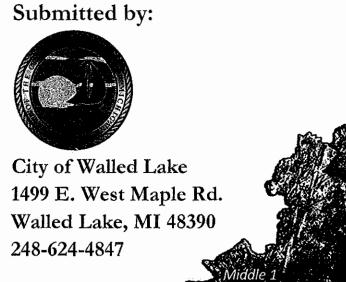
# WALLED LAKE MS4 STORMWATER DISCHARGE APPLICATION

Permit No: MIG610028





In collaboration with:



46036 Michigan Ave., Suite 126 Canton, Michigan 48188 www.allianceofrongecommunities.com April 1, 2016

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

version 1.4

(Submission #: 2E9-KF4D-9A64, version 1)

PRINTED ON 4/12/2016

Summary

Submission #:

2E9-KF4D-9A64

**Date Submitted:** 

3/31/2016 8:54 AM

Form:

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

Status:

Submitted

Applicant:

Meghan Price

Active Steps:

Reference #:

Description:

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

Notes

There are currently no Submission Notes.

4/12/2016

MDEQ MiWaters Portal System - View Submission

Contact

Contact

Prefix: Mr.

First Name: L. Dennis

Last Name: Whitt

Company: City of Walled Lake

Title: City Manager

Ext: NONE PROVIDED

Phone: 248-624-4847

FAX: 248-624-4847

Email: Idenniswhitt@walledlake.com

Address

Address Line 1: 1499 E. West Maple Rd.

Address Line 2: NONE PROVIDED

Description: NONE PROVIDED

City: Walled Lake

State: MI

Postal Code: 48390

Country: USA

#### Section 4: Regulated Area, Outfalls/Points of Discharge, and Nested Jurisdictions (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 than an MS4 is not a surface water of the state. For example, an open county drain that is a surface water of the state is not an MS4. An example table is available at the link below.

Outfall and Point of Discharge example table link

#### OUTFALL AND POINT OF DISCHARGE INFORMATION - Attachment(s)

WL\_Appendix A\_1of2.pdf WL\_Appendix A\_2of2.pdf 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.

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 - Attachment(s)

Appendix C FINAL PPP 3-22-16.pdf

Comment: See Appendix C for the Collaborative PPP which will apply to all of the City of Walled Lake, including areas outside of the Rouge River Watershed.

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?

#### PEP Procedures - Attachment(s)

Appendix D Final ARC Collaborative PEP\_032116.pdf

Comment: See Appendix D for the Collaborative PEP which will apply to all of the City of Walled Lake, including areas outside of the Rouge River Watershed.

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

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 delicing or dust suppressant.)

See Appendix H, Spill Response Procedure, 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 measures 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

into the applicant's MS4, including providing the applicant the authority to eliminate the illicit discharge in the attachment above. See Appendix E, Attachment E, Table 1

#### 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?

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?

Yes

If yes, choose type

Municipal Enforcing Agency

No the applicant relies on the following Qualifying Local Soil Erosion and Sedimentation Control Program (Part 91 Agency)
NONE PROVIDED

Construction Storm Water Runoff Control

Construction Storm Water Runoff Control Program Procedure Attachment - Attachment(s)

WL\_Appendix F\_Construction\_1of2.pdf
WL\_Appendix F\_Construction\_2of2.pdf
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 & C

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 E

- 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 F

#### 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.

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

Other rainfall data source (page and paragraph of attachments)

See Oakland County Stormwater Management Standards

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 Oakland County Stormwater Management Standards

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 Oakland County Stormwater Management Standards

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 Oakland County Stormwater Management Standards
- 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 Oakland County Stormwater Management Standards

Off-Site Mitigation and Payment in Lieu Programs

43. An applicant may choose to allow for the approval of off-site mitigation for redevelopment projects that cannot meet 100 percent of the performance standards on-site after maximizing storm water retention. Off-site mitigation refers to BMPs implemented at another location within the same jurisdiction and watershed/sewershed as the original project. A watershed is the geographic area included in a10-digit Hydrologic Unit

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 Attachments

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, Zoning Ordinance Section 21-28

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 Attachments

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 Attachments

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 Attachments

58. Does the maintenance agreement or other legal mechanism allow the applicant to complete the following? (Check if yes) Perform the necessary maintenance or corrective actions neglected by the BMP owner or operator

Track the transfer of operation and maintenance responsibility of the BMP (e.g., deed restrictions)

The state of the policies and maintenance responsibility of the Diff. (0.9., about 10.5116110110)

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 Attachments and Oakland County Stormwater Management Standards

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 Attachments and Oakland County Stormwater Management Standards

#### Section 10. Pollution Prevention and Good Housekeeping Program

Pollution Prevention and Good Housekeeping Program Procedures - Attachment(s)

WL\_Appendix H\_P2GH\_1of2m.pdf WL\_Appendix H\_P2GH\_2of2.pdf

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 H, P2GH, Table 1

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 H, Section E, Civic Center

See Appendix H, Sections J through L

- 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)
- 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 H, Section N

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 H, Section N

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 H, Sections G, I, and M

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 H, Section F

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 H, Section F

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 H, Section G

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

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 H, Section H

Managing Vegetated Properties

82. If the applicant's pesticide applicator does not exclusively use ready-to-use products from the original container, provide the reference to the procedure submitted above requiring the applicant's pesticide applicator to be certified by the State of Michigan as an applicator in the applicable category, to prevent or reduce pollutant runoff from vegetated land. A description of the certified applicator categories is available at the following link. If the applicant only applies ready-to-use products from the original container, enter "Not Applicable."

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 H, Section P

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 H, Section R

**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 H, Section Q

#### 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 - Attachment(s)

Appendix I Final Collaborative TMDL 032416.pdf

Comment: See Appendix I for the Collaborative TMDL. Additionally, the City was given late notice of additional TMDLs which apply to the portion of the City discharging to the Huron River. This response will be submitted separately.

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

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

Comments (As needed)

permit no: MIG10028

Additional Documents (As needed) - Attachment(s)

