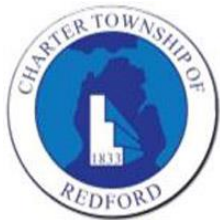


REDFORD TOWNSHIP STORMWATER MANAGEMENT PLAN (Stormwater Discharge Permit Application)

Submitted by:



Redford Township
12200 Beech Daly Rd.
Redford Twp., MI 48239
313-387-2700



In collaboration with:



46036 Michigan Ave., Suite 126
Canton, Michigan 48188
www.allianceofrougecommunities.com

October 2018

Table of Contents

Application Form	3
APPENDIX A: Outfall and Point of Discharge Information	23
APPENDIX B: Enforcement Response Procedure	26
APPENDIX C: PPP	31
APPENDIX D: PEP	32
APPENDIX E: IDEP	33
APPENDIX F: Construction Stormwater Runoff Control	40
APPENDIX G: Post-Construction Stormwater Runoff Program	44
APPENDIX H: Pollution Prevention and Good Housekeeping	48
GENERAL PROCEDURES	49
STORM WATER POLLUTION PREVENTION PLANNING, DEPARTMENT OF PUBLIC SERVICES, 12200 BEECH - DALY ROAD	66
STORM WATER POLLUTION PREVENTION PLANNING, GLENHURST GOLF COURSE, 25346 W. SIX MILE ROAD	78
SPILL RESPONSE	90
APPENDIX I: TMDL	96

National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Application Form (Reissuance)

version 1.4

(Submission #: 2EB-66KP-Q2VV, version 7)

Details

Form Alias	National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Application Form (Reissuance)
Submission #	2EB-66KP-Q2VV
Submission Reason	Renewal
Status	Submitted

Form Input

Existing Permit Details

Existing Permit ID (Read Only)
NONE PROVIDED

Existing Permit Number (Read Only)
NONE PROVIDED

Section 1. Applicant Information

Applicant Information

Prefix NONE PROVIDED		
First Name NONE PROVIDED	Last Name NONE PROVIDED	
Title NONE PROVIDED		
Organization Name Charter Township of Redford		
Phone Type Business	Number 313-387-2642	Extension
Email NONE PROVIDED		
Fax 313-387-2636		
12200 Beech Daly Rd.		
Redford Twp., MI 48239		
USA		

Section 2. MS4 Location Information

Municipal Entity Name (e.g., City of Lansing)

Charter Township of Redford

Identify the Primary Municipal Facility or the Mailing Address Location

A site needs to be identified as part of the application. Identify the physical address for the municipal entity, such as the primary municipal facility (e.g., City Hall).

Facility Location

42.3757352,-83.29438809999999

Section 3. MS4 Contacts (1 of 1)

CONTACTS

A contact must be provided for each of the roles listed below. You may assign more than one role to a single contact by holding down the 'Ctrl' key while selecting each role. Use the "+" (repeat section) button to add an additional contact.

Contact

Storm Water Billing Contact
Storm Water Program Manager
Application Contact

Contact**Prefix**

Mr.

First Name

George

Last Name

Bednarski

Title

Superintendent, Water & Sewer Department

Organization Name

Charter Township of Redford

Phone Type**Number****Extension**

Business

313-387-2642

Email

gbednarski@redfordtwp.com

Fax

313-387-2636

12200 Beech Daly Rd.

Redford Twp., MI 48239

USA

Section 4: Regulated Area, Outfalls/Points of Discharge, and Nested Jurisdictions (1 of 1)

Regulated Area

Identify the urbanized area within the applicant's jurisdictional boundary as defined by the 2010 Census. The regulated MS4 means an MS4 owned or operated by a city, village, township, county, district, association, or other public body created by or pursuant to state law and the nested MS4 identified below that is located in an urbanized area and discharges storm water into surface waters of the state. The 2010 Census maps are located at the Urbanized Area Link below.

[Urbanized Area Link](#)

Select an Urbanized Area

Detroit

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 that an MS4 is not a surface water of the state. For example, an open county drain that is a surface water of the state is not an MS4.

An example table is available at the link below.

[Outfall and Point of Discharge example table link](#)

OUTFALL AND POINT OF DISCHARGE INFORMATION

[RT_Appendix A_1of2.pdf - 03/31/2016 01:32 PM](#)

[RT_Appendix A_2of2.pdf - 03/31/2016 01:33 PM](#)

Comment

See Appendix A

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.

Use the "+" (repeat section) button to add an additional Jurisdiction contact.

Nested Jurisdiction

Prefix

NONE PROVIDED

First Name

NONE PROVIDED

Last Name

NONE PROVIDED

Title

NONE PROVIDED

Organization Name

NONE PROVIDED

Phone Type

NONE PROVIDED

Number

NONE PROVIDED

Extension**Email**

NONE PROVIDED

Fax

NONE PROVIDED

[NO STREET ADDRESS SPECIFIED]

[NO CITY SPECIFIED], [NO STATE SPECIFIED] [NO ZIP CODE SPECIFIED]

[NO COUNTRY SPECIFIED]

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.

[USEPA measurable goals guidance document link](#)

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.

ERP

[RT App B ERP.pdf - 07/06/2018 02:32 PM](#)

Comment

See Appendix B

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

[App C Final PPP 02-27-17.pdf - 07/06/2018 02:32 PM](#)

Comment

See Appendix C

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.
See Appendix C, 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):
See Appendix C, Section D

Section 6. Public Education Program

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

Yes

PEP Procedures

App D Final ARC Collaborative PEP 03-21-17.pdf - 07/06/2018 02:33 PM

Comment

See Appendix D

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).

See Appendix D, Section A

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.

[PEP table example link](#)

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. See Appendix D, Section C

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. See Appendix D, Section C

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. See Appendix D, Section C

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. See Appendix D, Section C

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. See Appendix D, Section C

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. See Appendix D, Section C

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. See Appendix D, Section C

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. See Appendix D, Section C

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. See Appendix D, Section C

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. See Appendix D, Section C

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.

See Appendix D, Section D

Section 7. Illicit Discharge Elimination Program

[>>Click here to access the MDEQ IDEP Compliance Assistance Document](#)

[>>Click here to access the Center for Watershed Protection guide](#)

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

Yes

Illicit Discharge Elimination Program Procedures

[App E Final Collaborative IDEP 09 25 2017.pdf - 07/06/2018 02:34 PM](#)

[RT App E2 IDEP Policy.pdf - 07/06/2018 02:34 PM](#)

Comment

See Appendix E

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)

The Department of Public Service office at 12200 Beech Daly Rd., Redford Twp.

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.

See Appendix E, Section C

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.

See Appendix E, 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.

See Appendix E, Section D

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.

See Appendix E, Section D

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.

See Appendix E, Section D

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.

See Appendix E, Section D

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.

See Appendix E, Section D

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.)

See Appendix H5, Spill Response, 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.

This Collaborative and Alternative approach meets and/or exceeds the expected results from minimum control measure requirements as described in Attachment E, Section B.

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.

See Appendix E, Section E

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.

See Appendix E, Section D

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.

See Appendix E, Section F

Illicit Discharge Ordinance or Other Regulatory Mechanism

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

See Appendix E2 Section D

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.

See Appendix E2 Section C

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.

See Appendix E2 Section C

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.

See Appendix E2

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.

See Appendix E2 Section D

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.

See Appendix E2 Section D

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.

See Appendix E2 Section D

Section 8. Construction Storm Water Runoff Control Program

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

[Click here to access the list of approved Part 91 Agencies](#)

27. Is the applicant a Part 91 Agency?

No

If yes, choose type

NONE PROVIDED

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

Wayne County Water Quality Management Division

Construction Storm Water Runoff Control

Construction Storm Water Runoff Control Program Procedure Attachment

RT_Appendix F_Construction_1of1.pdf - 03/31/2016 01:40 PM

Comment

See Appendix F

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.

See Appendix F, Section B

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.

See Appendix F, Section D

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.

See Appendix F, Section B

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).

See Appendix F, Section E

Section 9. Post-Construction Storm Water Runoff Program

[Click here to access the Low Impact Development Manual for Michigan. Chapter 9 of the manual provides a methodology for addressing post-construction storm water runoff.](#)

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

[Click here to access the Post-Construction Storm Water Runoff Program Compliance Assistance Document](#)

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

RT App G PCC.pdf - 07/06/2018 02:39 PM

Comment

See Appendix G

Ordinance or Other Regulatory Mechanism

32. Provide the reference to the in-effect ordinance or regulatory mechanism submitted above to address post-construction storm water runoff from new development and redevelopment projects, including preventing or minimizing water quality impacts. The ordinance or other regulatory mechanism shall apply to private, commercial, and public projects, including projects where the applicant is the developer. This requirement may be met using a single ordinance or regulatory mechanism or a combination of ordinances and regulatory mechanisms. If not available at this time, provide the date the ordinance or regulatory mechanism will be available.

See Appendix G

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.

See Appendix G

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, skip to Question 36

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.

The United States Environmental Protection Agency (USEPA) has a technical guidance available at the following link.

[USEPA Technical Guidance on Implementing the Stormwater Runoff Requirements](#)

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

NONE PROVIDED

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

See Appendix G

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

See Appendix G

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

NONE PROVIDED

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?

The MDEQ memo included in the sources below is available at the following link.
[March 24, 2006 MDEQ memo providing the 90 percent annual non-exceedance storm statistics](#)

Sources

NONE PROVIDED

Other rainfall data source (page and paragraph of attachments)

See Appendix G

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.

See Appendix G

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.

A MDEQ spreadsheet is available to assist with these calculations at the following link.

[Calculations for Storm Water Runoff Volume Control Spreadsheet](#)

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

See Appendix G

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.

NONE PROVIDED

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.

NONE PROVIDED

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.

See Appendix G

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.

See Appendix G

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 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 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.

NONE PROVIDED

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.

NONE PROVIDED

45. Provide the reference to 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.

NONE PROVIDED

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.

NONE PROVIDED

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.

NONE PROVIDED

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.

NONE PROVIDED

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.

NONE PROVIDED

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.
NONE PROVIDED

51. Describe the tracking system implemented, or to be implemented, to track off-site mitigation and/or in-lieu projects.
NONE PROVIDED

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.
NONE PROVIDED

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.
See Appendix G

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.
See Appendix G

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.
See Appendix G

Long-Term Operation and Maintenance of 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.
See Appendix G

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.
See Appendix G

58. Does the maintenance agreement or other legal mechanism allow the applicant to complete the following? (Check if yes)
NONE PROVIDED

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.
See Appendix G

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.
See Appendix G

Section 10. Pollution Prevention and Good Housekeeping Program

Pollution Prevention and Good Housekeeping Program Procedures

[RT_App.H2_P2GH_DPS.pdf - 07/06/2018 02:46 PM](#)

[RT_App.H4_P2GH_SpillResponse.pdf - 07/06/2018 02:46 PM](#)

[RT_App.H1_P2GH_General.pdf - 10/15/2018 02:35 PM](#)

[RT_App.H3_P2GH_Glenhurst.pdf - 10/17/2018 10:55 AM](#)

Comment

See Appendix H

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.

See Appendix H1, Section D, Table 1

Facilities that may have the high potential to discharge pollutants:

Equipment storage and maintenance facilities

Fleet maintenance facilities

Materials storage and Public Works yards

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

Administration buildings and libraries

Fire Stations

Parks

Police Stations

Public parking lots

Vacant land and open space

Vehicle storage

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

Catch basins

Rain gardens

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)

DPS Administrative Building, 12200 Beech Daly Rd., Redford Twp.

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.

See Appendix H1, 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.

See Appendix H1, Section B

If not applicable

NONE PROVIDED

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.

See Appendix H1, 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.

Yes, a site-specific SOP is available at each facility with the high potential for pollutant runoff

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)

See Appendix H2, Section C-D and Appendix H3, Section C-D

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)

See Appendix H2, Section C and G.1 and Appendix H3, Section C and E.1

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)

See Appendix H2, Section G.1 and Appendix H3, Section E.1

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)

See Appendix H2, Section G.2 and Appendix H3, Section G.2

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.

See Appendix H1, Sections F-L

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.

See Appendix H1, Sections F and 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.

See Appendix H1, Section G

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.

[Catch Basin Cleaning Activities Guidance Document](#)

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

See Appendix H1, Section H

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.

[Catch Basin Cleaning Activities Guidance Document](#)

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

See Appendix H1, Section J

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 control and the process for disposing of maintenance waste materials. The procedure shall require that controls be maintained to reduce to the maximum extent practicable the contribution of pollutants to storm water. The procedure shall include a process for updating/revising the procedure to ensure a maintenance and inspection program for each structural storm water control. A recommended timeframe for updating/revising the procedure is 30 days following the implementation of a new structural storm water control.

See Appendix H1, Section L

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.

See Appendix H1, Section M

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.

