORITIZATION

City owned and maintained streets have been prioritized for street sweeping. The criteria for the priority levels that include low, medium, and high are defined as follows:

*Low Priority* – Residential streets within the City are of low priority due to their minimal sediment accumulation rates. They are generally swept at least one time per year.

**Medium Priority** – Major roads throughout the City are of medium priority due to the higher rate of sediment accumulation rates in comparison to low priority residential streets. Medium priority areas are generally swept several times per year.

**High Priority** – Areas that are of high priority have a high rate of sediment accumulation and will require regular, frequent sweeping. These areas are typically located in areas where sediment is easily mobilized and transported by runoff. Additionally, areas that prompt resident complaints or are subject to excessive road sediments are also considered a high priority area. There are currently no areas that have been assigned a high priority rating due to excessive road sediments and resident complaints. However, if DPW receives a complaint, a determination of the area will be made by DPW staff to increase sweeping on a more frequent interval as well as a reclassify the area to high priority rating.

In the event a priority rating is changed, or new City owned streets are constructed, this procedure will be updated and revised to reflect the change in priority within 30 days.

Street sweeping activities are conducted by the City using both mechanical and regenerative air equipment. Collected sediment from street sweeping activities is disposed of as described in Section H. Major Roads within the City are considered Medium Priority over the rest of the city side streets which are Low Priority. Street sweeping program activities are not implemented under the following conditions:

- Street sweeping is not conducted on County or State roads
- Sweeping activities is not conducted during wet and inclement weather
- Street sweeping activities are not conducted on private streets, parking lots, or uncurbed streets.

#### SECTION J – OTHER STRUCTURAL STORMWATER CONTROLS

In addition to implementing the catch basin maintenance and street sweeping programs, the City also performs inspections of other storm water controls that are located throughout the City.

#### J.1 Detention Basin

The routine procedure for the detention basins at the DPW facility is the inspection of the inlet pipes and the outlet structure for blockages as part of the biannual comprehensive inspection of the DPW.

#### J.2 Vegetated Drainage Swales

The routine inspection of vegetated drainage swales located on City owned properties consists of the visual evaluation of blockages or excessive sedimentation. Inspections generally occur during the course of daily park operations, or when complaints are received by the City.

#### J.3 Stormwater Treatment Units

The City installed a stormwater treatment unit located at Big Beaver and Rochester Road. The units are cleaned and maintained annually or per the manufacturer's recommendations.

#### J.4 Pump Stations

The City installed pump stations are inspected regularly to ensure operation and maintenance is conducted on an as needed basins.

#### J.5 Secondary Containment

Secondary containment units are located at the City Department of Public Works facility for the two (2) brine tanks. Inspections of the secondary containment for the tanks are conducted as part of the DPW SWPPP/PIPP regular and comprehensive inspections, and repairs are completed on an as needed basis.

The City does not have any other structural controls that are owned or maintained by the City. In the event additional structural stormwater controls are constructed, this procedure will be updated and revised to include the new controls within 120 days.

#### **SECTION K – NEW APPLICANT OWNED FACILITIES**

In the event the City acquires or constructs new structural stormwater controls, the design of these structures will comply with the stormwater standards that have been established by Oakland County. Site plans will be reviewed by the City, or its consultants, to ensure the appropriate standards are met.

#### **SECTION L – CERTIFIED PESTICIDE APPLICATOR**

The City has a certified pesticide applicator on staff and applies pesticides or fertilizers seasonally. In addition, the City also retains the services of a licensed applicator.