NONE PROVIDED

Comment: NONE PROVIDED

Attachments

Date

Attachment Name

Context

Status History

Date

User

**Processing Status** 

3/31/2016

Colleen Coogan

Submitted

**Processing Steps** 

Step Name

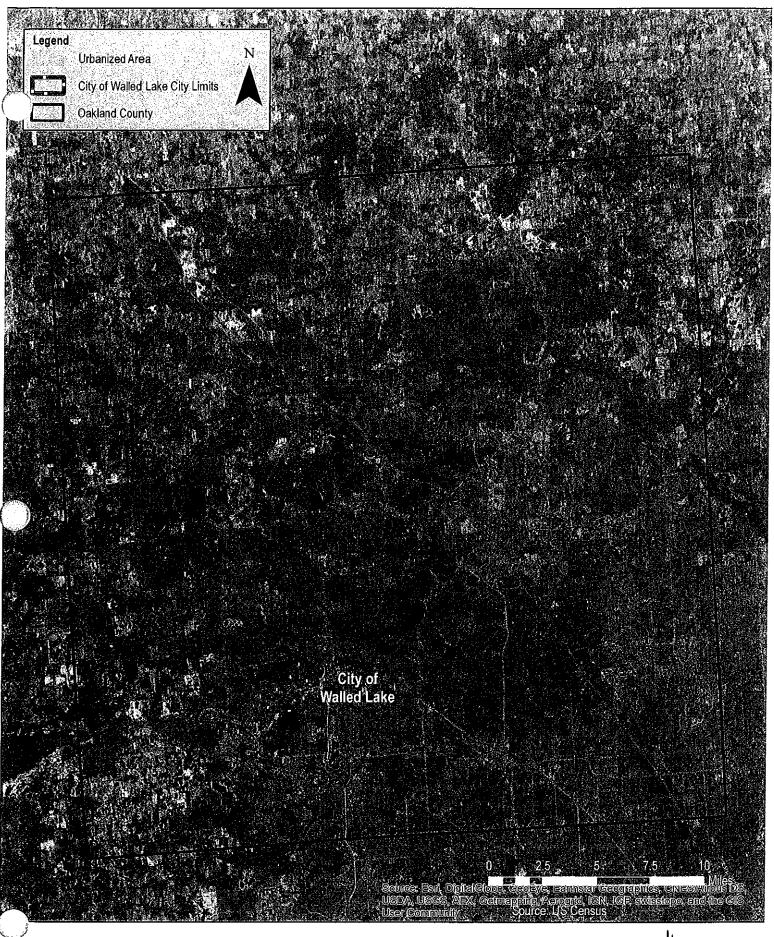
Assigned To/Completed By

Date Completed

Form Submitted

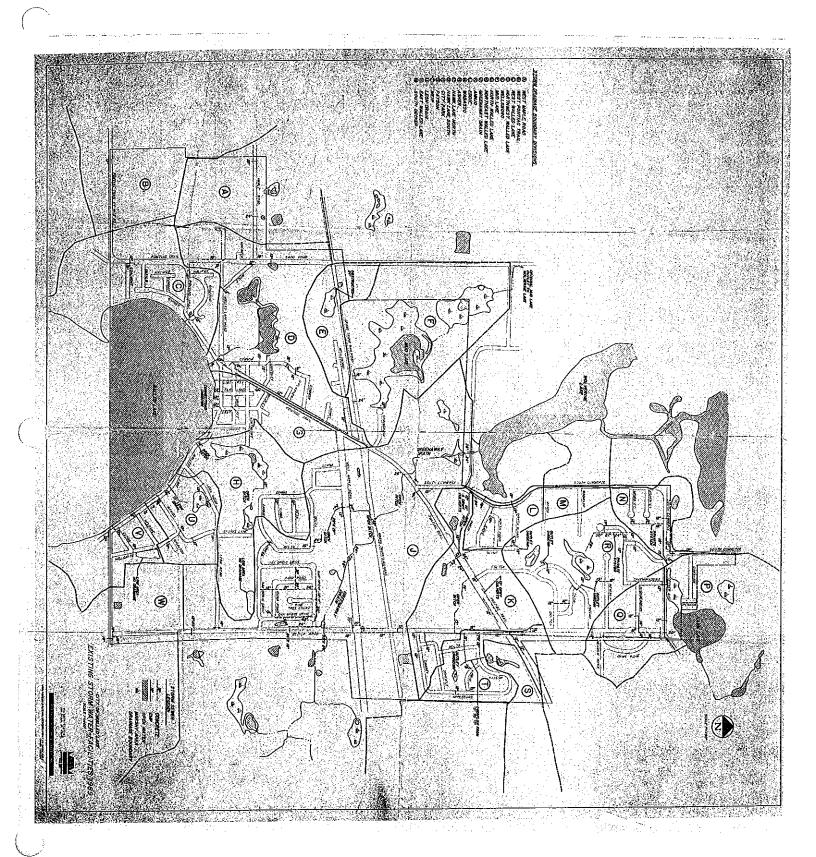
Colleen Coogan

03/31/2016 08:54 AM



City of Walled Lake - Urbanized Area
Detroit Area Cluster
Alliance of Rouge Communities





## STANDARD OPERATING PROCEDURE ENFORCEMENT RESPONSE

#### PREPARED FOR:

THE CITY OF WALLED LAKE
1499 E WEST MAPLE ROAD, WALLED LAKE, MICHIGAN 48390



**APRIL 2016** 

or upon any private or public property for the purpose of inspection and investigating conditions or practices that may be a violation of part 91, the rules, or this article."

#### C.3 Section 34.110 - Enforcement authority

"Upon a finding that there has been a violation of any provision, requirement or condition of this article (or of any soil erosion and sedimentation control permit or soil erosion and sedimentation control plan issued or approved under this article), the building and code enforcement department may take any enforcement action authorized by part 91, the rules, this article, or by other applicable laws, regulations and ordinances. In addition to other remedies provided in this article, the building and code enforcement department's enforcement authority includes, without limitation, the ability to issue cease and desist orders and to revoke earth change permits. Failure to comply with a cease and desist order or revocation of an earth change permit shall constitute a violation of this article."

#### SECTION D - ENFORCEMENT TRACKING

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

- 1. Name
- 2. Date
- 3. Location of the Violation (address, cross streets, etc.)
- 4. Business, Agency, Organization as applicable
- 5. Description of the Violation
- 6. Applicable Correspondence
- 7. Follow-up Actions
- 8. Key Dates
- 9. Descriptions of the City's Enforcement Response
- 10. Schedules for Achieving Compliance
- 11. Date the Violation was Resolved

#### SECTION E - PROCESS FOR REVISION

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

Sec. 1-15. - General penalty.

- (a) Every person convicted of a violation of any provision of this Code which is designated in the text of this Code to be a misdemeanor, or any rule, regulation, or order adopted or issued in pursuance to misdemeanor provisions shall be punished by a fine of not more than \$500.00 and costs of prosecution or by imprisonment for not more than 90 days, or by both such fine and imprisonment in the discretion of the court. Each act of violation and every day upon which any such violation shall continue shall constitute a separate offense.
- (b) The penalty provided by this section, unless another penalty is expressly provided, shall apply to the amendment of any section of this Code whether or not such penalty is reenacted in the amendatory ordinance.
- (c) The penalty shall be in addition to the abatement of the violating condition, any injunctive relief, or revocation of any permit or license.

(Ord. No. C-181-98, § 1, 6-16-98)

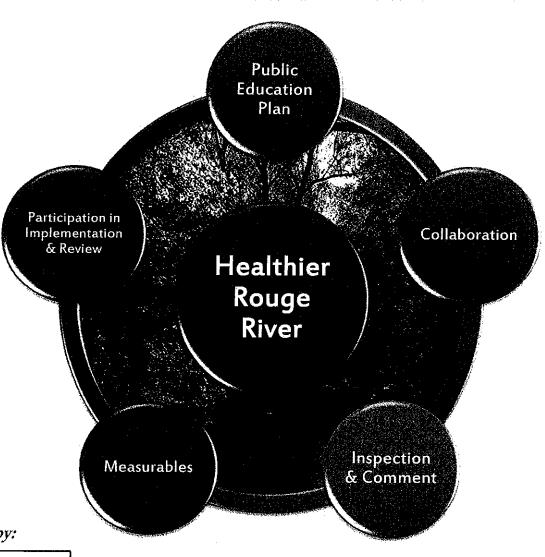
State law reference— Limitation on penalties, MCL 117.4i, MSA 5.2082.

Sec. 34-105. - Inspections.

- (a) The building and code enforcement department (or a person trained and experienced in soil erosion and sedimentation control techniques, as designated by the building and code enforcement department) shall inspect all work covered by an earth change permit issued pursuant to this article and is hereby authorized to enter property in the city covered by a permit for the purpose of performing any duties under this article. Inspection fees shall be paid as provided according to the fee schedule adopted by resolution of the city council.
- (b) The building and code enforcement department, or any person designated by the building and code enforcement department, may enter at all reasonable times in or upon any private or public property for the purpose of inspection and investigating conditions or practices that may be a violation of part 91, the rules, or this article.

(Ord. No. C-257-05, § 3, 2-15-05)

# ROUGE RIVER COLLABORATIVE PUBLIC PARTICIPATION/INVOLVEMENT PROGRAM (PPP)



Prepared by:



46036 Michigan Ave., Suite 126 Canton, Michigan 48188 www.allianceofrougecommunities.com March 23, 2016

The two primary goals of the Rouge River Watershed Management Plan (RRWMP) are Protect Public Health and Reduce Stormwater Runoff Impacts. Bacteria is one of the priority pollutants identified in the RRWMP. The ARC's collaborative program presents a watershed-wide plan that is being implemented to effectively and efficiently address *E. coli* levels in the Rouge River watershed caused by stormwater runoff. This plan consists of existing and planned activities and strategies that members of the Alliance of Rouge Communities (ARC) are individually and collectively implementing.

This plan was developed by the ARC through its Public Involvement and Education Committee (PIE) in coordination with the ARC Technical Committee in response to the findings and recommendations of the RRWMP as well as the Michigan Department of Environmental Quality's (MDEQ) Total Maximum Daily Load (TMDL) assessment for *E. coli* in the Rouge River Watershed. This plan is intended to meet the Public Participation/Involvement Program (PPP) element required by ARC members' NPDES permits for stormwater discharges from municipal separate storm sewer systems (MS4s). Those entities that are submitting a separate NPDES permit application, in lieu of this collaborative document, will continue to promote and participate in the activities identified in this plan as a member of the ARC.

This plan will be implemented collaboratively by the ARC participating communities and partners through September 30, 2022, which is the end of the permit cycle for the Rouge River watershed. The list of permittees participating in this Plan include:

Beverly Hills, Village of

Bingham Farms, Village of

Birmingham
Bloomfield Hills

Bloomfield Twp.

Canton Twp.

Dearborn Heights

Farmington
Farmington Hills
Franklin, Village of

Garden City

Inkster

Lathrup Village

Melvindale Northville

Livonia

Northville Twp.

Northville Twp.

Oak Park Plymouth

Plymouth Twp. Redford Twp.

Southfield

Troy

Walled Lake

Wayne Westland

Oakland County\*

Washtenaw County\*

Wayne County

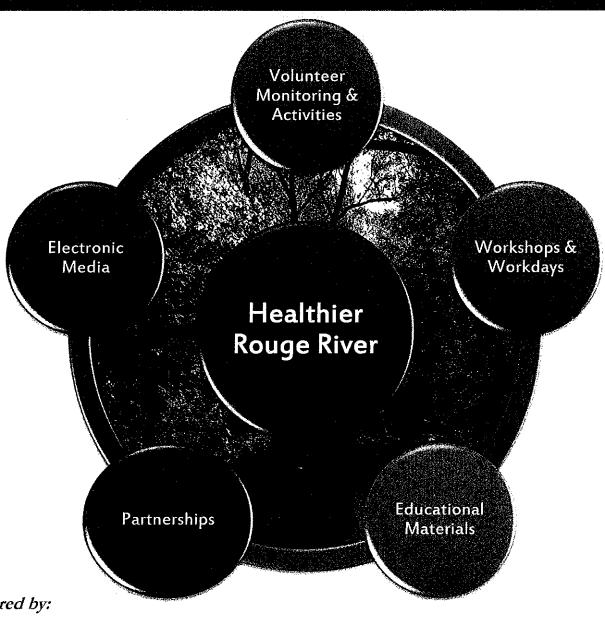
Henry Ford College

\*Participating but this plan is not part of their pending

permit application.