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

Road, parking lot, and sidewalk maintenance (e.g., pothole, sidewalk, and curb and gutter repair)

Cold weather operations (e.g., plowing, sanding, application of deicing agents, and snow pile disposal)

Vehicle washing and maintenance of applicant-owned vehicles (e.g., police, fire, school bus, public works)

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

See Appendix H2, Section C, E and F and Appendix H3, Section C

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.

See Appendix H1, Section F and G

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.

See Appendix H1, Section G

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.

See Appendix H1, 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.

[Catch Basin Cleaning Activities Guidance Document](#)

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

See Appendix H1, Section J and Appendix H2, Section C

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."

[Commercial Pesticide Application Certification Categories](#)

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

See Appendix H1, Section N

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.

See Appendix H1, Section P

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.

See Appendix H1, Section O

Section 11. Total Maximum Daily Load Implementation Plan

The USEPA has a document to assist with developing a TMDL Implementation Plan available at the following link.
[Understanding Impaired Waters and Total Maximum Daily Load \(TMDL\) Requirements for Municipal Stormwater Programs](#)

Total Maximum Daily Load Implementation Plan

Approved Rouge River Collaborative TMDL 9-5-19.pdf - 09/10/2019 08:20 AM

Comment

See Appendix I

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.

Rouge River Watershed (Biota, 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.

See Appendix 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.

See Appendix 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.

See Appendix I

Section 12. Phase I only Industrial Facility Inspection Program

Industrial Facility Inspection Program Procedures

NONE PROVIDED

Comment

NONE PROVIDED

89. Provide the reference to the procedure submitted above describing the process for identifying existing industrial facilities, as defined below, within the applicant's jurisdiction that discharge stormwater to the applicant's MS4.

Industrial facilities include, but are not limited to, the following:

- Industrial facilities that the applicant determines are contributing a substantial pollutant loading to the MS4
- Industrial facilities subject to the Superfund Amendments and Reauthorization Act (SARA)
- Hazardous waste treatment, disposal, storage, and recovery facilities

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

NONE PROVIDED

90. Provide the reference to the inventory of industrial facilities submitted above using the procedure in Question No. 89.

NONE PROVIDED

91. Provide the reference to the procedure submitted above for prioritizing the industrial facilities identified in Question No. 90 for inspection. Each industrial facility shall be evaluated and prioritized based on having a high, medium or low potential to discharge pollutants to the applicant's MS4. The procedure shall include a process for updating and revising the prioritization, including modifying the priority level based on contribution of significant pollutant loading to the MS4, inspection findings, and the potential to discharge pollutants.

The applicant should consider the following factors when prioritizing an industrial facility:

- Pollutant sources stored on site
- Pollutants of concern
- Proximity to impaired surface waters of the state
- The applicant's violation or complaint history with the facility

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

NONE PROVIDED

92. Provide the reference to the list of the prioritized industrial facilities for inspection submitted above.

NONE PROVIDED

93. Provide the reference to the procedure submitted above for inspecting industrial facilities based on the prioritized list in Question No. 92 to evaluate pollutant source controls. The number or percentage of facilities to be inspected (e.g., 20% annually) or the inspection frequency for the different priority levels (e.g., high priority facilities inspected annually) shall be identified with the highest priority facilities receiving more frequent inspections. The procedure shall include a process for inspecting facilities based on complaints concerning pollutants discharged to the applicant's MS4.

At a minimum, inspections shall include an evaluation of BMPs implemented and maintained to control pollutant sources at the industrial facility and for evidence of unauthorized discharges, illicit connections, and potential discharges of pollutants to the applicant's MS4.

The procedure shall include notifying the applicable Water Resources Division District Office if an industrial facility appears to be in violation of the NPDES industrial stormwater program.

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

NONE PROVIDED

94. Provide the reference to the employee training program submitted above to train employees whose primary job duties are to implement the industrial facility inspection program. The program shall include the training schedule. At a minimum, existing staff shall be trained once during the permit cycle and new hires within the first year of their hire date. The training shall cover facility inspection procedures.

[Click here to access the State of Michigan Industrial Stormwater program page](#)

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

NONE PROVIDED

Section 13. Certify and Submit

Comments (As needed)

NONE PROVIDED

Additional Documents (As needed)

NONE PROVIDED

Comment

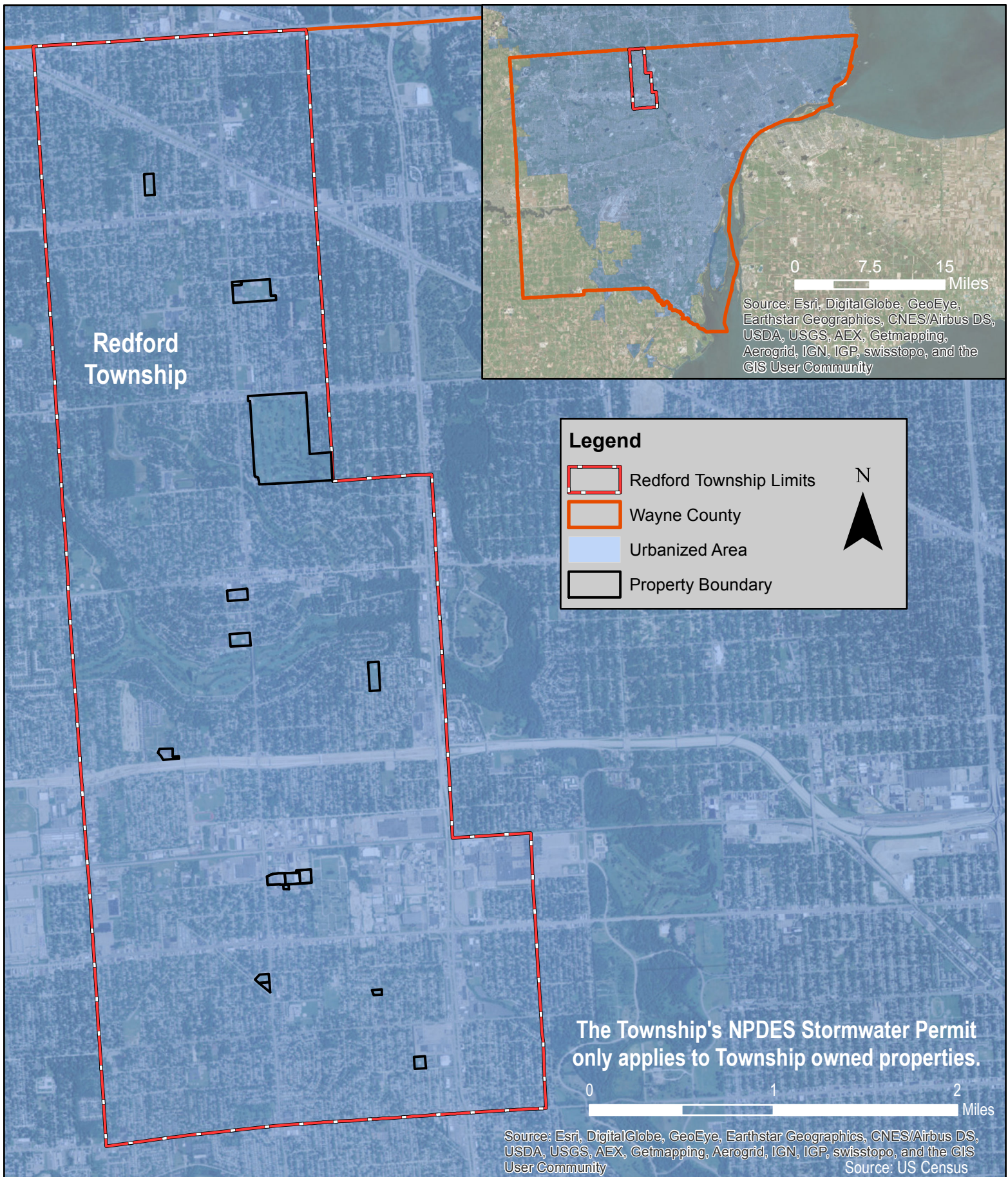
NONE PROVIDED

Attachments

Date	Attachment Name	Context	User
9/10/2019 8:20 AM	Approved Rouge River Collaborative TMDL 9-5-19.pdf	Attachment	george bednarski
10/17/2018 10:55 AM	RT_App.H3_P2GH_Glenhurst.pdf	Attachment	Meghan Price
10/15/2018 2:35 PM	RT_App.H1_P2GH_General.pdf	Attachment	Meghan Price

Date	Attachment Name	Context	User
7/6/2018 2:46 PM	RT_App.H4_P2GH_SpillResponse.pdf	Attachment	Meghan Price
7/6/2018 2:46 PM	RT_App.H2_P2GH_DPS.pdf	Attachment	Meghan Price
7/6/2018 2:39 PM	RT App G PCC.pdf	Attachment	Meghan Price
7/6/2018 2:34 PM	RT App E2 IDEP Policy.pdf	Attachment	Meghan Price
7/6/2018 2:34 PM	App E Final Collaborative IDEP 09 25 2017.pdf	Attachment	Meghan Price
7/6/2018 2:33 PM	App D Final ARC Collaborative PEP 03-21-17.pdf	Attachment	Meghan Price
7/6/2018 2:32 PM	App C Final PPP 02-27-17.pdf	Attachment	Meghan Price
7/6/2018 2:32 PM	RT App B ERP.pdf	Attachment	Meghan Price
3/31/2016 1:40 PM	RT_Appendix F_Construction_1of1.pdf	Attachment	Meghan Price
3/31/2016 1:33 PM	RT_Appendix A_2of2.pdf	Attachment	Meghan Price
3/31/2016 1:32 PM	RT_Appendix A_1of2.pdf	Attachment	Meghan Price

APPENDIX A
Outfall and Point of Discharge Information



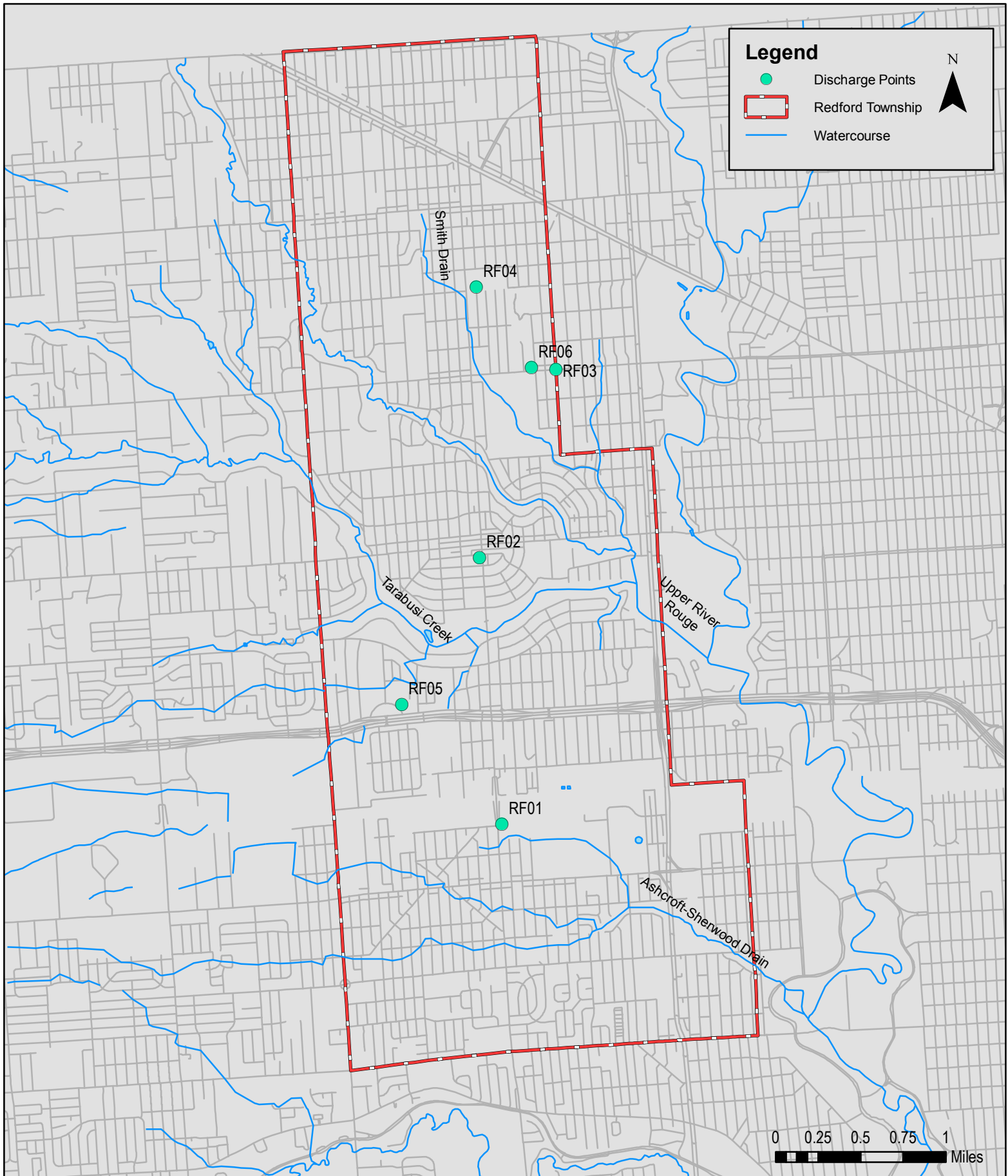
Redford Township - Urbanized Area

Detroit Area Cluster

Alliance of Rouge Communities



Working together, restoring the river



Redford Township Outfall Location Map

Wayne County, Michigan



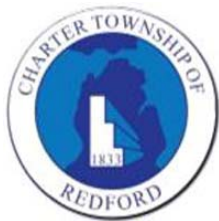
APPENDIX B
Enforcement Response Procedure

STANDARD OPERATING PROCEDURE ENFORCEMENT RESPONSE

PREPARED FOR:

THE CHARTER TOWNSHIP OF REDFORD

12200 BEECH DALY ROAD, REDFORD CHARTER TOWNSHIP, MICHIGAN 48239



REVISED: JUNE 2018

SECTION A – PURPOSE

The MDEQ NPDES Phase II Stormwater Discharge Permit Application requires a procedure for Enforcement Response to address violations of the ordinances or regulatory mechanisms identified in the Stormwater Management Plan.