#### SECTION M – EMPLOYEE TRAINING

Employee training programs will be implemented to inform appropriate personnel at all levels of responsibility of safety, environmental impacts, and good housekeeping practices at the

minimum of once every permit cycle. The City participates in training opportunities that are made available by SEMCOG, Oakland County, the Alliance of Rouge Communities, and others as deemed appropriate. Employee training components for the City staff includes:

<b>Employees Trained</b>	Training Description and Frequency
	Upon hire, employees will:
	View the Municipal Storm Water Pollution Prevention Storm Water
New Troy DPW Employees	training video.
	<ul> <li>Read and become familiar with the City of Troy SOPs</li> </ul>
	• Participate in a job shadow program where new staff is paired with
	a DPW foreman or grounds crewman.
	View the Municipal Storm Water Pollution Prevention Storm Water
	training video.
All Troy Facilities	<ul> <li>Review proper materials storage and handling.</li> </ul>
Employees	<ul> <li>Review good housekeeping and pollution prevention practices.</li> </ul>
	<ul> <li>Review samples of illicit discharges to the storm sewer system</li> </ul>
	<ul> <li>Review City of Troy Spill Response Procedures.</li> </ul>
KowStoff	• Attendance at key staff to relevant training workshops by the
Ney Stall	Alliance of Rouge Communities, SEMCOG, or others, when available.

# SECTION N -CONTRACT REQUIREMENTS AND OVERSIGHT

The contractors hired by the City to perform municipal operations that potentially impact stormwater are required to follow appropriate pollution prevention BMPs indicated in the City's contract language. In cases where an outside contractor is hired to perform services that could impact stormwater, the contracting company will be required to follow appropriate pollution prevention BMPs. At the time of the Pre-Construction Meeting for a new project, all contractors are given the City's "A Contractor's Guide to Storm Water Pollution Prevention" brochure for guidance. In addition, all work performed by outside contractors are monitored by City staff through observation to ensure quality of work, adherence to the specified contract language, and to ensure that potential impacts to stormwater are minimized.

*Measureable Goals* – To demonstrate the effectiveness of this procedure, the following metrics will be tracked for reporting purposes.

- Number of stormwater pollution related incidents pertaining to activities or work performed by the contractor.
- Number of incidents where the City required corrective action by the contractor

These metrics will be tracked over the reporting cycle that is specified in the City's Certificate of Coverage.

#### **SECTION O – COMPLAINT PROCEDURE**

Complaints or concerns may be reported by the public through the City's Service Request Portal available on the City's website. The service request is then routed to the appropriate department

via automated email for follow up. Investigation into complaints routed to the DPW department is conducted within 48 hours after the complaint has been received by the City. At that time, the DPW will make a determination to correct any problems, or contact the responsible parties for appropriate action.

*Measureable Goals* – To demonstrate the effectiveness of this procedure, the following metrics will be tracked for reporting purposes.

- Number of complaints routed to the DPW department for follow up.
- Number of incidents that prompted additional corrective actions by the DPW or other responsible party

These metrics will be tracked over the reporting cycle that is specified in the City's Certificate of Coverage.

# **SECTION P – PROCESS FOR REVISION**

This procedure shall be reviewed once per permit cycle by the City Engineering Department for any updates to streamline the requirements.

# STANDARD OPERATING PROCEDURE POLLUTION PREVENTION AND GOOD HOUSEKEEPING

STREET MAINTENANCE AND WINTER OPERATIONS

THE CITY OF TROY 500 W. BIG BEAVER ROAD, TROY, MICHIGAN 48084



REVISED JULY 2018

#### **SECTION A – PURPOSE**

The Michigan Department of Environmental Quality (MDEQ) National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Phase II Stormwater Discharge Permit Application requires a description of operation and maintenance activities to meet the minimum control measure requirements for the Pollution Prevention and Good Housekeeping Program to the maximum extent practicable to prevent or reduce the discharge of pollutants from municipal facilities and operations.

#### **SECTION B –INVENTORY AND DESCRIPTION OF MATERIALS AND ACTIVITIES**

The City salt dome and materials stockpiles are located at the Department of Public Works Facility located at 4693 Rochester Road. The Pollution Prevention and Good Housekeeping activities that occur at this facility are located in the City of Troy's Department of Public Works Facility Storm Water Pollution Prevention and Pollution Incident Prevention Plan (SWPPP/PIPP). Municipal street maintenance and winter operation activities that occur at the facility include the following:

- Materials Storage
- Salt Storage
- Brine Storage
- Compost and Aggregate Piles

### **SECTION C – WINTER OPERATIONS**

The City's Public Works field staff applies rock salt and liquid brine as part of their deicing procedures during the winter months. Bulk storage of road salt and liquid brine is located at the Public Works Facility.