The Rouge River Watershed communities have long realized that the public must be engaged in order to have successful restoration activities in the Rouge River watershed. Public involvement and education has been the foundation of Rouge River restoration activities since the inception of the Rouge River National Wet Weather Demonstration Project in 1992 and continues today through the ARC and its members.

### ROUGE RIVER COLLABORATIVE PUBLIC **EDUCATION PROGRAM (PEP)**



Prepared by:



46036 Michigan Ave., Suite 126 Canton, Michigan 48188 www.allianceofrougecommunities.com March 23, 2016

#### INTRODUCTION

The Alliance of Rouge Communities (ARC), a 501(c)(3) organization, is a voluntary public watershed entity currently comprised of municipal governments, counties, schools, and cooperating partners (see Figure 1) as authorized by Part 312 (Watershed Alliances) of the Michigan Natural Resources and Environmental Protection Act (MCL 324.101 to 324.90106) as amended by Act No. 517, Public Acts of 2004. The purpose of the ARC is to provide an institutional mechanism to encourage watershed-wide cooperation and mutual support to meet water quality permit requirements and to restore beneficial uses of the Rouge River to the area residents.

Figure 1: ARC Members

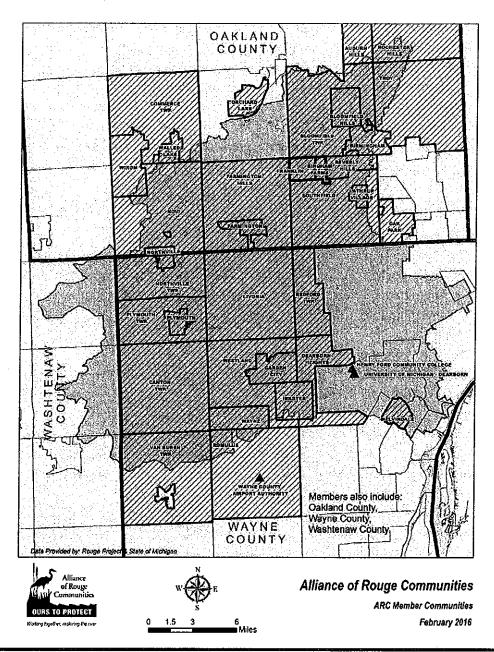


Table 1: PEP Topics and Priority

HEP TOURIES HE CONTEST TO THE SERVICE WEST OF THE SERVICE SERV	PHORINY RANGING
A. Promote public responsibility and stewardship in the Rouge River watershed	High
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	High
C. Educate the public on illicit discharges and promote public reporting of illicit discharges and improper disposal of materials into the MS4	High
D. Promote preferred cleaning materials and procedures for car, pavement, and power washing	Med
E. Inform and educate the public on proper application and disposal of pesticides, herbicides, and fertilizers	High
F. Promote proper disposal practices for grass clippings, leaf litter, and animal wastes that may enter into the MS4	High
G. Identify and promote the availability, location, and requirements of facilities for collection or disposal of household hazardous wastes, travel trailer sanitary wastes, chemicals, and motor vehicle fluids	High
H. Inform and educate the public on proper septic system care and maintenance, and how to recognize system failure	High
I. Educate the public on, and promote the benefits of, green infrastructure and Low Impact Development	High
J. Identify and educate commercial, industrial, educational and institutional entities likely to contribute pollutants to stormwater runoff	Low

#### **SECTION B - ACTION STRATEGY**

The ARC's overall action strategy is to protect and maintain what is healthy, identify and restore what is degraded, and keep working together to continuously improve environmental conditions. The ARC will look to use cost-effective outreach methods and maintain the efficiency of activities by using currently available resources when possible and collaborating with other potential partners

These activities are consistent with and help realize the goals of the RRWMP and address the *E. coli* and biota TMDLs within the Rouge River watershed.

#### SECTION C - COLLABORATIVE PEP BMP ACTIVITIES

Each PEP topic from the Stormwater Discharge Permit Application is addressed with various BMP activities and will be implemented collaboratively and parallel to the Collaborative IDEP. These action items are described below and include the target audience, key message, delivery mechanism, year and frequency implemented, and responsible party (or parties).

#### Responsible Party:

ARC members listed in Attachment A

#### Measurable Goal:

Number of materials distributed annually to ARC members by topic and number of views on website. Viewer numbers will be requested from electronic media companies when used.

BMP Identifier:

2

**BMP Descriptor:** 

Coordinate existing and create new community articles and ad graphics on pollution prevention and watershed restoration and stewardship

Addresses PEP Topic:

A, B, C, D, E, F, G, H, I, J

Target Audience:

Public and businesses

#### Key Message:

Articles and ad graphics may include the following topics: The connection of the MS4 to area waterbodies and the potential impacts discharges could have. The importance of pollution prevention and watershed restoration and stewardship. Reporting illicit discharges and improper disposal of materials into the Rouge River Watershed, promoting proper disposal practices, identify and promote facilities for collection or disposal of household hazardous wastes (including travel trailer sanitary wastes, chemicals and motor vehicle fluids). Septic system maintenance and how to recognize system failure and preferred cleaning materials and procedures for car, pavement, and power washing. Proper application and disposal of pesticides, herbicides, and fertilizers and the proper disposal practices for grass clippings, leaf litter and animal waste that may enter the Rouge River. Benefits of green infrastructure and Low Impact Development and methods for managing riparian lands to protect water quality. It may also include educating commercial, industrial, educational, and institutional entities likely to contribute pollutants to stormwater runoff.

#### **Delivery Mechanism:**

With ARC PIE oversight, county and ARC staff will facilitate the selection (based on an annual theme) and distribution of various articles and/or ad graphics that support watershed restoration and pollution prevention public education themes. Other existing articles or ad graphics will be made available upon request by ARC members. Articles and ad graphics will also be posted on the ARC's website and through social media. ARC members will be able to repost using their social media.

displays if a particular topic is deemed necessary. The ARC is also creating seasonal posters covering a variety of the PEP Topics which will be provided to ARC members for display in their facilities.

#### Year/Frequency BMP Implemented:

Up to 4 seasonal posters will be created beginning in 2016 to be displayed at ARC member facilities. Static displays will be created upon permit approval. ARC Staff will promote the use of displays at community events and facilities during the permit cycle.

#### Responsible Party:

ARC members listed in Attachment A

#### Measurable Goal:

Date and title of events that static displays were used at. The number of posters distributed annually to ARC members will be reported along with where posters were displayed in their community.

**BMP Identifier:** 

4

**BMP Descriptor:** 

Promote environmental hotlines to educate the public on illicit discharges and promote public reporting of illicit discharges and improper disposal of materials into the MS4

#### Addresses PEP Topic:

A, B, C, E, G, J

#### <u>Target Audience</u>:

Public, municipal employees and businesses

#### Key Message:

The message will educate the public about the connection of the MS4 to area waterbodies and the potential impacts discharges could have and the importance of pollution prevention and watershed restoration and stewardship. Promote awareness of environmental contaminants and encourage the reporting of observed and/or suspected pollutant sources. It will also include informing the public of collection/disposal sites of household hazardous waste, travel trailer sanitary wastes, chemicals and motor vehicle fluids along with proper disposal practices for grass clippings, leaf litter, and animal wastes.

#### **Delivery Mechanism:**

The environmental hotline numbers and collection/disposal information will be advertised by ARC members through available outlets such as the ARC website, county and local community websites, social media, through hotline brochure distribution, as well as being displayed on other topical brochures, distributed at display events and training sessions, electronic media and other outlets.

#### Year/Frequency BMP Implemented:

Homeowner brochure will be developed upon approval of the permit and will be distributed on an ongoing basis.

#### Responsible Party:

ARC members listed in Attachment A

#### Measurable Goal:

Number of materials distributed annually.

**BMP Identifier:** 

6

**BMP Descriptor:** 

Develop and promote educational workshops and presentations

#### Addresses PEP Topic:

A, B, C, D, E, F, G, H, I, J

#### **Target Audience:**

Public and businesses

#### Key Message:

The key message of the workshops and presentations could include the connection of the MS4 to area waterbodies and the potential impacts discharges could have. The importance of pollution prevention and watershed restoration and stewardship. Reporting illicit discharges and improper disposal of materials into the Rouge River Watershed, promoting proper disposal practices, identify and promote facilities for collection or disposal of household hazardous wastes (including travel trailer sanitary wastes, chemicals and motor vehicle fluids). Septic system maintenance and how to recognize system failure and preferred cleaning materials and procedures for car, pavement, and power washing. Proper application and disposal of pesticides, herbicides, and fertilizers and the proper disposal practices for grass clippings, leaf litter and animal waste that may enter the Rouge River. Benefits of green infrastructure and Low Impact Development and methods for managing riparian lands to protect water quality. It may also include educating commercial, industrial, and educational institutional entities likely to contribute pollutants to stormwater runoff.

#### **Delivery Mechanism:**

With ARC PIE oversight, Friends of the Rouge and ARC staff will determine the topics, coordinate content and present 6 workshops during the permit cycle. Workshop topics will vary based on annual education themes and/or needs as determined by the ARC PIE. Workshops and presentations to business associations, chamber of commerce, business organizations and focus groups could also be included. ARC members may host and participate in these workshops and presentations.

#### Measurable Goal:

Number of views on website and social media annually and number of volunteers attending the various events. Results of surveys conducted at the end of activities.