SECTION B – GENERAL PENALTY

Section 1.11 of Chapter 1 General Provisions of the Charter Township of Redford Code of Ordinances defines the penalties levied by the Township for ordinance violations. The section specifically defines penalties for misdemeanors or civil infractions and continuing violations.

B.1 Section 1.11a&b – General penalty for violation of code; continuing violations

(a) “Unless another penalty is expressly provided by another township ordinance, enacted after April 1, 1994, for any particular provision or section, every person convicted of a violation of any township ordinance, or any rule or regulation adapted or issued pursuant thereto shall be guilty of a misdemeanor punishable by a fine of not more than \$500.00 and costs of prosecution, or by imprisonment for a term not exceeding 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 new and separate offense.”

(b) “Violations of any provision of this Code designated a municipal civil infraction as that term is used in section 21 of Public Act 359 of the Public Acts of 1947, as amended by Public Act 13 of the Public Acts of 1994 (MCL 42.21) and section 8701-8735 of Public Act 12 of the Public Acts of 1994 (MCL 600.8701—600.8735) shall pay a fine as provided in the Code section being violated or, if not provided in the Code section, as set by separate resolution of the township board and shall be subject to costs, damages, expenses, collection and prosecution as provided in sections 8727 and 8735 of Public Act 12 of the Public Acts of 1994 (MCL 600.8727 and MCL 600. 8735) which sections are hereby incorporated by reference under the authority of Public Act 359 of the Public Acts of 1947, as amended (MCL 42.23). Each act of violation and every day upon which any such violation shall occur shall constitute a new and separate offense.”

SECTION C – IDEP ENFORCEMENT RESPONSE PROCEDURE

The enforcement response procedure related to IDEP enforcement can be found in Section E of the River Rouge Collaborative Illicit Discharge and Elimination Plan. As part of this enforcement procedure, Section 1.11a&b of the Charter Township of Redford Code of Ordinances will be used as an enforcement mechanism to extent necessary to ensure corrective action of an illicit discharge by the responsible party.

SECTION D – POST CONSTRUCTION STORMWATER RUNOFF CONTROL ENFORCEMENT RESPONSE PROCEDURE

As stated in the Post Construction Stormwater Runoff Control Standard Operating Procedure, the Township’s regulated MS4 is limited to Township owned properties only. Connections to,

or the discharge of stormwater to the Township's MS4 is not allowed, therefore, the Township is the only user of their MS4. In the event an unauthorized, physical connection to the Township's MS4 is identified, the Township will deem it as an illicit connection as defined in the Illicit Discharge Prohibition Policy and implement the procedures in Section C above to require its disconnection from the Township's MS4.

SECTION E – ENFORCEMENT TRACKING

The Township 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 Township.

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 Township's Enforcement Response
10. Schedules for Achieving Compliance
11. Date the Violation was Resolved

SECTION F – PROCESS FOR REVISION

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

Sec. 1-11 - General penalty for violation of Code; continuing violations.

- (a) Unless another penalty is expressly provided by another township ordinance, enacted after April 1, 1994, for any particular provision or section, every person convicted of a violation of any township ordinance, or any rule or regulation adapted or issued pursuant thereto shall be guilty of a misdemeanor punishable by a fine of not more than \$500.00 and costs of prosecution, or by imprisonment for a term not exceeding 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 new and separate offense.
 - (b) Violations of any provision of this Code designated a municipal civil infraction as that term is used in section 21 of Public Act 359 of the Public Acts of 1947, as amended by Public Act 13 of the Public Acts of 1994 (MCL 42.21) and section 8701-8735 of Public Act 12 of the Public Acts of 1994 (MCL 600.8701—600.8735) shall pay a fine as provided in the Code section being violated or, if not provided in the Code section, as set by separate resolution of the township board and shall be subject to costs, damages, expenses, collection and prosecution as provided in sections 8727 and 8735 of Public Act 12 of the Public Acts of 1994 (MCL 600.8727 and MCL 600. 8735) which sections are hereby incorporated by reference under the authority of Public Act 359 of the Public Acts of 1947, as amended (MCL 42.23). Each act of violation and every day upon which any such violation shall occur shall constitute a new and separate offense.
 - (c) In addition to the penalties provided in subsection (a), the township may enjoin or abate any violation of the township ordinances by appropriate action.
- (Ord. No. 236, 3-21-94; Ord. No. 236-O, § 1, 3-22-05)

State Law reference— Limitation on penalties, MCL 42.21.

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

ILLICIT DISCHARGE PROHIBITION POLICY

PREPARED FOR:

CHARTER TOWNSHIP OF REDFORD

12200 BEECH DALY ROAD, REDFORD CHARTER TOWNSHIP, MICHIGAN 48239



JUNE 2018

SECTION A – PURPOSE

This procedure demonstrates that Redford Township has adequate mechanisms in place to prohibit unauthorized, non-stormwater discharges into their storm sewer as required by the state in the municipal separate stormwater sewer system (MS4) permit program. All Township owned MS4s are located on Township property. As other entities are not allowed to connect, only Township-managed property discharge to their MS4. As such, the Township is solely responsible for the investigation, inspection, monitoring, and elimination of all suspected illicit discharges.

SECTION B - DEFINITIONS

Illicit Discharge

An illicit discharge is any discharge to, or seepage into, an MS4 that is not composed entirely of stormwater or uncontaminated groundwater except discharges that are authorized under a NPDES permit. A discharge that originates from the applicant's property and meets the illicit discharge definition is an illicit discharge.

Illicit Connection

A physical connection to an MS4 that primarily conveys non-stormwater discharges other than uncontaminated groundwater into the MS4; or a physical connection not authorized or permitted by the Township.

SECTION C – ALLOWABLE NON-STORMWATER DISCHARGES

The following non-stormwater flows can be discharged to the MS4 so long as they are not a significant contributor to violations of water quality standards:

- a. Discharges and flows from firefighting activities;
- b. Water line flushing and discharges from potable water sources;
- c. Landscape irrigation runoff, lawn watering runoff, and irrigation waters;
- d. Diverted stream flows and flows from riparian habitats and wetlands;
- e. Rising groundwaters and springs;
- 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; and
- j. Street/parking lot wash water.

SECTION D – PROHIBITION OF ILLICIT DISCHARGES

The Township prohibits illicit discharges, including illicit connections, direct dumping or disposal of materials, into the Township's storm sewer system. This includes the construction or continued existence of illicit connections to the Township's MS4. This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the

connection was permissible under law or practices applicable or prevailing at the time of connection.

A person is considered to be in violation of this procedure if the person connects a line conveying sewage to the Township's MS4 or allows such a connection to continue. If an illicit discharge or illicit connection is found emanating from the Township's property, it will be removed/corrected according to the procedures in Section E.3 of the Rouge River Collaborative IDEP Plan. Improper connections must be disconnected and redirected, if necessary, to an approved onsite wastewater management system or the sanitary sewer system upon approval of the Township.

Any drain or conveyance that has not been documented in plans, maps or equivalent, and which may be connected to the Township's MS4, shall be located by the owner or occupant of the property upon receipt of written notice of violation from the Township requiring that such locating be completed. Such notice will specify reasonable time within which the location of the drain or conveyance is to be determined, that the drain or conveyance be identified as storm sewer, sanitary sewer or other, that a point of connection to the proper storm or sanitary sewer system be identified and that the proper connection be completed. Results of these investigations are to be documented and provided to the Township.

The Township has authority under Chapter 22.226 Buildings and Building Regulations Ordinance, which references the Michigan Plumbing Code (Section 104.4 Right-of-Entry), to enter premises to inspect, investigate and monitor suspected illicit discharges, if necessary.

SECTION E – PROCESS FOR REVISION

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

ARTICLE VIII. - PLUMBING CODE^[7]

Sec. 22-226. - Administration and enforcement of the State of Michigan Plumbing Code.

The State of Michigan Plumbing Code, and any amendments and/or supplements thereto as promulgated by the State Construction Code Commission and any amendments thereto, in accord with Section 8b(6) of 1972 Act 230, as amended, shall be administered and enforced in the charter township for regulating the design, construction, quality of materials, erection, installation, alteration, repair, location, relocation, replacement, addition to, use or maintenance of plumbing systems in the charter township and providing for the issuance of permits and collection of fees therefore; and each and all of the regulations, provisions, conditions and terms of the State of Michigan Plumbing Code and any amendments and/or supplements thereto are available for public use and inspection in the office of the clerk of the charter township.

(Ord. No. 126-I, 11-19-01)

Sec. 22-227. - Penalty.

Any person who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter or repair plumbing work in violation of the approved construction document or directive of the code official, or of a permit or certificate issued under the provisions of this code, shall be guilty of a misdemeanor, punishable by a fine of not more than \$500.00, or by imprisonment not exceeding 90 days, or both such fine and imprisonment in the discretion of the court. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

(Ord. No. 126-I, 11-19-01)

Sec. 22-228. - Fee schedule.

The amount of the permit fees for any and all plumbing work performed shall be passed by resolution of the charter township board and posted at the charter township building and safety engineering department.

(Ord. No. 126-I, 11-19-01)

Sec. 22-229. - Penalty.

A violation of the provisions of the State of Michigan Plumbing Code in the Charter Township of Redford shall be a municipal civil infraction punishable as provided in section 1-11 of this Code.

(Ord. No. 126-J, § 1, 2-28-06)

Secs. 22-230—22-250. - Reserved.

[A] 102.7 Moved buildings. Except as determined by Section 102.2, plumbing systems that are a part of buildings or structures moved into or within the jurisdiction shall comply with the provisions of this code for new installations.

[A] 102.8 Referenced codes and standards. The codes and standards referenced in this code shall be those that are listed in Chapter 15 and such codes and standards shall be considered as part of the requirements of this code to the prescribed extent of each such reference and as further regulated in Sections 102.8.1 and 102.8.2.

[A] 102.8.1 Conflicts. Where conflicts occur between provisions of this code and the referenced standards, the provisions of this code shall apply.

[A] 102.8.2 Provisions in referenced codes and standards. Where the extent of the reference to a referenced code or standard includes subject matter that is within the scope of this code, the provisions of this code, as applicable, shall take precedence over the provisions in the referenced code or standard.

[A] 102.9 Requirements not covered by code. Any requirements necessary for the strength, stability or proper operation of an existing or proposed plumbing system, or for the public safety, health and general welfare, not specifically covered by this code shall be determined by the code official.

PART 2—ADMINISTRATION AND ENFORCEMENT

SECTION 103 DEPARTMENT OF PLUMBING INSPECTION

[A] 103.1 General. The department of plumbing inspection is hereby created and the executive official in charge thereof shall be known as the code official.

[A] 103.2 Appointment. The code official shall be appointed by the chief appointing authority of the jurisdiction.

[A] 103.3 Deputies. In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the appointing authority, the code official shall have the authority to appoint a deputy code official, other related technical officers, inspectors and other employees. Such employees shall have powers as delegated by the code official.

SECTION 104 DUTIES AND POWERS OF THE CODE OFFICIAL

[A] 104.1 General. The code official shall enforce all of the provisions of the code and shall act on any question relative to the installation, alteration, repair, maintenance, or operation of all plumbing systems, devices, and equipment except as specifically provided for by statutory requirements or as provided for in sections 104.3 to 104.7.