#### C.1 Salt Storage and Loading

The City of Troy has a covered salt storage dome structure. The structure is not located within 50 feet of a lake shore, stream bank, or wetland, nor is it located in a 100-year floodplain.

Loading of salt takes place at the structure entrance on a paved surface. This procedure is followed as there is not enough room to have both a loader and a truck inside the structure at the same time. Employees are trained to immediately sweep excess salt from track out or spills back into the Salt Dome for reuse.

#### C.2 Brine Storage and Loading

The City stores liquid brine in a 8,000-gallon double-walled tank and a 3,000-gallon singlewalled tank inside a secondary containment structure. The containment structure consists of a cement floor, with cement walls, that are sealed. The containment unit is inspected regularly to look for potential leaks of the structure in accordance with the DPW SWPPP/PIPP document. Salt and brine application training is conducted to Public Works staff. Staff has been trained to minimize any track-out from loading operations. Salt application vehicles are calibrated before the winter season. An additional winter maintenance BMP is the use of designated no salt zones.

#### SECTION D - ROAD, PARKING LOT AND RIGHT-OF-WAY MAINTENANCE

Road and parking lot maintenance activities includes pothole repair, curb and gutter repair, and gravel road maintenance. These services are addressed by the City's Department of Public Works on an as needed basis. Materials are purchased in quantities as needed to reduce waste. In cases where a contractor is retained to perform these activities, a City representative is on site to oversee the work and ensure that left over material, concrete washout, and other associated pollutants are disposed of property. Disposing of concrete washout and other excess repair materials into the storm sewer is strictly prohibited by the City. The City's parking lots and entrance roads are swept once (1) a year.

#### D.1 Unpaved Road Maintenance

Exposed soil areas are stabilized to prevent soil from eroding during rain events. This is particularly important on steep slopes. Dust suppressants are used to minimize airborne transfer of fine aggregates into the air. Grading is conducted and quality aggregates are used to minimize transfer of fine aggregates onto paved surfaces.

#### D.2 Right-of-Way Maintenance

Grass areas are mowed and maintained by the City's contractor. Certified applicators for fertilizers and pesticides or other herbicides are contracted by the City for application on properties or road right-of-ways.

#### D.3 Bridge Maintenance

Bridge and culvert crossings are inspected Biennially by an Engineering Consultant.

# **SECTION E – PROCESS FOR REVISION**

This procedure shall be reviewed once per permit cycle by the City Engineering Department for any updates to streamline the requirements.

# STANDARD OPERATING PROCEDURE POLLUTION PREVENTION AND GOOD HOUSEKEEPING

SPILL RESPONSE

THE CITY OF TROY 500 W. BIG BEAVER ROAD, TROY, MICHIGAN 48084



REVISED JULY 2018

# **SECTION A – PERSONNEL**

The following City personnel have been identified as key staff in charge of spill response planning, implementation and maintenance of the Spill Response Plan.

Name	Phone
City of Troy Fire Department	(248) 524-3419
City of Troy Police Department	(248) 524-3477
Public Works Director	(248) 524-3392
Brian Varney – Superintendent of Fleet Maintenance	(248) 524-3392

#### A.1 Responsibilities

- The **Facility Responsible Personnel** have primary responsibility for coordinating the response to emergencies, including chemical spills
- **Supervisors** should ensure that employees are familiar with these procedures and receive the necessary training
- All employees should follow these procedures in the event of a chemical spill

#### A.2 Emergency Contact Numbers

The following telephone numbers should be posted near telephones and in other conspicuous locations:

Name	Affiliation	Phone
City of Troy Fire Department	Fire Department	(248) 524-3419
City of Troy Police Department	Police Department	(248) 524-3477
Public Works Director	Public Works Director	(248) 524-3392
Brian Varney – Superintendent of Fleet Maintenance	Superintendent of Fleet Maintenance	(248) 524-3392
MDEQ 24-Hour Pollution Emergency Alerti	ng System (PEAS)	1-800-292-4706
MDEQ Southeast Michigan District Office	(586) 753-3700	
City of Detroit Wastewater Treatment Plar	(313) 297-9400	
National Response Center		1-800-424-8802

# **SECTION B – CLEAN-UP PROCEDURES**

Spilled chemicals should be effectively and quickly contained and cleaned up. Employees should clean up spills themselves **only if properly trained and protected.** Employees who are not trained in spill cleanup procedures should report the spill to the Responsible Person(s) listed above, warn other employees, and leave the area.

The following general guidelines should be followed for evacuation, spill control, notification of proper authorities, and general emergency procedures in the event of a chemical incident in which there is potential for a significant release of hazardous materials.

#### B.1 Evacuation

Persons in the immediate vicinity of a spill should *immediately evacuate* the premises (except for employees with training in spill response in circumstances described below). If the spill is of "medium" or "large" size, or if the spill seems hazardous, immediately notify emergency response personnel.

#### **B.2** Spill Control Techniques

Once a spill has occurred, the employee needs to decide whether the spill is small enough to handle without outside assistance. Only employees with training in spill response should attempt to contain or clean up a spill.

NOTE: If you are cleaning up a spill yourself, make sure you are aware of the hazards associated with the materials spilled, have adequate ventilation, and proper personal protective equipment. Treat all residual chemical and cleanup materials as hazardous waste.

Spill control equipment should be located wherever significant quantities of hazardous materials are received or stored. Material Safety Data Sheets (MSDSs), absorbents, over-pack containers, container patch kits, spill dams, shovels, floor dry, acid/base neutralizers, and "caution-keep out" signs are common spill response items.

#### B.3 Spill Response and Clean-up

Chemical spills are divided into three categories: Small, Medium and Large. Response and cleanup procedures vary depending on the size of the spill.

<u>Small Spills</u>: Any spill where the major dimension is less than 18 inches in diameter. Small spills are generally handled by internal personnel and usually do not require an emergency response by police or fire department HAZMAT teams.

- Quickly control the spill by stopping or securing the spill source. This could be as simple as up-righting a container and using floor-dry or absorbent pads to soak up spilled material. Wear gloves and protective clothing, if necessary.
- Put spill material and absorbents in secure containers if any are available.

- Consult with the Facility Responsible Person and the MSDS for spill and waste disposal procedures.
- Use Dry Cleanup Methods and **never** wash spills down the drain, onto a storm drain or onto the driveway or parking lot.
- Both the spilled material and the absorbent may be considered hazardous waste and must be disposed of in compliance with state and federal environmental regulations.

<u>Medium Spills</u>: Spills where the major dimension exceeds 18 inches, but is less than 6 feet. Outside emergency response personnel (police and fire department HAZMAT teams) may be called for medium spills. Common sense, however, will dictate when it is necessary to call them.

- Immediately try to help contain the spill at its source by simple measures only. This means quickly up-righting a container, or putting a lid on a container, if possible. Do not use absorbents unless they are immediately available. Once you have made a quick attempt to contain the spill, or once you have quickly determined you cannot take any brief containment measures, leave the area and alert Emergency Responders at 911. Closing doors behind you while leaving helps contain fumes from spills. Give police accurate information as to the location, chemical, and estimated amount of the spill.
- Evaluate the area outside the spill. Engines and electrical equipment near the spill area must be turned off. This eliminates various sources of ignition in the area. Advise Emergency Responders on how to turn off engines or electrical sources. Do not go back into the spill area once you have left. Help emergency responders by trying to determine how to shut off heating, air conditioning equipment, or air circulating equipment, if necessary.
- If emergency responders evacuate the spill area, follow their instructions in leaving the area.
- After emergency responders have contained the spill, be prepared to assist them with any other information that may be necessary, such as MSDSs and questions about the facility. Emergency responders or trained personnel with proper personal protective equipment will then clean up the spill residue. Do not re-enter the area until the responder in charge gives the all clear. Be prepared to assist these persons from outside the spill area with MSDSs, absorbents, and containers.
- Reports must be filed with proper authorities. It is the responsibility of the spiller to inform both his/her supervisor and the emergency responders as to what caused the spill. The response for large spills is similar to the procedures for medium spills, except that the exposure danger is greater.