BMP Identifier:

8

**BMP Descriptor:** 

Promotion of and support for volunteer monitoring activities within

the Rouge River Watershed

Addresses PEP Topics:

A, B, C, I, J

Target Audience:

Public and businesses

#### Key Message:

Promote the importance of pollution prevention and watershed restoration and stewardship through volunteer monitoring. This monitoring may include general macroinvertebrates, stoneflies, and frogs and toads, and/or fish. Volunteer monitoring will provide education, build stewardship and provided valuable data for the protection and restoration of the Rouge River.

#### **Delivery Mechanism:**

With ARC Technical Committee oversight, the ARC will promote and support Wayne County and the Friends of the Rouge to implement a watershed-wide volunteer monitoring program through websites, social media, distribution of materials and presentations. ARC members will actively promote public and business participation and lend support to FOTR as appropriate. ARC members will host monitoring activities at their facilities when appropriate.

#### Year/Frequency BMP Implemented:

Annually with 1 Winter Stonefly Search in the winter and 1 Bug Hunt in the spring or other like programs, and 2 other volunteer monitoring training exercises and/or workshops. This monitoring may occur on a rotating basis. The watershed will be monitored for these parameters a minimum of once every permit cycle.

#### Responsible Party:

ARC members listed in Attachment A

#### Measurable Goal:

Number of public and business volunteers attending the various monitoring events. Results of surveys conducted at the end of activities.

#### Target Audience:

Organizations, businesses and governmental agencies

#### Key Message:

To build partnerships with organizations like the Alliance of Downriver Watersheds, SEMCOG, Great Lakes Commission and other regional partners to coordinate stormwater permit related public education and other stormwater related initiatives.

#### **Delivery Mechanism:**

ARC members and ARC staff will continue to participate and collaborate with regional partners like SEMCOG on the Southeast Michigan Partners for Clean Water initiatives committee to provide input and coordinate ARC PIE committee initiatives with this regional effort. ARC members and ARC staff may attend conferences and workshops promoting collaborative efforts throughout the region, state and nation.

#### Year/Frequency BMP Implemented:

Annually

#### Responsible Party:

ARC members listed in Attachment A

#### Measurable Goal:

Meeting dates and summaries of partnership activities. The ARC will reference annual reports from regional partners if available.

### SECTION D - PROCEDURE FOR EVALUATING AND DETERMINING EFFECTIVENESS

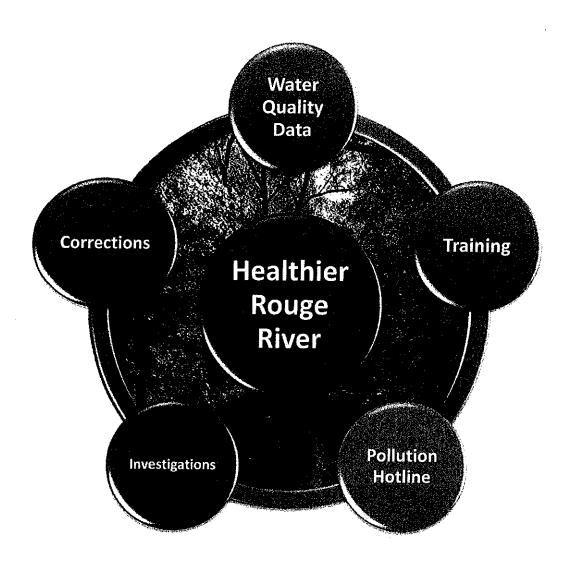
The ARC will conduct a public awareness survey during the permit cycle and compare it to the previous survey results to evaluate changes in public awareness/behavior. After comparing the results from the surveys, the ARC PIE Committee will determine if any modifications should be made to the PEP to address ineffective implementation.

In addition to analyzing the survey results, the ARC will use the evaluations that are done at all workshops, presentations, workdays, water festivals and other activities hosted by ARC member communities and partners. This will allow the ARC to make any necessary adjustments to the information presented at the ARC supported workshops and presentations during the permit cycle.

		T	<del></del>	<del></del>	<del></del>
	Measurable Goal	where posters were displayed	Number of materials distributed and number of views on website/social media	Number of materials distributed	Sign-in sheets and topics from workshops/presentations and number of materials distributed
	Responsible Party	Appendix D, Attachment A	ARC member communities listed in Appendix D, Attachment A	ARC member communities listed in Appendix D, Attachment A	ARC member communities listed in Appendix D, Attachment A
	Frequency	posters in 2016 and then then mew static displays annually upon completion	Annually	Annually	6 during the permit cycle
	Year	posters in 2016 and new displays during the permit cycle	Ongoing	During the permit cycle	Ongoing
	Delivery Mechanism		Websites, social media, brochures, electronic media, at events and trainings	Brochure	Workshops and presentations
2	ney Wessages	and failure, proper disposal of pesticides, herbicides and fertilizers, public responsibility and stewardship in the Rouge River watershed, proper disposal of grass, leaf and animal wastes, promote HHHW including trailer, motor vehicle and chemical waste, GI and LID, cleaning materials and proper car, pavement and power washing.	Educating on connection of MS4 to area waterbodies, public reporting illicit discharge, public responsibility and stewardship in the Rouge River watershed, proper disposal of pesticides, herbicides and fertilizers, promote HHHW including trailer, motor vehicle and chemical waste, educate commercial, industrial and educational institutional entities about pollution prevention.	Educating on connection of MS4 to area waterbodies, public reporting illicit discharge, septic system care and failure, proper disposal of pesticides, herbicides and fertilizers, public responsibility and stewardship in the Rouge River watershed, proper disposal of grass, leaf and animal wastes, promote HHHW including trailer, motor vehicle and chemical waste, GI and LID, and cleaning materials and power pavement and power	Educating on connection of MS4 to area waterbodies, public reporting illicit discharge, septic system care and failure, proper disposal of pesticides, herbicides and fertilizers, public responsibility and stewardship in the Rouge River watershed, proper.
Torrot	Audience			General public	General public, businesses
Dorthou	Collaboration	cooperaive partners	ARC member communities, Wayne County, Oakland County, Washtenaw County, State of Michigan	ARC member communities, counties and cooperative partners	ARC member communities, Friends of the Counge and counties and cooperative partners
RMP	Descriptor	prevention and watershed restoration and stewardship	Promote environmental hottlines to educate the public on illicit discharges and promote public reporting of illicit discharges and incorper discosal of materials into the MS4	Development of "homeowners" homeowners" materials to promote the importance of pollution prevention and watershed restoration and stewardship	Develop and promote educational workshops and presentations
BMP	Identifier		4	o	Ø
PFP	Topic	Jr.O.T.	< m∪ш0¬	< □ ○ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	<b>4 шОСШГОТ</b> _

	Measurable Goal	Documentation of current signage, maintenance required, and future signage placement and the number of new signs/stickers distributed	Meeting dates, summaries of activities and partner annual reports
	Responsible	ARC members listed in Appendix D, Attachment A	ARC members listed in Appendix D, Attachment A
	Frequency	Annually	Annually
	Year	Ongoing and one new sign and/or bumper sticker during the permit cycle	Ongoing
	Delivery Mechanism	Signs and sticker	Participate and collaborate with regional partners
	Key Messages	River/Road Crossing signs, Don't Feed the Geese/Waterfowl signs, and Grow Zone signs and disposal practices of animal waste or other pollution prevention topic. This activity helps to educate and increase public awareness about the interconnectedness of the watershed and the storm sewer system.	To build partnerships with organizations like the Aliance of Downriver Watersheds, SEMCOG, Great Lakes Commission and other regional partners to coordinate storm water permit related public education and other storm water related initiatives.
-	Andience	General public	Organizations, businesses and governmental agencies
Dartnor	Collaboration	Ark member communities, Wayne County, Oakland County, and Washtenaw County	ARC member communities, Wayne County, Oakland County, Washtenaw County, SEMCOG, and various other organizations as sportunities
BMP	Descriptor	Nouge Kiver Signage	Continued participation in regional partnership activities
BMP	Identifier	S .	0
PEP	Topic △	(mu	< a∪∩шпΩ⊥¬¬

## ROUGE RIVER COLLABORATIVE ILLICIT DISCHARGE ELIMINATION PLAN (IDEP)





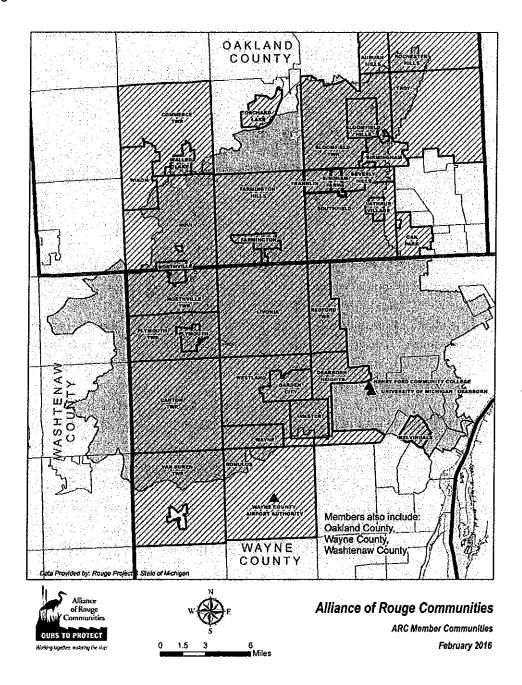
Prepared by:

46036 Michigan Ave., Suite 126 Canton, Michigan 48188

March 23, 2016

#### A. INTRODUCTION

The Alliance of Rouge Communities (ARC), a 501(c)(3) organization, is a voluntary public watershed entity currently comprised of municipal governments, counties, schools, and cooperating partners as authorized by Part 312 (Watershed Alliances) of the Michigan Natural Resources and Environmental Protection Act (MCL 324.101 to 324.90106) as amended by Act No. 517, Public Acts of 2004. The purpose of the ARC is to provide an institutional mechanism to encourage watershed-wide cooperation and mutual support to meet water quality permit requirements and to restore beneficial uses of the Rouge River to the area residents.