R 408.30717

[A] 104.2 Applications and permits. The code official shall receive applications, review construction documents and issue permits for the installation and alteration of plumbing

systems, inspect the premises for which such permits have been issued, and enforce compliance with the provisions of this code.

[A] 104.3 Inspections. The code official shall make all the required inspections, or shall accept reports of inspection by approved agencies or individuals. Reports of such inspections shall be in writing and be certified by a responsible officer of such approved agency or by the responsible individual. The code official is authorized to engage such expert opinion as deemed necessary to report on unusual technical issues that arise, subject to the approval of the appointing authority.

[A] 104.4 Right of entry. Where it is necessary to make an inspection to enforce the provisions of this code, or where the code official has reasonable cause to believe that there exists in any building or upon any premises any conditions or violations of this code that make the building or premises unsafe, insanitary, dangerous or hazardous, the code official shall have the authority to enter the building or premises at all reasonable times to inspect or to perform the duties imposed upon the code official by this code. If such building or premises is occupied, the code official shall present credentials to the occupant and request entry. If such building or premises is unoccupied, the code official shall first make a reasonable effort to locate the owner, the owner's authorized agent or other person having charge or control of the building or premises and request entry. If entry is refused, the code official shall have recourse to every remedy provided by law to secure entry.

Where the code official shall have first obtained a proper inspection warrant or other remedy provided by law to secure entry, no owner, owner's authorized agent, occupant or person having charge, care or control of any building or premises shall fail or neglect, after proper request is made as herein provided, to promptly permit entry therein by the code official for the purpose of inspection and examination pursuant to this code.

[A] 104.5 Identification. The code official shall carry proper identification when inspecting structures or premises in the performance of duties under this code.

[A] 104.6 Notices and orders. The code official shall issue all necessary notices or orders to ensure compliance with this code.

[A] 104.7 Department records. The code official shall keep official records of applications received, permits and certificates issued, fees collected, reports of inspections, and notices and orders issued. Such records shall be retained in the official records for the period required for the retention of public records.

SECTION 105 APPROVAL

[A] 105.1 Modifications. Where there are practical difficulties involved in carrying out the provisions of this code, the code official shall have the authority to grant modifications for individual cases, upon application of the owner or owner's authorized agent, provided the code official shall

APPENDIX F
Construction Stormwater Runoff Control

STANDARD OPERATING PROCEDURE CONSTRUCTION STORMWATER RUNOFF CONTROL PROGRAM

PREPARED FOR:

THE CHARTER TOWNSHIP OF REDFORD
12200 BEECH DALY RD, REDFORD CHARTER TWP, MICHIGAN 48239



APRIL 2016

SECTION A – PURPOSE

The Michigan Department of Environmental Quality (MDEQ) National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) 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 Charter Township of Redford does not administer a Part 91 program and is not a designated municipal enforcement agency. The following standard operating procedure provides a description of the procedures the Township 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 – NOTIFICATION PROCEDURE

The Township will notify the Wayne County Water Quality Management Division (WCWQMD) when soil or sediment is discharged into the Township's MS4 in a quantity that could negatively impact surface waters of the state. Complaints received by the Township will be referred to WCWQMD within 24 hours.

Through the site plan review process, the Township ensures 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.

SECTION C – MEASUREABLE GOALS

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

- Number of Part 91 related complaints received and referred to the County by the Township building inspector.
- Number of Part 91 permits issued by the County within the Township.

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

SECTION D – REPORTABLE DISCHARGES

The Township 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 Stormwater Management Plan (SWMP), the Township will notify the MDEQ through the Pollution Emergency Alert System (PEAS) at 1-800-292-4706.

SECTION E –STATE OF MICHIGAN PERMIT BY RULE

The Township 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 F – PROCESS FOR REVISION

Any questions on this policy and procedure should be directed to the Stormwater Manager or the Township Supervisor. This procedure shall be reviewed once per permit cycle by the Stormwater Manager 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 CHARTER TOWNSHIP OF REDFORD

12200 BEECH DALY ROAD, REDFORD CHARTER TOWNSHIP, MICHIGAN 48239



REVISED: JUNE 2018

SECTION A – PURPOSE

The MDEQ NPDES 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 sites that undergo development or significant redevelopment.

SECTION B – DESIGN STANDARDS FOR TOWNSHIP PROPERTIES

The Township's regulated MS4 is limited to Township owned and maintained properties only. Connections to, or the discharge of stormwater to the Township's MS4 is not allowed. Therefore, the Township is the only user of their MS4. Township led development or redevelopment projects, that are disturb at least one or more acres, shall comply with the following design requirements for the discharge of stormwater to waters of the state:

B.1 Water Quality Performance Standard

- Provide treatment of the first inch of runoff or 90% of all runoff-producing storms from the tributary area associated with the area of development or redevelopment.
- When needed, rainfall data will be obtained from either the MDEQ memo dated March 24, 2006 or Wayne County's stormwater management standards to determine the runoff generated from 90% of all runoff-producing storms.
- Provide treatment on a site-specific basis to reduce post-development total suspended solids discharge concentration by 80% or achieve a discharge concentration of 80 mg/L or less when compared to pre-development conditions.

B.2 Channel Protection Standard

- Provide storage so there is no net increase in offsite runoff volume and rate for storm events up to the 2-year, 24 -hour storm event from that of predevelopment conditions.

B.3 Site Specific Standards

- In areas of known oil or groundwater contamination, stormwater management measures will be specified so that existing conditions are not exacerbated.

Pre-development is defined as the land use immediately prior to the new development/redevelopment.

SECTION C – SITE PLAN REVIEW PROCESS

Site plans associated with development and redevelopment projects undertaken on Township property will be reviewed by the Township Engineer, or their designee, to determine compliance with the design standards contained in this policy.

SECTION D – LONG TERM MAINTENANCE

The long-term maintenance of structural and vegetative best management practices installed as a result of this policy will be maintained in perpetuity. As such, the procedure for the long-term maintenance of these best management practices will be incorporated into the Township's Pollution Prevention/Good Housekeeping standard operating procedure.

SECTION E – 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 maintenance violations of constructed BMPs on Township properties
- Number of instances where the Township had to undertake corrective measures on Township properties

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

SECTION F – PROCESS FOR REVISION

This procedure shall be reviewed every two years by the Stormwater Manager for any updates to streamline the requirements.

APPENDIX H
Pollution Prevention and Good Housekeeping

STANDARD OPERATING PROCEDURE POLLUTION PREVENTION AND GOOD HOUSEKEEPING

GENERAL PROCEDURES

PREPARED FOR:

THE CHARTER TOWNSHIP OF REDFORD
12200 BEECH DALY ROAD, REDFORD CHARTER TOWNSHIP, MICHIGAN 48239



REVISED: SEPTEMBER 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

The Charter Township of Redford 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 as outlined in the NPDES permit application:

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 water bodies
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 will be 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 Appendix H of the Stormwater Management Plan (SWMP).

SECTION C – UPDATES AND PRIORITY REVISION

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

SECTION D – MUNICIPAL INVENTORY AND ASSESSMENT

The following table identifies the Township'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 Township 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 1

Facility Name	Structural Controls and Materials	Priority Level	Assessment Factors	BMP's Implemented
Department of Public Services & Ice Arena	Catch Basins (15) Storm Manholes (2) Dumpsters (8) Stockpiles (5) Underground Storage Tank (1) Household Hazardous Waste (1) Ice Shavings (1) Rain Garden (1)	High	1, 3	See Sections G-O below and Site-Specific SOP
Glenhurst Golf Course	Catch Basins (2) Aboveground Storage Tank (3) Dumpster (1) Stockpiles (4) Vehicle Wash Areas (2) Material Storage Sheds (1) Rain Garden (1)	High	1, 3, 4	See Sections G-O below and Site-Specific SOP
Township Offices and Police Department	Catch Basins (8) Storm Manholes (1) Underground Storage Tank (1) Rain Garden (1)	Medium	1	See Sections G-O below
Claude Allison Park	Catch Basins (9)	Low	1	Catch basin cleaning Street sweeping
South End Fire Station	Dumpster (1)	Low	1	Street sweeping

In addition to the properties in **Table 1**, the Township owns an additional eight (8) parks and one (1) fire station at which no structural stormwater controls are installed. Other Township-owned properties are located within a combined sewer area and are not included for the purposes of this permit.

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 majority of the Township's Department of Public Services (DPS) operations are conducted at their 12200 Beech-Daly Road facility. The Township operates a public golf course located at 25345 W Six Mile Road. There are also fueling operations conducted at the Township Offices at 15145 Beech-Daly Road. All three facilities are considered high priority sites due the following operations:

Department of Public Services (DPS) Facility – 12200 Beech-Daly Road

- Stockpiled Materials
- Fuel Storage and Fueling
- Vehicle and Equipment Maintenance and Cleaning

Glenhurst Golf Course – 25345 W. Six Mile Road

- Stockpiled Materials
- Fuel Storage and Fueling
- Storage of Pesticides, Herbicides, and Fertilizers

Site specific standard operating procedures have been developed for these facilities and are included as separate documents. Please see the Standard Operating Procedures – DPS Facility and Standard Operating Procedures – Glenhurst Golf Course.

SECTION F –PRIORITIZATION CRITERIA OF STREET SWEEPING AND CATCH BASIN INSPECTIONS

The criteria for prioritizing street sweeping and catch basin cleaning activities has been defined as described below.

High Priority streets and catch basins have one or more of the following criteria:

- Immediately adjacent to stockpiles or potentially polluting materials that are not equipped with secondary containment measures or other BMPs;
- Frequently used, Township-owned and maintained parking lots that have a high potential for pollutant runoff; and/or
- Receive drainage from unpaved roadways and/or parking lots.

Medium Priority streets and catch basins have one or more of the following criteria:

- Immediately adjacent to stockpiles or potentially polluting materials that have with secondary containment measures or other BMPs;
- Associated with a downtown shopping district;
- Streets within the municipality zoned as industrial with heavy truck traffic; and/or
- Township -owned and maintained streets with moderate traffic volumes (speed limit greater than 30 mph).

Low Priority streets and catch basins have one or more of the following criteria:

- Township-owned parking lots with no material storage or handling;
- Catch basins located within vegetated areas; and/or
- Township-owned and maintained streets with low traffic volumes.

SECTION G – SCHEDULE OF STREET SWEEPING AND CATCH BASIN INSPECTIONS

The frequency of parking lot/street sweeping and catch basin inspections associated with each priority level is provided in **Table 2** below.

Table 2

Maintenance Activity	Priority Level – Schedule		
	High	Medium	Low
Street/Parking Lot Sweeping	4x /year	2x /year	1x /year
Catch Basin Inspections	Monthly	1x /year	1x /permit cycle

A summary of the municipal properties and their designated priority level is provided in **Table 3** below, followed by the criteria by which the specific priority levels were determined.

Table 3

Maintenance Activity	Priority Level – Municipal Properties		
	High	Medium	Low
Street/Parking Lot Sweeping	DPS Facility, Glenhurst Golf Course	Township Offices/Police Department	All Other Township-Owned Parking Lots
Catch Basin Inspections	DPS Facility, Glenhurst Golf Course	Township Offices/Police Department	All Other Township-Owned Parking Lots

The DPS Facility and Glenhurst Golf Course are classified a high priority due to on-site fuel storage tanks and fueling, stockpiled materials, vehicle and equipment maintenance and storage, and storage and use of other polluting materials. The Township does not own or operate any major thoroughfares that would be classified a high priority.

The Township Offices/Police Department is classified a medium priority due to fuel storage and use in an underground tank and the level of public usage of the parking lot.

All other Township-owned parking lots, properties and catch basins are classified as low priority due to their limited potential for pollutant runoff or other environmental impacts.

If the DPS receives a complaint, a determination of the area will be made by DPS staff to increase sweeping on a more frequent interval as well as to reclassify the area to a higher priority rating. Catch basins that prompt resident complaints or are subject to isolated instances where structures are plugged or damaged will be maintained and inspected by DPS. 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 higher priority rating.

In the event a priority rating is changed for catch basin inspections or street sweeping, this procedure will be updated within 120 days.

SECTION H – CATCH BASIN INSPECTION, MAINTENANCE, AND CLEANING METHODOLOGY

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 using a standardized form. Structure repairs are prioritized based on public safety concerns. During the inspection, if it is determined that the catch basin sump is 50% full of accumulated sediment and debris, it will be cleaned promptly and advanced to the next higher priority inspection level. Catch basins will be serviced using a Vactor truck to remove solids and liquids from the structure. 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 Township.

SECTION I – STREET SWEEPING METHODOLOGY

Street sweeping activities on Township-owned and operated facilities are conducted by Township DPS staff using mechanical street sweeping equipment per the manufacturers operating recommendations. Collected sediment from street sweeping activities is disposed of as described in Section J. Street sweeping program activities are not implemented under the following conditions:

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

SECTION J – DISPOSAL OF COLLECTED MATERIAL

Collected material from catch basin maintenance and street sweeping activities is initially dewatered into a combined sewer connection. The dewatered solids are transferred into a roll-off dumpster at the DPS Yard and stored temporarily. The solid waste is then picked up and disposed of by a third party at a licensed waste disposal facility.