**Large Spills:** Any spill involving flammable liquid where the major dimension exceeds 6 feet in diameter; and any "running" spill, where the source of the spill has not been contained or flow has not been stopped.

- Leave the area and notify Emergency Responders (911). Give the operator the spill location, chemical spilled, and approximate amount.
- From a safe area, attempt to get MSDS information for the spilled chemical for the emergency responders to use. Also, be prepared to advise responders as to any ignition sources, engines, electrical power, or air conditioning/ventilation systems that may need to be shut off. Advise responders of any absorbents, containers, or spill control equipment that may be available. This may need to be done from a remote area, because an evacuation that would place the spiller far from the scene may be needed. Use radio or phone to assist from a distance, if necessary.
- Only emergency response personnel, in accordance with their own established procedures, should handle spills greater than 6 feet in any dimension or that are continuous. Remember, once the emergency responders or HAZMAT team is on the job cleaning up spills or putting out fires, the area is under their control and no one may re-enter the area until the responder in charge gives the all clear.
- Provide information for reports to supervisors and responders, just as in medium spills.

# **SECTION C – REPORTING SPILLS**

All chemical spills, regardless of size, should be reported as soon as possible to the Facility Responsible Person. The Responsible Person will determine whether the spill has the potential to affect the environment outside of the facility and must be reported to local, state, or federal agencies. Examples of spills that could affect the outside environment include spills that are accompanied by fire or explosion and spills that could reach nearby water bodies.

# C.1 Reporting Thresholds

The spill coordinator will report spills to MDEQ PEAS for spilled that involve the following:

- Salt spills over 50 pounds or 50 gallons of brine onto the ground or into water (required by Part 5 rules)
- Gasoline release of 32 gallons or more onto the ground (required by Part 201)
- Oil release of 50 pounds (approximately 7½ gallons) onto the ground (required by Part 5 rules)
- Any amount of oil or fuel that reaches surface water or shorelines, call MDEQ PEAS and the National Response Center (as required by the Clean Water Act and Part 31)
- Any spill that is in doubt about reporting
## C.2 Reporting Requirements

Within ten (10) days of release, submit a written report for the reportable releases to the following:

- MDEQ Water Resources Division Field Operations Chief, PO Box 30273, Lansing, Michigan 48909-7773
- Oakland County Health Division, 1200 N. Telegraph Road, Building 34 East, Pontiac, Michigan 48341

Note: the optional report form EPQ 3465 can be found at: <u>http://www.michigan.gov/deq/0,4561,7-135-3307 29894 5959-20341--,00.html</u> The MDEQ may request other follow-up reports depending on the situation.

## **SECTION D – SPILL KIT INVENTORY**

The following is a list of spill response equipment that will be maintained by the designated spill response coordinators at all locations where fuel products are stored and dispensed.

## D.1 Minimum Spill Response Equipment

- 20 pounds of floor dry
- 1 shovel
- 1 broom
- Caution tape
- 2 Absorbent booms
- 20 Absorbant Pads
- Container for clean-up (30 gallons)
- Sample bottles

## **SECTION E – PROCESS FOR REVISION**

This procedure shall be reviewed once per permit cycle by the City Engineering Department for any updates to streamline the requirements.

APPENDIX I Total Maximum Daily Loads (TMDL) Click here for link to Collaborative TMDL