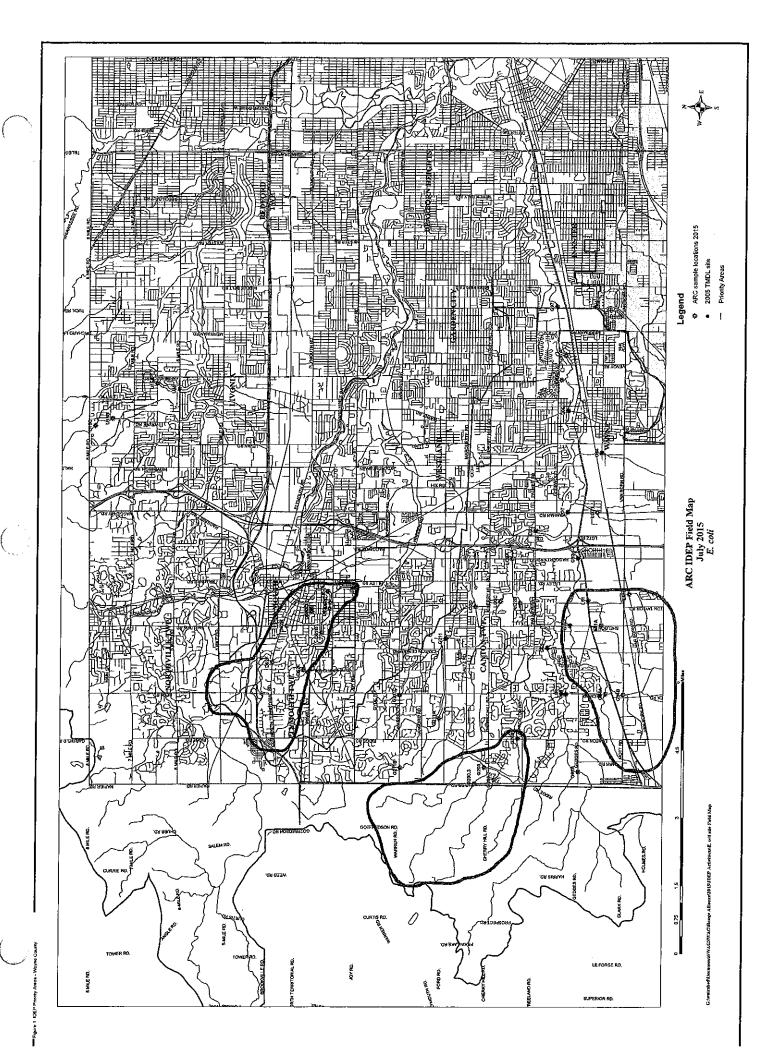
This estimate does not include the results of Wayne County's septic system time-of-sale inspection, household hazardous waste, illegal dumping, complaint response, field staff training, monitoring, public education, and pollution prevention good housekeeping (e.g. road sweeping, catch basin cleaning, drain trash rack cleaning, etc.) programs. In 2014 alone, these efforts resulted in more than 13,000 tons of material being properly disposed of or recycled; and an estimated 4 million gallons of polluted water being prevented from entering waters of the state county-wide (WCDPS, 2016).

Since 2000, **2,329 municipal staff and thousands of volunteers have been trained** on how to identify and report illicit discharges through the efforts of the ARC, Rouge Project, and Friends of the Rouge (WCDPS, 2016). This has resulted in hundreds of pollution complaint calls from the public and municipal staff which led to the identification of numerous illicit discharges. For example, in 2013, Wayne County responded to 39 pollution complaint calls resulting in the identification of eight illicit discharges (ARC, 2014).

Beyond being a collaborative approach, this Plan meets the Michigan Department of Environmental Quality's (MDEQ) definition of an Alternative Approach as defined within the current permit application guidelines. The primary reason that this Plan is classified Alternative is due to the ARC's approach in addressing Application Item 10 – Outfall Screening. In lieu of routine inspection of individual permittee outfalls for visual signs of an illicit discharge, we propose to monitor the river at numerous locations in order to select areas where we can target our resources to conduct investigations to locate sources. This is being suggested because our experience indicates that individual outfall surveys are inefficient: they identified very few illicit discharges while being very expensive. Using outfall surveys, as the first line of defense for IDEP, will yield little benefit to the river and our residents.

Our IDEP approach is based on the following, which we have gleaned from 29 years of experience:

- Sampling for E. coli is more effective for detecting sewage than screening for other indicator
  parameters. Many of the indicators suggested in the Permit Application (ex: ammonia, fluoride,
  detergents, and pH) are not effective indicators of sewage discharges which are our target in the
  Rouge;
- Pollution sources will be tracked down using experienced and specialized team of IDEP investigators. No other region in the state has the experience that we have in the Rouge. Our approach uses lay people (IDEP #5) and water quality data (IDEP #2) to identify potential problems, but only the most experienced individuals will do the investigations. This allows the local community resources to focus on any necessary correction efforts;
- Investigations will be conducted regardless of jurisdiction. The intertwining MS4s in the Rouge can make investigations very slow and cumbersome due to the varying jurisdictions that are encountered during an investigation. Instead of stopping at jurisdictional boundaries, our investigators track problems to the source with the assistance of the local community. This cross jurisdictional cooperation leads to much quicker source identification and removal; and
- Our approach is geographically more comprehensive. Illicit discharges draining directly to
  waters of the state are not revealed while screening MS4 outfalls. Finding these requires one to
  look at the watercourse.



#### D. ACTION STRATEGIES

Each strategy listed in this section includes a description, responsibility and schedule for completion. The Counties, Cities, Villages, Townships, and Schools listed in the Responsibility Sections refer to those who are participating in this Plan as listed in **Attachment A**. The timelines presented below are contingent on plan approval by October 1, 2016.

#### IDEP #1: Mapping of Storm Sewer Systems

<u>Description</u>: Storm sewer maps for individual jurisdictions are available in various formats and at various levels of detail. For the purposes of this Plan, a storm sewer map will include the location of outfalls, enclosed and open storm drains, roads, and waters of the state. For each permittee, the physical location of these maps is provided in **Table 1**.

In addition, a watershed-wide GIS database of the storm sewer system maps will be developed. This activity will centralize data and facilitate source-tracking investigations and ease reporting to the MDEQ over time.

#### ARC Member Responsibilities and Schedule:

- ARC (as contracted by the permittees):
  - Update the watershed's Storm Sewer GIS by July 30, 2022.
- Cities, Villages, Townships and Counties
  - With the exception of drainage from road agencies and Schools, convert hard copy storm sewer system maps to GIS format. See schedule in Table 1. Outfall mapping for road agencies will be discussed under the individual county stormwater management plans.
  - Provide GIS layers to the ARC within 6 months of completion or major update of GIS database.

Table 1 - Individual Permittee Storm Sewer System Map and Schedule for GIS

Permittee	Physical Location of Storm Sewer Map(s)	Timeline for GIS Storm Sewer Layer				
Municipalities	Municipalities					
Beverly Hills	Oakland County WRC	Spring 2020				
Bingham Farms	Oakland County WRC	Complete				
Birmingham	Oakland County WRC	Complete				
Bloomfield Hills	Department of Public Works	Complete				
Bloomfield Twp.	Dave Payne Public Services Building	Complete				
Canton Twp.	Department of Public Works	Ongoing (50% complete)				
Dearborn Heights	Department of Public Works	Complete (2007)				
Farmington	Department of Public Works	Complete (updates in progress)				
Farmington Hills	Engineering Department	Complete				
Franklin	Oakland County WRC	Spring 2020				
Garden City	Department of Public Works	Complete				
Inkster	Department of Public Works	Complete				
Lathrup Village	Oakland County WRC	Complete				
Livonia	Department of Public Works	Complete (2015)				
Melvindale	Department of Public Works	Complete				
Northville	Department of Public Works	Complete (updates in progress)				



- o Summarize data in spreadsheet format, annually. Due March 30 each year.
- Cities, Villages, Townships
  - o Perform dry weather screening of new outfalls by November 30, 2021.