One dumpster is kept the Township Offices for collection of vegetation debris and wood refuse. The dumpster is not used for the disposal of hazardous materials and is kept covered when not in use.

SECTION K – FUEL STORAGE AND FUELING

One 9,000-gallon underground storage tank (UST) containing gasoline is installed at the Township Offices/Police Department. The UST is double-walled and equipped with an emergency shut-off and an automatic leak detection and volume control system. Part 5 Rules indicate that fuel storage areas “shall be designed, constructed, maintained, and operated to prevent the release of polluting materials through sewers, drains, or otherwise directly or indirectly into any public sewer system or to the surface or groundwater’s of this state.” The City has met this requirement through the proper storage and pollution prevention methods currently in place. These include the following:

- The gasoline UST is located outside within a designated fueling area. The tank is equipped with an emergency power shut-off and an automated leak detection and volume monitoring system.
- Bulk liquid tanker delivery vehicles will only be allowed on site if contact has been made with properly trained personnel and it has been confirmed that these personnel will be present at the delivery point.
- Properly trained personnel will be in attendance to monitor the entire fuel transfer process. They are authorized to terminate or to order the driver to terminate the transfer and have the driver move the tanker in case of an emergency. Attending personnel will be alert, have an unobstructed view of the cargo tank connections and be within 25 feet of the cargo tank during transfer operations.
- Properly trained Township staff will direct the tanker for proper positioning, verify, and provide access to the correct fill port.
- Properly trained Township staff will ensure a potential spill or release cannot enter storm drains by placing a protective barrier on or around affected storm drains (*e.g.*, spill blanket, catch basin mat, absorbent sock).
- Wheel chocks or other approved methods to prevent the tanker from moving during the transfer process or driving off without following proper disconnection practices will be required.
- Inspection of the truck to ensure that there are no leaks will be conducted before and after the transfer operation.
- Hose connections will be reviewed and verified prior to the transfer.
- The available volume of the tank will be verified prior to transfer to prevent over-filling.
- During removal of the transfer lines, trained staff will ensure that excess material is drained into the appropriate receiving tank or receptor to prevent a release of materials to the environment.
- Trained staff will monitor the termination process and inspect the lower most tanker manifold for evidence of leaks or damage prior to the tanker's departure.
- A spill kit will be stationed in the fueling area at all times.

A fueling log is maintained to track and record the volume of fuel dispersed for Township vehicles and equipment. Completion of these logs is mandatory and used as secondary control to track the volume of fuel stored in the tanks.

There are no other vehicle fluids are stored on site. All vehicle maintenance and washing activities are conducted offsite.

SECTION L – OTHER STRUCTURAL STORMWATER CONTROLS

The Township does not have any other structural controls that are owned or maintained by the Township except for rain gardens, as described below. In the event additional structural stormwater controls are constructed, this procedure will be updated and revised to include the new controls within 120 days.

L.1 Rain Gardens

Rain gardens will be inspected on a biannual basis. Inspections will assess the vegetation, presence of invasive species, erosion, flow channelization, bank stability, inlet/outlet conditions, embankment, and sediment and debris accumulations. The inspections will also determine if the basin is properly dewatering 24-48 hours after a major storm event. Based on the inspections, maintenance tasks may include re-seeding and/or replanting bare areas, removal of accumulated sediment, floatables and litter, and treatment of invasive species will be undertaken if the basin has reduced functional capacity. Debris from maintenance is recycled with yard waste.

SECTION M – NEW APPLICANT OWNED FACILITIES

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

SECTION N – CERTIFIED PESTICIDE APPLICATOR

The DPS has a certified pesticide applicator on staff; however, the Township does not have a Township-wide application program. Pesticides and fertilizers are used for golf course applications only and are stored indoors at the grounds maintenance facility. In the event the application of pesticides or fertilizers is needed for other purposes, the Township will retain the services of a licensed applicator.

SECTION O – 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. The Township participates in training opportunities that are made available by SEMCOG, Wayne County, the Alliance of Rouge Communities, and others as deemed appropriate. Employee training components for the Township's DPS field staff and golf course maintenance staff includes:

Employees Trained	Training Description and Frequency
New Township DPS Employees	Upon hire, employees will: <ul style="list-style-type: none">• View the Municipal Storm Water Pollution Prevention Storm Watch training video (or similar).• Read and become familiar with the Township's SOPs.• Participate in a job shadow program where new staff is paired with an experienced staff member for 30 days.

Employees Trained	Training Description and Frequency
All Township DPS Employees	Once per permit cycle: <ul style="list-style-type: none"> • View the Municipal Stormwater Pollution Prevention Storm Watch training video (or similar). • Review proper materials storage and handling. • Review good housekeeping and pollution prevention practices. • Review examples of illicit discharges to the storm sewer system • Review Township’s Spill Response Procedures
Key staff	<ul style="list-style-type: none"> • Attendance of key staff to relevant training workshops by the Alliance of Rouge Communities, SEMCOG, or others, when available.

SECTION P –CONTRACT REQUIREMENTS AND OVERSIGHT

The contractors hired by the Township to perform municipal operations that potentially impact stormwater are required to follow appropriate pollution prevention BMPs indicated in the Township’s contract language. All work performed by outside contractors are monitored by Township staff through daily observation to ensure quality of work, adherence to the specified contract language, and to ensure that potential impacts to stormwater are minimized.

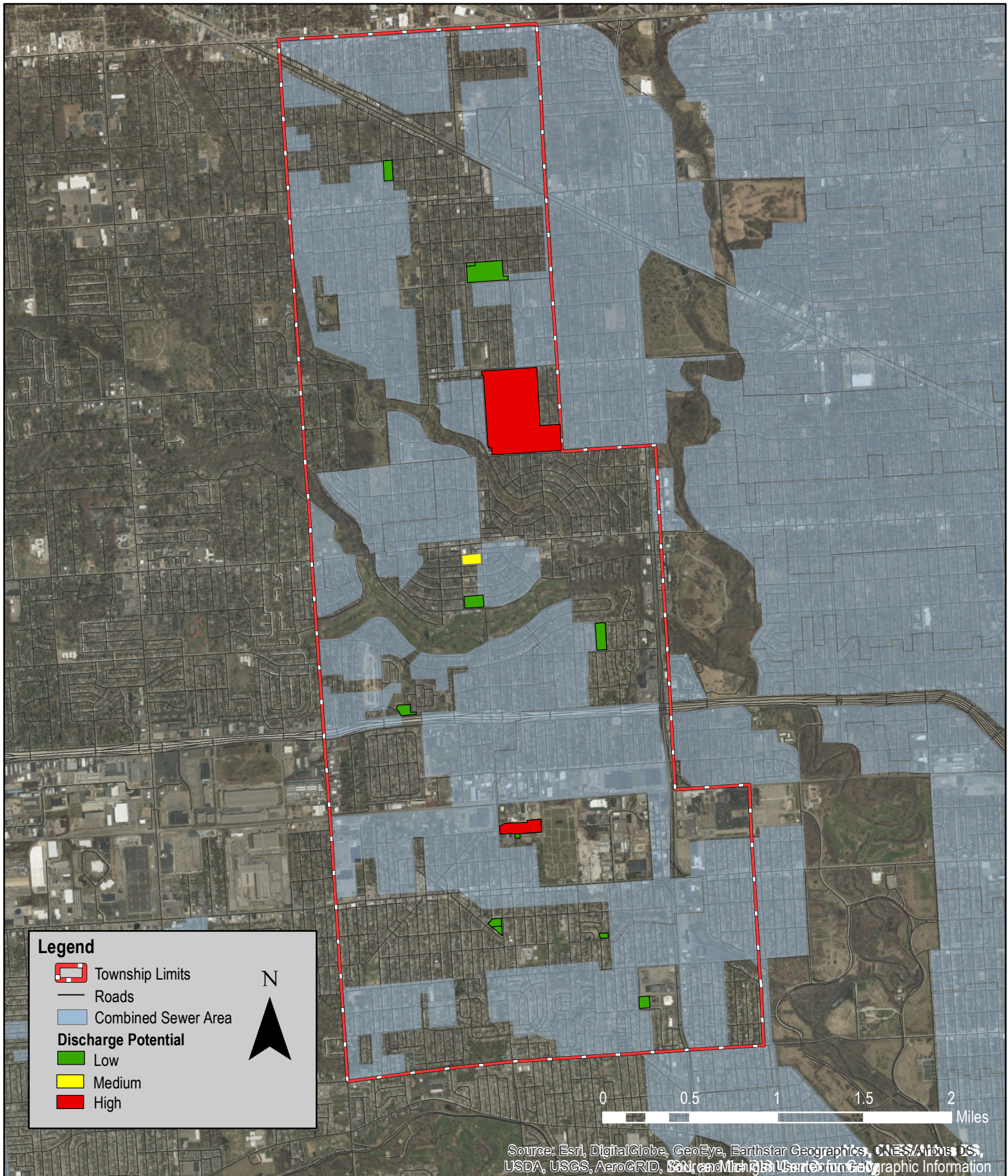
Measurable Goals – To demonstrate the effectiveness of this procedure, the following metrics will be tracked for reporting purposes.

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

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

SECTION Q –PROCESS FOR REVISION

This procedure shall be reviewed once per permit cycle by the Stormwater Manager for any updates to streamline the requirements.



Redford Township Facilities Location Map

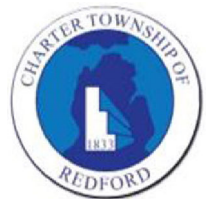
Wayne County, Michigan





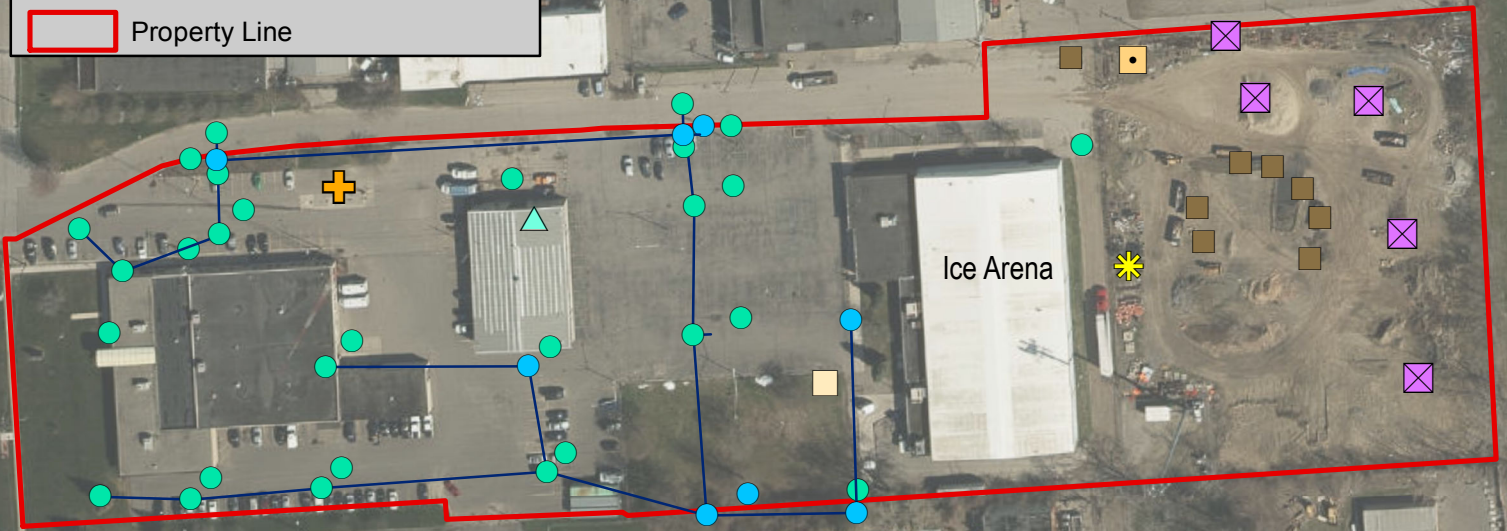
Redford Township - Claude Allison Park

18250 Beech-Daly Road
Redford Charter Twp, MI 48239



Legend

- Catch Basin (29)
- Dewatering Pad (1)
- Dumpster (8)
- ✱ HHW Storage (Temporary)
- Ice Shavings (1)
- Storm Manhole (8)
- ▲ Oil/Water Separator (1)
- ✕ Stockpile (5)
- + Gas/Diesel UST (10,000 gal) (1)
- Storm Sewer
- ▭ Property Line



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Redford Township - Dept. of Public Services and Ice Arena