Figure 3 – E. coli Screening Locations

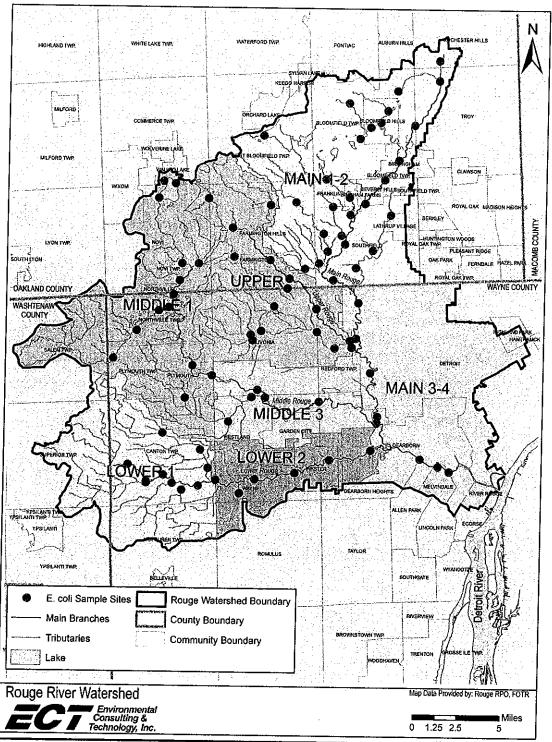
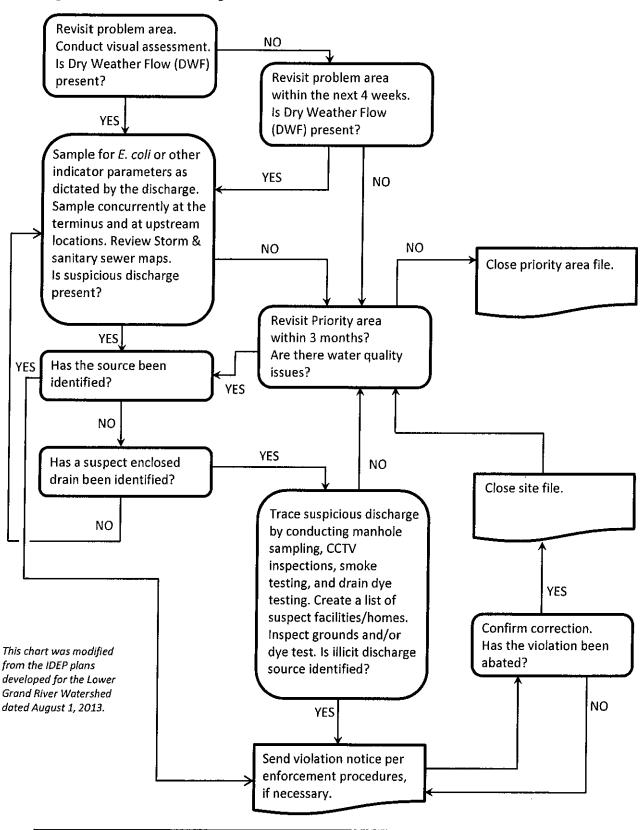


Figure 4 - Advanced Investigation Protocol



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o For permittees in Priority Areas, remind staff of the *E. coli* problem and encourage the reporting of pollution complaints.

## IDEP #5: Pollution Complaint Response

<u>Description</u>: Oakland, Wayne, and Washtenaw counties operate environmental hotline numbers and respond to environmental complaints including illegal dumping, spills and suspicious discharges. Local communities also receive pollution complaints directly from residents. Local communities (cities, villages, and townships) will promote the use of the hotline numbers to their residents and general public and assist with and/or perform follow up complaint response as appropriate. Community staff may identify a potential pollution issue during their day-to-day activities. These issues will be handled just like a pollution complaint from a resident. It should be noted that suspicious discharges within townships, not on township property, will be handled by the county road agency or their designee.

Investigative responses will range from a site visit that fails to confirm a problem to full scale advanced investigation to identify the source of the illicit discharge. When responding to complaints staff will use the Advanced Investigation process outlined in **Figure 4**. For non-emergency spills, the initial complaint response will begin within 48 hours of notification and within regular working hours. Emergency spills will be handled immediately. The spill response protocol for handling complaints, spills and illegal dumping is permittee-specific and, as such, is outlined in each permittee's Stormwater Management Plan.

Any other nonpriority area investigations will also be handled as described in Figure 4.

## ARC Member Responsibilities and Schedule:

Entity/Task	Schedule
ARC (as contracted by the permittees)	
Maintain a list of IDEP community contacts and update.	By July 30 <sup>th</sup> each year
Cities, Villages, Townships, Road Agencies and Schools	
Provide the ARC with a contact person for addressing pollution complaints.	By July 30 <sup>th</sup> each year
Track status of complaints using the Spill Notification & Complaint Response form (See <b>Attachment D</b> ) or similar form. This will include complaints handled internally or those referred by the county.	As they arise.
Investigate and resolve complaints within their MS4.	As they arise.
WCDPS and OCWRC	
Provide technical guidance as requested by local communities.	As requested
Track the status of any pollution complaints that they investigate.	As they arise.
Investigate and resolve complaints within their MS4.	As they arise.

Permittee (listed alphabetically)	Timeline
Westland	Completed
Counties	
Wayne County	Completed
Schools	
Henry Ford College	Completed

NA-1=Not applicable because there are no municipal facilities.

NA-2=Not applicable because municipal facilities are not located in the watershed.

## IDEP #7: Legal Authority

<u>Description</u>: The legal authority that allows permittees to prohibit, investigate and/or enforce the correction of illicit discharges varies depending on the nature of the discharge in question and the jurisdiction of the MS4. For discharges to city and village MS4s, the legal authority is granted via the Plumbing Code, Sewer Use Ordinances, Nuisance Ordinances, and Municipal Civil Infraction Ordinances. Schools and county departments will follow their written policies or codes, as appropriate. **Table 3** provides the list of regulatory mechanisms by type of illicit discharge within the authority of local, school and county agencies. **Table 4** provides a list of additional regulatory mechanisms that are available to state and federal agencies. This table is provided for informational purposes only. Given that the discharges in **Table 4** are outside the purview of the local agencies, they will not be tracked by the permittees.



Table 3 - IDEP Regulatory Mechanisms within the Permittee's Authority

Discharge Type or Source	Lead Enforcement Agency	Regulatory Authority
Discharges to city and village MS4s (except as noted below)	Local DPWs and Building Depts.	Varies by community. See Attachment E.
Discharges to school or township MS4s	School or Township	See Attachment E.
Sanitary sewage and waste matter into County Drains	County Drain or Water Resource Commissions	Section 280.423 of the Michigan Drain Code of 1956, as amended. Under the Michigan Drain Code, pollution of a county drain is a criminal misdemeanor and punishable by a fine of \$25,000 or imprisonment.  See Items 1-10 of Chapter 18, Section 280.423 of the Michigan Drain Code at: http://legislature.mi.gov/doc.aspx?mcl-280-423  See also Section 280.421: Obstructions; removal; expenses, notice; livestock; criminal complaint of Chapter 18 of the Drain Code at: http://www.legislature.mi.gov/%285%28 fpcedzixcmfe3wvtvqmyto3x%29%29/mil eg.aspx?page=getObject&objectName=m cl-280-421.

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Discharge Type or Source	State or Federal Enforcement Agency	Regulatory Authority
Releases of Oil and Polluting Materials, Sewage, Flammable and Combustible Liquids, Hazardous Materials, Hazardous Substances, Infectious Substances, Hazardous Wastes, Leaking Above Ground and Underground Storage Tanks, Bulk Commercial Fertilizers and Pesticides, and Liquid Industrial Wastes	MDEQ - WRD & RRD, USEPA, USCG, NRCS, USDOT, MSP, Local Police & Fire Depts., LEPC, LARA, MDARD, Local Health Dept., and CDC	See Attachment F for appropriate regulatory authority

Notes: CDC = Center for Disease Control, LARA= Michigan Dept. of Licensing and Regulatory Affairs, LEPC=Local Emergency Planning Commission, MDA=Michigan Dept. of Agriculture & Rural Development, MDEQ WRD=Michigan Dept. of Environmental Quality Water Resources Division, MDEQ RRD= MDEQ Remediation and Redevelopment Division, MDLEG=Michigan Dept. of Labor and Economic Growth, MSP=Michigan State Police, NRCS=Natural Resources Conservation Service, USCG=US Coast Guard, USDOT=US Dept. of Transportation, USEPA=US Environmental Protection Agency Source: Oakland County Water Resources Commissioner's Office

## E. CORRECTIVE ACTION NOTIFICATION

The procedure for responding to illicit discharges will vary depending on the nature of the discharge (ex: illicit connection to a storm sewer, failing septic system, illegal dumping, etc.) and jurisdiction of the discharge. Similarly, the timeline for eliminating a discharge will vary depending on the geographic extent of the issue, the complexity of the corrective action, responsible party's financial constraints, etc. Deviations to the procedures below may be made on a case by case basis and will be documented in the IDEP record. In all cases, corrective action measures will be implemented to the maximum extent practicable and as soon as practicable. The status of corrective actions will be included in permit-required progress report to the MDEQ.

## E.1. Discharges from Private Sources to MS4s

If the source of an illicit discharge has been determined to be privately owned, discharging to a MS4 and regulated by the MS4, the MS4 owner (city, village, county) will use the procedure below to notify and correct the illicit discharge. It should be noted that discharges to drains within townships are typically under the jurisdiction of the county road agency. However, corrective action and enforcement for discharges to their MS4 is handled under the local jurisdiction's codes and ordinances, the county health department's sanitary code or other appropriate regulatory authority.

## First Notice: Notification of Problem and Correction Needed

Once the source(s) of an illicit discharge has been identified, the MS4 owner will provide the first written notice to the responsible party of the illicit discharge by registered mail within 7 days. The first written notice will notify the responsible party of the illicit discharge, the MS4 owner's regulatory authority to require correction, and the potential enforcement actions if the discharge is not addressed. The responsible party will be required to contact the MS4 owner regarding plans for correction within 14 days. Tracking of all notifications and documentation of registered mail receipts shall be retained by the MS4 owner.

## Final Notice

if 14 days have passed from the date of the 1st written notice and no response has been received from the responsible party, a second written notice will be sent. The second written notice will remind the responsible party of the illicit discharge, the prior notice, the regulatory authority to require correction, and the potential enforcement actions that will occur if the discharge is not addressed. The responsible party will be given an additional 14 days to contact the MS4 owner regarding plans for correction.

## F. EVALUATING EFFECTIVENESS

Records for each of the above IDEP activities will be kept and a summary report will be prepared documenting the tracking metrics indicated in **Table 5**. This information will be included in the permittee's semi-annual report to the MDEQ.

Table 5 - Tracking Metrics for Evaluating Effectiveness

_	ltem	Associated Action Strategy #
Α.	Number of pollution complaints investigated by counties	
В.	Percentage of complaints that lead to an illicit discharge discovery	IDEP #5
C.	Number of spills and complaints investigated by locals	-
D.	Percentage of complaints that lead to an illicit discharge discovery	IDEP #5
E.	Number of illicit connections found/corrected in priority areas	IDEP #2, #3
F.	Number of field staff trained	IDEP #4
G.	Number of permittee-owned facilities inspected and illicit connections found/corrected	IDEP #6
Н.	Updated map of outfalls	IDEP #1

Overall effectiveness will be determined based on the natural resource response as indicated by stream sampling conducted throughout the watershed. This monitoring will also take place (every 10 years) and include assessments for dissolved oxygen, *E. coli*, and stream flow, and suspended solids. The number of monitoring locations and frequency of monitoring are displayed in **Table 6**. **Figures 5 and 3** depict the monitoring locations.

A watershed-wide assessment report will be prepared that includes a summary of all monitored parameters. Dry and wet weather *E. coli* conditions will be determined based on flow duration curves and compared to previous results reported by the MDEQ. Other parameters will also be compared to previous results complied by the Rouge Project and others.

Table 6 - Watershed-wide Monitoring Locations and Frequency

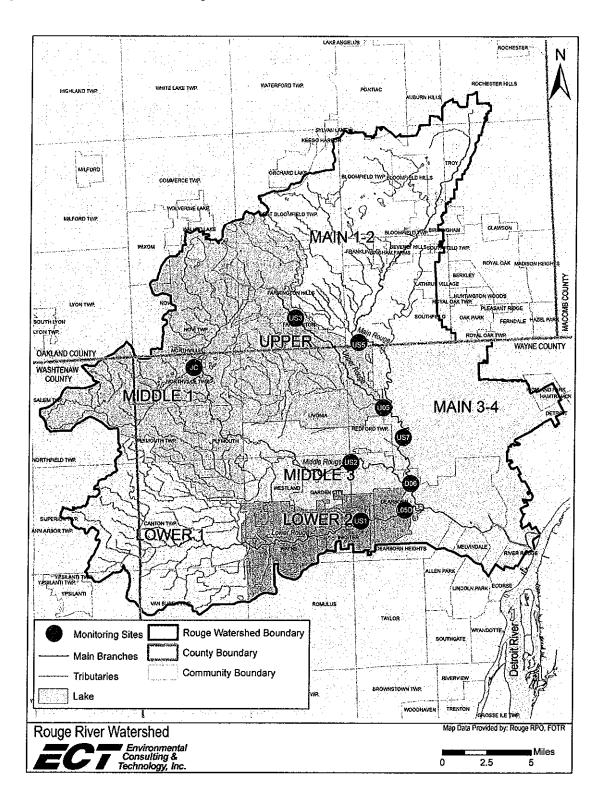
Parameter	Anticipated Monitoring Sites	Frequency	Schedule
Dissolved oxygen	Main (US5 and US7), Lower (L05D), Middle (D06) Upper (U05) and Johnson Creek (JC)	20 events	May – Oct 2017
Stream flow	Main (US5 and US7), Lower (US1), Middle (US2) Upper (US3) and Johnson Creek (JC)	Continuous	May Oct 2017
E. coli	Similar to sites in the MDEQ E. coli TMDL Assessment – 85 sites	20 events	May – Oct 2017
Suspended solids	Same as DO sites	20 events	May - Oct 2017

Schedule:

Metric Summary Report: Due biennially by March 15<sup>th</sup> starting in 2018. Watershed-wide Assessment Report: Due every 10 years by June 30<sup>th</sup> starting in 2018.



Figure 5 - Non-Bacterial Monitoring Locations



## Attachment A Participating ARC Members

Communities	
Beverly Hills, Village of	Northville, City of
Bingham Farms, Village of	Northville Township
Birmingham, City of	Novi, City of
Bloomfield Hills, City of	Oak Park, City of
Bloomfield Township	Plymouth, City of
Canton Township	Plymouth Township
Dearborn Heights, City of	Redford Township
Farmington, City of	Southfield, City of
Farmington Hills, City of	Troy, City of
Franklin, Village of	Walled Lake, City of
Garden City, City of	Wayne, City of
Inkster, City of	Westland, City of
Lathrup Village, City of	
Livonia, City of	
Melvindale, City of	
Counties	
Dakland County*	
Wayne County	
chools	
lenry Ford College	
Participating but this Plan is not now	

<sup>\*</sup>Participating but this Plan is not part of their pending permit application.

## FIELD SCREENING PROCEDURE FOR IDENTIFYING POTENTIAL ILLICIT DISCHARGES

## PREPARED FOR:

THE ALLIANCE OF ROUGE COMMUNITIES 46036 MICHIGAN AVE, CANTON, MICHIGAN 48188



March 16, 2016

should be between 10 and approximately 24,000 colonies/100 mL. Care should be taken not to disturb any accumulated sediment when collecting the *E. coli* sample.

4. Other parameters – Additional samples may be collected depending on the suspected source.

Disposable gloves will be worn to collect all samples. Gloves will be changed out between sampling sites. *E. coli* samples will be collected directly into the laboratory container, while sample collection cups will be used for pH and surfactants. Decontamination procedures for reusable sample collection containers consists of a triple rinsed with site water prior to taking a measurement.

If sample result exceeds the threshold(s) provided in Table 1, then additional investigations will be conducted to locate the source of the suspicious discharge.

Field screenings will be conducted in conjunction with field observation procedures as described in Section B. Screenings may also be conducted on an as needed basis if suspicious discharges are discovered by field staff during day-to-day operations, or if a pollution complaint or referral is received from the public or other agencies.

Table 4 – Guidance for Outfall Screening Results

Parameter	Follow-up Threshold
Typical Parameters	
рН	>9 or <6.5
Surfactants (mg/L)	
E. coli (cfu/100 mL or MPN/100 mL)	>1,000
Physical signs	unusual odor, color, clarity, floatables, deposits, stains, vegetation change, outfall structural damage
Additional Parameters	
Ammonia (mg/L)	<u>}</u>
Conductivity (uS/cm)	>1,000
Turbidity (NTU)	>5
TDS (mg/L)	>500
Dissolved oxygen (mg/L)	< 5
Temperature (°F)	+5 warm water stream [1] +2 cold water stream [1]

## SECTION C – PROCESS FOR REVISION

Any questions on this procedure should be directed to the entity's Stormwater Manager. This procedure shall be reviewed once per permit cycle by ARC staff for any updates.

## Attachment B-2

**Dry Weather Instream Water Quality Screening Procedure** 

## SECTION A - SCOPE AND APPLICATION

This procedure provides the basis for performing in-stream sample collection during dry weather for *E. coli* analysis. This procedure covers the collection, storage, and transport of water samples.

## **SECTION B - METHOD SUMMARY**

The scope for this procedure is based on the guidance found in the Rouge River Collaborative Illicit Discharge Elimination Plan (IDEP). Under this procedure, the Alliance of Rouge Communities (ARC) or their designee will conduct dry weather screening (48 hours with no precipitation or with precipitation less than 0.1") for each monitoring location identified in the Collaborative IDEP. The focus of the field observation will be to observe the following conditions:

- Water clarity
- Color
- Odor
- Floatable materials
- Deposits/stains on the bank or within the river
- Vegetation condition
- Presence of bacterial sheens, algae, and slimes

New, clean, latex (or similar) gloves should be worn at all times when handling the sample bottles and obtaining samples in the field. Samples shall be collected from mid-stream in an area of constant positive flow. Do NOT collect samples from pools of water if there is not substantial flow. Ensure the bottom sediment is NOT disturbed before or during sample collection. *E. coli* samples shall be collected directly into the laboratory bottle. The label on each bottle is completed to identify the date, site ID, samplers initials, and sample type. Filled sample bottles are placed in cooler(s) with ice for transport to the laboratory. A chain of custody form (COC) is completed for all the bottles contained in a single cooler. Custody of the samples is transferred to the laboratory upon arrival.