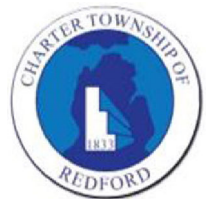
12200 Beech-Daly Road
Redford Charter Twp, MI 48239





Redford Township - Glenhurst Golf Course

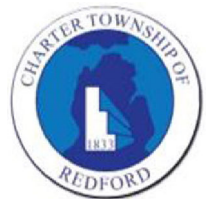
25345 W Six Mile Road
Redford Charter Twp, MI 48239





Redford Township - Glenhurst Golf Course

25345 W Six Mile Road
Redford Charter Twp, MI 48239

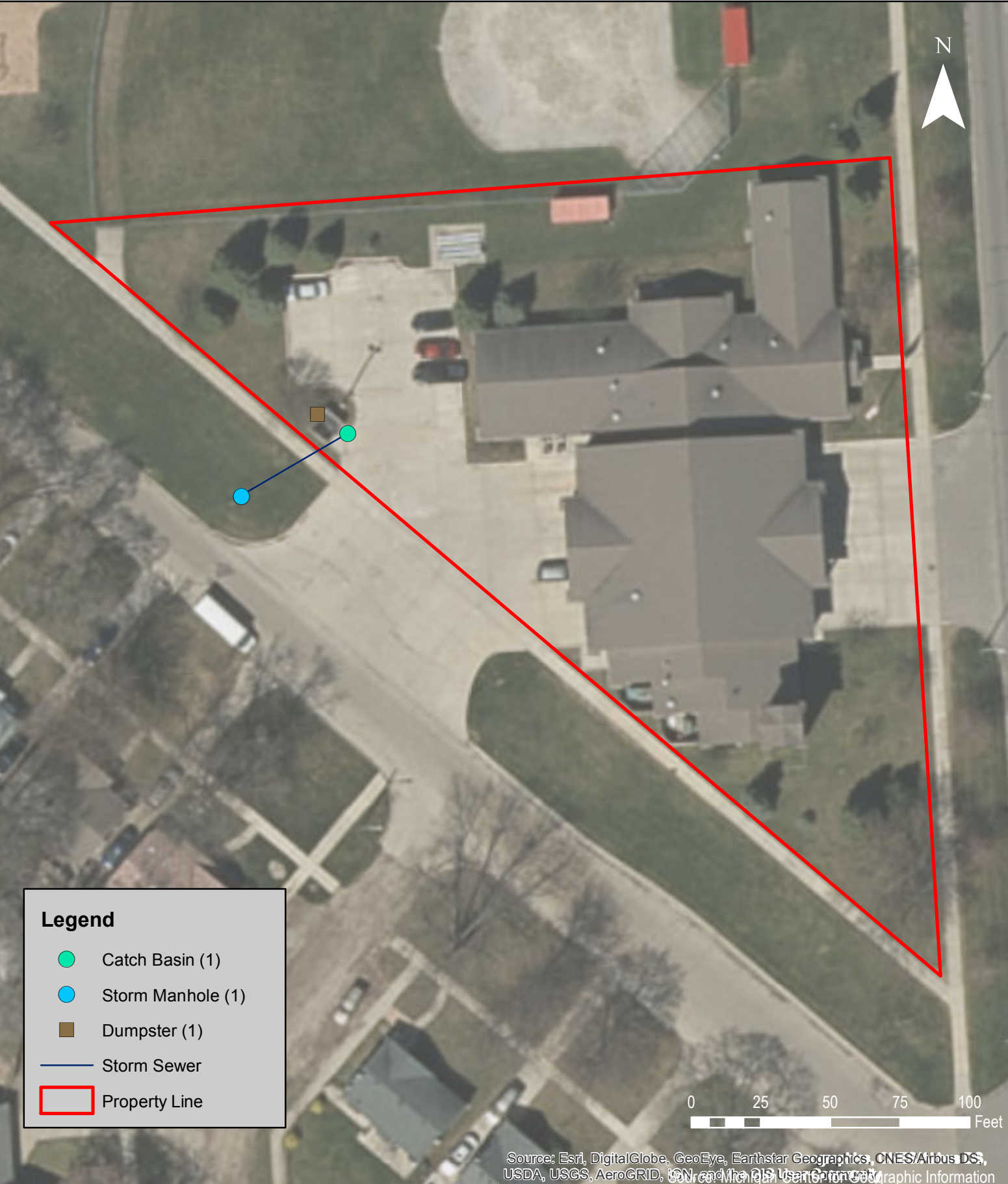




Redford Township - Minock Meadows Apartments

26600 Schoolcraft Ave.
Redford Charter Twp, MI 48239





Legend

- Catch Basin (1)
- Storm Manhole (1)
- Dumpster (1)
- Storm Sewer
- Property Line

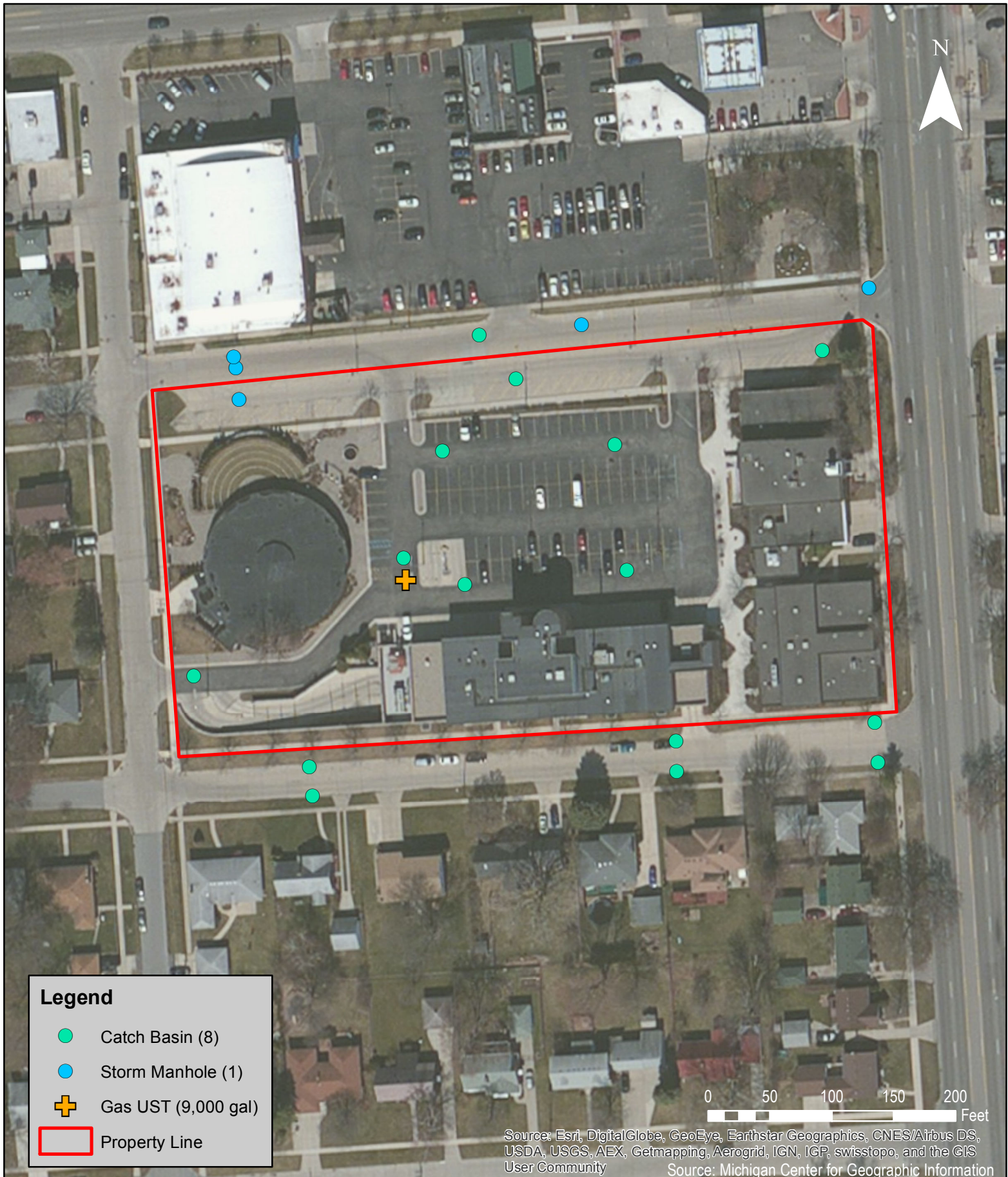
0 25 50 75 100 Feet

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Redford Township - South End Fire Station

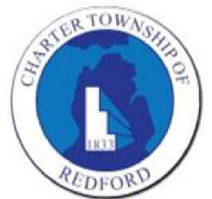
10100 Beech-Daly Road
Redford Charter Twp, MI 48239





Redford Township - Township Offices

15145 Beech-Daly Road
Redford Charter Twp, MI 48239



STANDARD OPERATING PROCEDURE POLLUTION PREVENTION AND GOOD HOUSEKEEPING

STORM WATER POLLUTION PREVENTION PLANNING

DEPARTMENT OF PUBLIC SERVICES
12200 BEECH-DALY ROAD

PREPARED FOR:

THE CHARTER TOWNSHIP OF REDFORD
15145 BEECH DALY ROAD, REDFORD CHARTER TOWNSHIP, MICHIGAN 48239



REVISED: JUNE 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. The following standard operating procedure is intended for the Charter Township of Redford Department of Public Services (DPS) facility, which has been deemed as a high priority based on the operations that are conducted at the site.

SECTION B –FACILITY ASSESSMENT AND PRIORITIZATION

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. The DPS facility was assessed for its potential to discharge pollutants to the waters of the state and as deemed a high priority based on the following applicable criteria as outlined in the NPDES permit application:

- 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)
- Potential for polluting activities to be conducted outside (i.e. vehicle washing)
- Proximity to waterbodies

Based on these criteria, the DPS facility has been deemed a high priority site which has prompted the need for a site specific standard operating procedure to prevent or minimize the potential for pollutants from entering surface waters of the state.

The Township's DPS Facility is located at 12200 Beech-Daly Road and consists of three (3) buildings, whose purposes include DPS administration, fleet maintenance, sign production, water and sewer maintenance, general storage, and an ice arena.

SECTION C –SIGNIFICANT MATERIALS

Significant materials are any material which could degrade or impair water quality. The following significant materials are used and stored at the DPS Facility:

- Fuel Storage and Use
- Automotive and Maintenance Fluids (*e.g.*, new and used oil, coolant, windshield wiper fluid, oils, lubricants)
- Vehicle and Equipment Wash Water (detergents, sediment, oils)
- Household Hazardous Waste
- Stockpiled Materials
- General Refuse and Recyclable Materials

- Ice Shavings

The following handling and storage requirements apply to these materials.

Significant Material	Potential for Discharge	Handling and Storage Requirements
Fuel Storage and Use	High	<p>One 10,000-gallon underground storage tank (UST) partitioned to store gasoline and diesel fuel is installed at the DPS Facility. The tank is double-walled which provides secondary containment. The UST is provided with dispensers that are locked when the area is closed and activated by card access only, an emergency power shut-off, leak detection, an automated monitoring system, bollards for protection from vehicle impacts, and a spill containment kit.</p> <p>Operation procedures for fueling are described below.</p>
Automotive and Maintenance Fluids	Low	<p>Vehicle and equipment maintenance activities are only conducted inside the DPS Garage. Floor drains within the garage are connected to the sanitary sewer system. Storage, pickup and delivery of automotive fluids occur inside the garage.</p>
Vehicle and Equipment Wash Water	Low	<p>Vehicles and equipment are washed inside the DPS Garage, where wash water is collected and discharged to the sanitary sewer system. Vehicle washing outside the DPS building is prohibited.</p>

Significant Material	Potential for Discharge	Handling and Storage Requirements
Household Hazardous Waste	Low	The Township periodically offers their DPS facility to host Wayne County's household hazardous waste event where the public is encouraged to drop off unwanted household hazardous wastes. Wayne County only accepts wastes that are in sealed containers. Accepted waste are processed and properly disposed of by a licensed waste hauler all in the same day.
Stockpiled Materials	Low	Designated stockpile areas are located on the east side of the DPS property in an unpaved area. Materials are stockpiled at this location infrequently and include scrap metal, topsoil, sand, gravel, and other earthen materials as needed. When not in use, the stockpiles are covered with a tarp to minimize erosion.
Street Sweepings and Catch Basin Cleanout Debris	Low	Collected material from catch basin maintenance and street sweeping activities is temporarily stored at the DPS Facility where it is kept in roll-off dumpsters that are covered when not in use. The solid and liquid waste is then disposed of by a third party.
General Refuse and Recyclable Materials	Low	A total of two (2) dumpsters for general refuse, two (2) dumpsters for street sweepings, one (1) dumpster for catch basin cleanings, and three (3) dumpsters for yard waste are kept on site. None of the dumpsters are used for the disposal of hazardous materials. Dumpsters and roll-offs are kept closed or covered at all times except when adding or removing waste.
Ice Shavings	Low	Ice shavings from the ice arena are collected in a grassy area adjacent to the ice arena building and allowed to melt and infiltrate. The ice shavings are not contaminated with any pollutants.

C.1 Fuel Storage and Use

One 10,000-gallon underground storage tank (UST) partitioned to storage gasoline and diesel fuel is installed at the DPS facility. Part 5 Rules indicate that fuel storage areas “shall be designed, constructed, maintained, and operated to prevent the release of polluting materials through sewers, drains, or otherwise directly or indirectly into any public sewer system or to the surface or groundwater’s of this state.” The Township has met this requirement through the proper storage and pollution prevention methods currently in place. These include the following:

- The tank is located outside within a paved, designated fueling area. The UST is equipped with an emergency power shut-off, and an automated leak detection and monitoring system. The tank is only filled on an as-needed basis.
- Bulk liquid tanker delivery vehicles will only be allowed on site if contact has been made with properly trained personnel and it has been confirmed that these personnel will be present at the delivery point.
- Properly trained personnel will be in attendance to monitor the entire fuel transfer process. They are authorized to terminate or to order the driver to terminate the transfer and have the driver move the tanker in case of an emergency. Attending personnel will be alert, have an unobstructed view of the cargo tank connections and be within 25 feet of the cargo tank during transfer operations.
- Properly trained DPS staff will direct the tanker for proper positioning, verify, and provide access to the correct fill port. Access to other fill ports or unlocking pipeline caps in anticipation of other delivery vehicles is strictly prohibited.
- Properly trained DPS staff will ensure a potential spill or release cannot enter storm drains by placing a protective barrier on or around affected storm drains (*e.g.*, spill blanket, catch basin mat, absorbent boom).
- Wheel chocks or other approved methods to prevent the tanker from moving during the transfer process or driving off without following proper disconnection practices.
- Inspection of the truck to ensure that there are no leaks will be conducted before and after the transfer operation.
- Connected hoses and connections will be reviewed and verified prior to the transfer.
- The available volume of the tank will be verified prior to transfer to prevent over-filling.
- During removal of the transfer lines, trained staff will ensure that excess material is drained into the appropriate receiving tank or receptor to prevent a release of materials to the environment.
- Trained staff will monitor the termination process and inspect the lower most tanker manifold for evidence of leaks or damage prior to the tanker’s departure.
- A spill kit will be stationed next to the fueling station at all times.

A fueling log is maintained to track and record the volume of fuel dispersed for Township vehicles and equipment. Completion of these logs is mandatory and used as secondary control to track the volume of fuel stored in the tanks.

C.2 Vehicle and Equipment Washing and Maintenance

Vehicle maintenance activities are conducted by DPS staff for the Township's entire vehicle fleet. Maintenance activities conducted by DPS staff include, but are not limited to, oil changes and other vehicle fluids, brakes, tune ups, and general repair tasks. All vehicle fluids are stored indoors. Floor drains within the DPS building are connected to the sanitary sewer. Vehicle maintenance activities are conducted indoors. A maintenance log is maintained by the Township which is used to document all vehicle maintenance and repair activities. Vehicle washing activities are also conducted indoors in an area with floor drains that are connected to the sanitary sewer.

SECTION D – STRUCTURAL STORMWATER CONTROLS

The following is an inventory of stormwater controls (i.e., catch basins, detention basins, etc.) that are present at the DPS facility to prevent or minimize impacts to stormwater:

- Stormwater Catch Basins (15)
- Stormwater Manhole Structures (2)
- Rain Garden (1)

D.1 Rain Garden

The rain garden at the DPS Facility will be inspected on a biannual basis. Inspections will assess the vegetation, presence of invasive species, erosion, flow channelization, bank stability, inlet/outlet conditions, embankment, and sediment and debris accumulations. The inspections will also determine if the basin is properly dewatering 24-48 hours after a major storm event. Based on the inspections, maintenance tasks may include re-seeding and/or replanting bare areas, removal of accumulated sediment, floatables and litter, and treatment of invasive species will be undertaken if the basin has reduced functional capacity. Debris from maintenance is recycled with yard waste.

SECTION E – ROAD, PARKING LOT, AND SIDEWALK MAINTENANCE

Road, parking lot, and sidewalk maintenance activities include pothole repair, sidewalk repair/replacement, and curb and gutter repair. These services are addressed by DPS field staff as determined in the field on an as needed basis. Materials are purchased in quantities as needed to reduce waste. Left-over materials are stored in designated stockpile areas at the DPS Facility and covered with a tarp. In cases where a contractor is retained to perform these activities, a Township representative is on site to oversee the work and ensure that left over material, concrete washout, and other associated pollutants are disposed of properly. Disposing of concrete washout and other excess repair materials into the storm sewer is strictly prohibited by the Township.

SECTION F – WINTER OPERATIONS

The Township's DPS field staff applies rock salt as part of their deicing procedures during the winter months. The Township owns one (1) salt truck that is loaded off-site by a third party and calibrated as-needed. Salt is only used on Township properties and parking lots. There is no bulk storage or loading/unloading of road salt or brine within Township property. Rock salt is purchased and loaded from a nearby Wayne County facility and used immediately; no bulk salt is storage on-site.

Several best management practices (BMPs) are employed by Township personnel to achieve effective deicing with minimized environmental impact. The salt truck is calibrated at the commencement of the winter season to allow monitoring of the amount of deicing salt applied to ensure efficient use of materials and prevent over application. Snow storage areas will be designated in locations that enable runoff to be directed to landscaped areas for infiltration, be filtered through a vegetated buffer, or be otherwise treated prior to entering streams, wetlands or the storm sewer system. DPS employee informal training and refresher training on salt application is provided at the commencement of the winter season.

SECTION G – NON-STRUCTURAL CONTROLS

The Township is committed to employing preventive maintenance practices through the use of several nonstructural controls to prevent stormwater pollution. These nonstructural controls are everyday types of activities undertaken by employees at the facility. The non-structural controls implemented at the DPS facility are as follows:

G.1 Routine Inspections and Good Housekeeping Procedures

Preventive maintenance involves the regular inspection, testing, and cleaning of facility equipment, vehicles, and operational systems. DPS foremen meet with field staff on a daily basis to discuss daily assignments and objectives. A routine inspection is conducted by facility staff during site walkthroughs during normal operations activities. The purpose of these inspections is to identify and prevent conditions that could lead to stormwater pollution. A log of corrective actions will be kept on file by the Township.

Staff inspects all vehicles consistent with Commercial Driver's License Procedures and performs detailed vehicle inspections every month. Completed vehicle maintenance records and fueling logs are kept on file at the DPS facility.

Routine inspections of stormwater management and control structures are conducted to ensure materials and equipment are clean and orderly and to prevent or minimize pollutant runoff. Part 5 rules also require surveillance of polluting materials. The routine inspections will include this information for the salt storage and fueling areas. These routine inspections are conducted and documented on a monthly basis. A Routine Preventive Maintenance and Good Housekeeping Inspection Form has been created for the facility and is included at the end of this SOP. Completed routine inspection forms are kept on file at the DPS facility.

G.2 Comprehensive Site Inspections

The comprehensive site inspection will include the areas and equipment identified in the preventive maintenance program, good housekeeping procedures, a review of the routine preventive maintenance reports, and any other paperwork associated with this SOP. All DPS related activities will be evaluated during the comprehensive inspection. In contrast to the routine inspections, comprehensive inspections will focus on areas that have a reasonable potential for significant materials to contaminate stormwater runoff. The comprehensive site inspection for DPS areas will be conducted every (six) 6 months. Documentation of the comprehensive site inspection results will be prepared and kept on file for three years. The report shall identify any incidents of non-compliance with the SOPs. If there are no reportable incidents of non-compliance, the report shall contain a certification that the facility is in compliance. The Comprehensive Site Inspection and Report Form that will be used for each inspection is included at the end of this SOP.

SECTION H – PROCESS FOR REVISION

This procedure shall be reviewed once per permit cycle by the Stormwater Manager for any updates to streamline the requirements.

INSPECTION FORMS

**ROUTINE PREVENTIVE MAINTENANCE
AND GOOD HOUSEKEEPING INSPECTION FORM**

**Complete this inspection every month. It is not necessary to complete this inspection during the same month the Comprehensive Inspection is conducted. Maintain completed copy in site files.*

Name:		Date/Time:	
Title:		Weather:	
Significant Materials / Activity	Location	Status, Corrective Action Needed?	Corrective Action Date, Initials
Fuel Dispensing Area (Gasoline, Diesel)	Exterior		
General Refuse and Recyclable Materials, Dumpsters	Exterior		
Household Hazardous Waste Collection (when applicable)	Exterior		
Storm Water Catch Basins	Exterior		
Material Stockpiles	Exterior		
Other Inspection Notes:			
	YES	NO	Follow-Up Required?
Are good housekeeping practices being maintained?			
Is all preventive maintenance of equipment performed in areas that will not release pollutant into storm water run-off?			
Do any areas of exposed soil and/or erosion need to be addressed?			
Signature:			

**COMPREHENSIVE SITE INSPECTION
AND REPORT FORM (EVERY 6 MONTHS)**

**Complete this inspection every 6 months. It is not necessary to complete the Routine Preventive Maintenance and Good Housekeeping Inspection during the same month this inspection is conducted. Maintain completed copy in site files.*

Name:		Date/Time:	
Title:		Weather:	
Significant Materials / Activity	Location	Status, Corrective Action Needed?	Corrective Action Date, Initials
Fuel Dispensing Area (Gasoline, Diesel)	Exterior		
General Refuse and Recyclable Materials, Dumpsters	Exterior		
Household Hazardous Waste Collection (when applicable)	Exterior		
Storm Water Catch Basins	Exterior		
Material Stockpiles	Exterior		
Vehicle and Equipment Maintenance and Cleaning	Interior, Garage		
Other Inspection Notes:			

**COMPREHENSIVE SITE INSPECTION
AND REPORT FORM (EVERY 6 MONTHS)**

	YES	NO	Follow-Up Required?
Are good housekeeping practices being maintained?			
Is all preventive maintenance of equipment performed in areas that will not release pollutant into storm water run-off?			
Do records exist of preventive maintenance activities conducted during the past 6 months since the last Comprehensive Inspection?			
Do any areas of exposed soil and/or erosion need to be addressed?			
Are there any non-storm water discharges? (Authorized or Unauthorized; Inspect site for this)			
Has any training been completed in past 6 months concerning stormwater controls and preventive maintenance? If so, what?			
<i>I certify that the facility is in compliance with the Storm Water Pollution Prevention Planning SOP.</i>			
Signature:			Date:

STANDARD OPERATING PROCEDURE POLLUTION PREVENTION AND GOOD HOUSEKEEPING

STORM WATER POLLUTION PREVENTION PLANNING

GLENHURST GOLF COURSE
25346 W. SIX MILE ROAD

PREPARED FOR:

THE CHARTER TOWNSHIP OF REDFORD
15145 BEECH DALY RD, REDFORD CHARTER TWP, MICHIGAN 48239



REVISED: SEPTEMBER 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. The following standard operating procedure is intended for the Charter Township of Redford's Glenhurst Golf Course, which has been deemed as a high priority based on the operations that are conducted at the site.

SECTION B –FACILITY ASSESSMENT AND PRIORITIZATION

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. The golf course was assessed for its potential to discharge pollutants to the waters of the state and as deemed a high priority based on the following applicable criteria as outlined in the NPDES permit application:

- 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)
- Potential for polluting activities to be conducted outside (*e.g.*, vehicle washing)
- Proximity to water bodies

Based on these criteria, the golf course has been deemed a high priority site which has prompted the need for a site specific standard operating procedure to prevent or minimize the potential for pollutants from entering surface waters of the state.

The Township's Glenhurst Golf Course is located at 25345 W. Six Mile Road and consists of four (4) buildings that include the maintenance building, material storage structure, clubhouse, and a cold storage building.

SECTION C –SIGNIFICANT MATERIALS

Significant materials are any material which could degrade or impair water quality. The following significant materials are used and stored at the DPW Facility:

- Fuel Storage and Use
- Material Stockpiles
- Vehicle and Equipment Maintenance Fluids (*e.g.*, new and used oil, coolant, windshield wiper fluid, oils, lubricants)
- Storage and Use of Pesticides, Herbicides and Fertilizers
- General Refuse

The following handling and storage requirements apply to these materials.

Significant Material	Potential for Discharge	Handling and Storage Requirements
Fuel Storage and Use	High	<p>Three 500-gallon steel aboveground storage tanks (ASTs) are installed at Glenhurst; two containing gasoline and one containing diesel fuel. One gasoline and one diesel double-walled steel ASTs are located adjacent to the material storage structure and are equipped with an emergency power shut-off, and an automated leak detection and monitoring system. One single-walled steel AST containing gasoline is located next to the cold storage building south of the clubhouse and is situated within a steel secondary containment structure.</p> <p>Operation procedures for fueling are described below.</p>
Material Stockpiles	Medium	<p>Designated stockpile areas are located near the maintenance and material storage buildings on the northwest side of the golf course. Stockpiled materials include topsoil, sand, gravel, and other earthen materials as needed. Sand stockpiles have perimeter controls in place to prevent erosion which are comprised of precast concrete blocks that are positioned at rear and sides of the stockpile. The front is left open to provide access for loading. When not in use, the stockpiles are covered with a tarp to minimize erosion.</p>
Vehicle and Equipment Maintenance Fluids	Low	<p>Vehicle and equipment maintenance activities are only conducted inside the Glenhurst maintenance building. Storage, pickup and delivery of equipment fluids occur inside the garage.</p>

Significant Material	Potential for Discharge	Handling and Storage Requirements
Lawn Equipment Washing Activities	Low	Golf Course Maintenance Equipment is washed outdoors in grassy areas to allow for infiltration. No detergents are utilized nor is engine washing conducted. Equipment washing is conducted in an area that discharges to a combined sewer system and is not included in the MS4.
Storage and Use of Pesticides, Herbicides, and Fertilizers	Low	The golf course has a material storage structure that is located to the south of the maintenance building and used for pesticide, herbicide, and fertilizer storage. The structure is self-contained and equipped with a fire suppression system. No floor drains are located inside the structure. The storage structure remains locked at all times except during times of access. Golf course staff tracks the quantity of material that is stored in both structures using a tracking log. A spill containment kit is immediately accessible in the event of a spill.
General Refuse	Low	One dumpster is kept on site for collection of vegetation debris and wood refuse. The dumpster is not used for the disposal of hazardous materials and is kept covered when not in use.

C.1 Fuel Storage and Use

Three 500-gallon aboveground storage tanks (ASTs) containing gasoline and diesel fuel are installed at the Glenhurst Golf Course property. The ASTs are constructed of double-walled steel. One gasoline and one diesel tank are located next to the material storage structure, and the third tank is located near the cold storage building south of the clubhouse. Part 5 Rules indicate that fuel storage areas “shall be designed, constructed, maintained, and operated to prevent the release of polluting materials through sewers, drains, or otherwise directly or indirectly into any public sewer system or to the surface or groundwater’s of this state.” The Township has met this requirement through the proper storage and pollution prevention methods currently in place. These include the following:

- Bulk liquid tanker delivery vehicles will only be allowed on site if contact has been made with properly trained personnel and it has been confirmed that these personnel will be present at the delivery point.
- Properly trained personnel will be in attendance to monitor the entire fuel transfer process. They are authorized to terminate or to order the driver to terminate the transfer and have the driver move the tanker in case of an emergency. Attending personnel will be alert, have an unobstructed view of the cargo tank connections and be within 25 feet of the cargo tank during transfer operations.
- Properly trained staff will direct the tanker for proper positioning, verify, and provide access to the correct fill port. Access to other fill ports or unlocking pipeline caps in anticipation of other delivery vehicles is strictly prohibited.
- Properly trained staff will ensure a potential spill or release cannot enter storm drains by placing a protective barrier on or around affected storm drains (*e.g.*, spill blanket, absorbent boom).
- Wheel chocks or other approved methods to prevent the tanker from moving during the transfer process or driving off without following proper disconnection practices.
- Inspection of the truck to ensure that there are no leaks will be conducted before and after the transfer operation.
- Hose connections will be reviewed and verified prior to the transfer.
- The available volume of the tank will be verified prior to transfer to prevent over-filling.
- During removal of the transfer lines, trained staff will ensure that excess material is drained into the appropriate receiving tank or receptor to prevent a release of materials to the environment.
- Trained staff will monitor the termination process and inspect the lower most tanker manifold for evidence of leaks or damage prior to the tanker's departure.
- A spill kit will be stationed next to each fueling station at all times.

A fueling log is maintained to track and record the volume of fuel dispersed for Township vehicles and equipment. Completion of these logs is mandatory and used as secondary control to track the volume of fuel stored in the tanks.

SECTION D – STRUCTURAL STORMWATER CONTROLS

The following is an inventory of stormwater controls (*e.g.*, catch basins, detention basins) that are present at the Glenhurst Golf Course to prevent or minimize impacts to stormwater:

- Stormwater catch basins (2)
- Tank Secondary Containment Structure (1)

D.1 Secondary Containment

The AST near the cold storage building is placed in a secondary containment structure to mitigate spills and leaks. Containment measures are comprised of a self-contained, steel tray that is not equipped with an outlet, as well as a metal roof. Secondary containment

measures are inspected over the course of daily operations by the grounds crew and during waste disposal operations. If the grounds crew observes that the secondary containment structure is filled with stormwater, a licensed waste hauler is contracted to pump out the structure using a Vactor truck. Collected liquids are transported and disposed at an appropriate wastewater treatment facility by the third party.

D.2 Catch Basin Inserts

The catch basins located on the golf course currently have silt sacks installed to capture and filter sediment. The silt sacks are inspected during the routine monthly site inspection to evaluate the amount of sediment that has accumulated in the silt sack. Cleaning of the silt sack is conducted if sediment has accumulated up to 50% of the silt sack's maximum capacity. Cleaning shall be completed during a period of dry weather when no flow is entering the unit. After removing the catch basin cover, the sediment can be removed from the unit using a Vactor truck.

SECTION E – NON-STRUCTURAL CONTROLS

The Township is committed to employing preventive maintenance practices through the use of several nonstructural controls to prevent stormwater pollution. These nonstructural controls are everyday types of activities undertaken by employees at the facility. The non-structural controls implemented at the golf course are as follows:

E.1 Routine Inspections and Good Housekeeping Procedures

Preventive maintenance involves the regular inspection, testing, and cleaning of facility equipment, vehicles, and operational systems. The golf course superintendent meets with grounds crew on a daily basis to discuss daily assignments and objectives. A routine inspection is conducted by facility staff during site walkthroughs during normal operations activities. The purpose of these inspections is to identify and prevent conditions that could lead to stormwater pollution. A log of corrective actions will be kept on file by the Township.

Staff inspects all vehicles consistent with Commercial Driver's License Procedures, and performs detailed vehicle inspections every month. Completed vehicle maintenance records and fueling logs are kept on file at the maintenance building.

Routine inspections of stormwater management and control structures are conducted to ensure materials and equipment are clean and orderly and to prevent or minimize pollutant runoff. Part 5 rules also require surveillance of polluting materials. The routine inspections will include this information for the salt storage and fueling areas. These routine inspections are conducted and documented on a monthly basis. A Routine Preventive Maintenance and Good Housekeeping Inspection Form has been created for the facility and is included at the end of this SOP. Completed routine inspection forms are kept on file at the golf course maintenance facility.

E.2 Comprehensive Site Inspections

The comprehensive site inspection will include but not be limited to the areas and equipment identified in the preventive maintenance program, good housekeeping procedures, structural and non-structural controls, a review of the routine preventive maintenance reports, and any other paperwork associated with this SOP. The entire DPW facility will be evaluated during the comprehensive inspection. In contrast to the routine inspections, comprehensive inspections will focus on areas that have a reasonable potential for significant materials to contaminate stormwater runoff. The comprehensive site inspection of the Glenhurst Golf Course will be conducted once every six (6) months. Documentation of the comprehensive site inspection results will be prepared and kept on file for three years. The report shall identify any incidents of non-compliance with the SOPs. If there are no reportable incidents of non-compliance, the report shall contain a certification that the facility is in compliance. The Comprehensive Site Inspection and Report Form that will be used for each inspection is included at the end of this SOP.

SECTION F – PROCESS FOR REVISION

This procedure shall be reviewed once per permit cycle by the Stormwater Manager for any updates to streamline the requirements.

INSPECTION FORMS

**ROUTINE PREVENTIVE MAINTENANCE
AND GOOD HOUSEKEEPING INSPECTION FORM**

**Complete this inspection every month. It is not necessary to complete this inspection during the same month the Comprehensive Inspection is conducted. Maintain completed copy in site files.*

Name:		Date/Time:		Golf Course:	
Title:		Weather:			
Significant Materials / Activity	Location	Status, Corrective Action Needed?		Corrective Action Date, Initials	
Fuel Dispensing Area (Gasoline, Diesel)	Exterior, next to Material Storage				
Gasoline Dispensing Area	Exterior, by Cold Storage Building				
Material Stockpiles	Exterior				
Lawn Equipment Wash Area	Exterior				
General Refuse Dumpster	Exterior				
Storage Shed (Pesticides, Herbicides), Outside Equipment Storage	Exterior				
Storm Water Catch Basins, Silt Sack Inserts	Exterior				
Other Inspection Notes:					
		YES	NO	Follow-Up Required?	
Are good housekeeping practices being maintained?					
Is all preventive maintenance of equipment performed in areas that will not release pollutant into storm water run-off?					
Do any areas of exposed soil and/or erosion need to be addressed?					
Signature:					

Redford Charter Township
Glenhurst Golf Course

**ROUTINE PREVENTIVE MAINTENANCE
AND GOOD HOUSEKEEPING INSPECTION FORM**

NPDES MS4 Permit

**COMPREHENSIVE SITE INSPECTION
AND REPORT FORM (EVERY 6 MONTHS)**

**Complete this inspection every 6 months. It is not necessary to complete the Routine Preventive Maintenance and Good Housekeeping Inspection during the same month this inspection is conducted. Maintain completed copy in site files.*

Name:		Date:	Time:
Title:		Weather:	
Significant Materials / Activity	Location	Status, Corrective Action Needed?	Corrective Action Date, Initials
Fuel Dispensing Area (Gasoline, Diesel)	Exterior, next to Material Storage Shed		
Gasoline Dispensing Area	Exterior, by Cold Storage Building		
Material Stockpiles	Exterior		
Lawn Equipment Wash Area	Exterior		
General Refuse Dumpster	Exterior		
Storage Shed, Outside Equipment Storage	Exterior		
Storm Water Catch Basins, Silt Sack Inserts	Exterior		
Inside of Storage Shed (check for housekeeping, material mgmt.)	Interior		
Maintenance Garage (check for housekeeping, material mgmt.)	Interior		
Cold Storage Building (check for housekeeping, material mgmt.)	Interior		
Other Inspection Notes:			

**COMPREHENSIVE SITE INSPECTION
AND REPORT FORM (EVERY 6 MONTHS)**

	YES	NO	Follow-Up Required?
Are good housekeeping practices being maintained?			
Is all preventive maintenance of equipment performed in areas that will not release pollutant into storm water run-off?			
Do records exist of preventive maintenance activities conducted during the past 6 months since the last Comprehensive Inspection?			
Do any areas of exposed soil and/or erosion need to be addressed?			
Are there any non-storm water discharges? (Authorized or Unauthorized; Inspect site for this)			
Has any training been completed in past 6 months concerning stormwater controls and preventive maintenance? If so, what?			
<i>I certify that the facility is in compliance with the Storm Water Pollution Prevention Planning SOP.</i>			
Signature:			Date:

STANDARD OPERATING PROCEDURE POLLUTION PREVENTION AND GOOD HOUSEKEEPING SPILL RESPONSE

PREPARED FOR:

THE CHARTER TOWNSHIP OF REDFORD
15145 BEECH DALY RD, REDFORD CHARTER TWP, MICHIGAN 48239



APRIL 2016

SECTION A – PERSONNEL

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

Name	Phone
Redford Township Police Dispatch	(313) 387-2553
Mike Dennis – Public Services Director	(313) 387-2670
George Bednarski – Water & Sewer Foreman	(313) 387-2670

A.1 Responsibilities

- The **Facility Responsible Person** has 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
Redford Township Police Dispatch	Redford Township Police Department	(313) 387-2553
Mike Dennis – Public Services Director	Redford Township DPS	(313) 387-2670
George Bednarski – Water & Sewer Foreman	Redford Township DPS	(313) 387-2670
MDEQ 24-Hour Pollution Emergency Alerting System (PEAS)		1-800-292-4706
MDEQ Southeast Michigan District Office		(586) 753-3700
City of Detroit Wastewater Treatment Plant		(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 (SDSs), 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.

Small Spills: 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 SDS 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.

Medium Spills: 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 SDSs 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 SDSs, 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 SDS 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 spills 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
- Wayne County Department of Public Health, 33030 Van Born Road, Wayne, Michigan 48184

Note: the optional report form EPQ 3465 can be found at:

http://www.michigan.gov/deq/0,4561,7-135-3307_29894_5959-20341--,00.html

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
- 5 Absorbent booms
- 20 Absorbent 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 Stormwater Manager for any updates to streamline the requirements.

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