## SECTION C - EQUIPMENT AND MATERIAL

The following equipment is required for implementing the dry weather screening procedure:

- Field forms and log book
- Sampling location map
- · Global positioning device (GPS), for new sampling locations
- Disposable latex gloves (or similar)
- Safety equipment (personal and traffic)
- Sampling pole
- Sterile sample collection bottles (provided by the laboratory)
- Cooler with ice
- · Chain of Custody forms
- Distilled water

## **Attachment B-3**

Advanced Investigation Procedure for Locating the Source of Suspicious Discharges

## **SECTION A – PURPOSE**

The purpose of this procedure is to describe the protocols to conduct advanced investigations in storm sewer systems to identify the source of a suspicious discharge. These investigations would be performed based on the results of field screening procedures or based on a pollution complaint. The Michigan Department of Environmental Quality (MDEQ) requires this procedure for stormwater discharges from municipal separate storm sewer systems (MS4) as part of an entity's National Pollutant Discharge Elimination System (NPDES) permit application.

## SECTION B - PERFORMING SOURCE INVESTIGATIONS

The investigation parameters will be selected based on the nature of the complaint or initial field screening results. If working within a river/stream/open drain, then samples or observations will be taken concurrently at the origin of the suspicious discharge and at upstream locations. This will continue until the source is found or an enclosed storm sewer is located. If investigations lead to an enclosed drain, the owner/operating of the enclosed system will be determined.

## **B.1** Determining Ownership

For complaint-based investigations, the owner/operator of the enclosed storm sewer will be determined. If it is suspected that a discharge originates from another jurisdiction, the other jurisdiction will be notified in writing of the suspicious discharge and any pertinent information about the discharge. This will occur within 10 working days of the discovery of the discharge from the other jurisdiction.

For investigations based on outfall screening results, the ownership step is not required because it is assumed that outfall screening was completed by the owner/operator.

For investigations based on instream sampling results and the owner/operator is participating in the Rouge River Collaborative IDEP Plan, the owner/operator will be notified of the suspicious discharge and storm and sanitary sewer maps will be obtained. Investigations will continue with the assistance of the owner/operator. If the owner/operator is not participating in the Rouge River Collaborative IDEP Plan, than they will be notified in writing of the suspicious discharge and any pertinent information about the discharge. This will occur within 10 working days of the discovery of the discharge from the other jurisdiction.

## **B.2** Source Investigations

Enclosed drain investigations will proceed as soon as possible, following discovery of a suspicious discharge. The site of the discharge will be re-visited up to two more times during dry conditions for the appropriate indicator parameter. The sample parameters will be the same as those used during the initial field screening. The second site visit will be conducted within 4 weeks of discovery, weather permitting. The third site visit will be conducted within 3 months of the date of the second visit, weather permitting. The second and third visits will only be performed if dry weather flow is not present or if the suspicious discharge is not present during previous visits.

- Facility or Building Name
- Date
- Location where dye is applied (i.e. second floor men's restroom)
- Time the dye is applied
- Time dye is observed in the field
- Location where dye is observed (i.e. sanitary manhole, northeast of building)
- Time of Travel
- Follow up action, if needed

## **SECTION F - PROCESS FOR REVISION**

Any questions on this procedure should be directed to the entity's Stormwater Manager or ARC staff. This procedure shall be reviewed once per permit cycle by ARC staff for any updates.

## Southeast Michigan Regional Illicit Discharge Elimination Program Training Plan February 19, 2013

## Introduction

Southeast Michigan is a seven county region with a population exceeding 4.7 million and comprising 16 watersheds. Five of the counties (Wayne, Washtenaw, St. Clair, Macomb and Oakland), comprising 11 watersheds, have a stormwater discharge permit. The permit requires training in various aspects of illicit discharge elimination. Recent audits of permittees by the Michigan Department of Environmental Quality have requested documentation of such training. This document lays out a plan for training municipal staff that is consistent with the language in the forth coming stormwater permit. The plan provides background information, objectives, details, and a cost-share arrangement to provide stormwater-related training to the permitted communities.

## Background

The Alliance of Rouge Communities (ARC) has sponsored the Basic/Advanced IDEP Training for the last few years. This training was made available to ARC members without charge. The participation in the training has decreased over the years. Wayne County has provided training to non-ARC members in southeast Michigan on a cost recovery basis, e.g. contracts with Eastern Michigan University, Washtenaw County.

In 2011, SEMCOG sponsored five municipal training sessions across Southeast Michigan that targeted pollution prevention actions at municipal facilities. These ½ day sessions also included an illicit discharge identification component designed to educate a broad audience on basic recognition and reporting techniques. Staff from Washtenaw, Livingston, St. Clair, Oakland, Macomb and Wayne counties helped to develop the content of the training and co-host the session at one of their facilities. The sessions were also co-hosted by the DEQ, which provided Industrial Operator Training at no cost in the afternoon of each session. Over 350 people attended the five training sessions and 107 people took the DEQ Industrial Operator.

## **Objective**

The goal of this plan is to provide training to the southeast Michigan region focused on illicit discharge elimination and storm water pollution prevention. There are three main objectives of this plan. The first objective is to establish a framework that shares responsibility and costs of training on a regional basis. The second objective is to be efficient by maximizing class size not duplicating efforts and spreading the costs over the region. The third objective is to make it unnecessary to charge a fee for the training.

## Plan

The plan calls for an alternating five year schedule of training between Wayne County's IDEP training program and SEMCOG's municipal facility training and illicit discharge recognition training provided by the host county. The training would be provided once a year. The period covered by this plan is January 2013 through December 2017.

By signing below, the parties agree to participate in the plan as outlined in Tables 1 and 2. The plan will become effective once all parties have signed it.

Macomb County Representativ		
Whysteromics	- COUNTY PUBLIC WORKS	MB 8 05-17-2013
Signature	Name/Title COMMISSIONE	
Oakland County Representative	MES WINEKA ASST. CHIEF ENG. Name/Title	4/17/13
Signature	Name/Title	Date
Saint Clair County Representativ	e	
Signature	Name/Tile 3:ALOFOA	4. 39.13 Date
Washtenaw County Representative  Signature	EVEN PRATT Water Resources Commissioner Name/Title De	8/8/12
Wayne County Representative  Ally Care  Signature	KELLY A CAVE  WAYNE CO STOPM WATER  Name/Title COORDINATOZ	11 APRIL 13 Date
SEMCOG Representative		
Kath Janako Signature	Kathleen Lomalco Name/Title	8/14/2013 Date
	) annuagantativa	
Alliance of Rouge Communities F	Kevis Bufund, ARCChai Name/Title	$\frac{3/28/13}{\text{Date}}$
and the second s		
Alliance of Downriver Watershed	s Representative	
Signature	Mark Gabry, Chairman Name/Title	May 7, 2013 Date

Page 3 of 3

Illicit Discharge Elimination Program

# Community Name

Pollution Complaint Tracking Form

Comptaint made by:		Phone #:
ion of Problem:	—— Offending Party (if known)	(u)
Nature of Problem (i.e. paper waste, odor, color,	etc.):	
s this an Emergency? No		
	Investigation Summary  Initial Investigation  Follow-up Investigation	Actions Taken (dye testing, notification letter, etc.):
Initial Contact made to:    911	Date of Investigation: Investigating Agency: Location of Discharge:	
Wayne County (200) 223-2363 	Crew Members:	Were photos taken: \( \text{Yes} \) \( \text{No} \)
Additional Comments:	Investigation Location:	Agency Referred to:
	Observations (odor, color, volume, etc.):	Method of Communication:    E-mail*   Letter/memo*   Phone *Attached copies Content of Communication:
Date Corrected or Resolved:		

C:\Users\comeara\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Outlook\7K5R0RGA\Attach D IDEP Complaint Form.docx

## Attachment E Permittee-Specific Regulatory Mechanisms

Included as a separate PDF attachment in MiWaters

Act & Regulation	Reporting Criteria	Notification Requirements in Michigan*		
		Initial Notification	Written Follow-up Report	Notes
	Release of a CERCLA hazardous substance (40 CFR 302, Table 302.4) or Extremely Hazardous Substance (EHS) (40 CFR 355,	Immediate (within 15 minutes after		PEAS: 800-292-4706
	Appendix A) from a facility (all buildings, equipment, etc. located on a single site or adjacent sites owned or operated by the same names) at	discovery); to LEPC(s) of any area(s)	As soon as practicable (within	
	which a hazardous chemical (as defined under 29 CFR 1910.1200(c))	potentially affected, and	30 days) after release:	Contact your LEPC for
	Is used, produced or stored (including motor vehicles, rolling stock, and aircraft) in a quantity or including to a great the stock.	SERC (DEL PEAS line accepts	(c) and CENC.	a phone number to
	reportable quantity in any 24-hr period that migrates beyond the facility.	by	Not required for releases that	report releases.
SABA Title III	boundaries.	owner or operator.	occur during transportation or from storage incident to	
Section 304	Includes continuous release reportable under CEBC! A Sention 403	Continuous releases must be	transportation.	Call 911 if your LEPC
40 CFR 355.40 (EHS &	ייייי שומני טבויטבר ספטוטון וסטי	identified as such and are reported	: : : : : : : : : : : : : : : : : : :	is not active.
nazardous Substances)	Excludes release that is federally permitted or that results in exposure to persons solely within the boundaries of the facility. See 67 FR	initially and when there is a significant change in the release.	Initial written within 30 days	
	18899 (4/17/02) for guidance on the CERCLA federally permitted release definition for certain air emissions.	See 73 FR 76948 (12/18/08): Only	notification:	
	Does not apply to the application handling and storage by an	CAFOs are required to report continuous releases to the air from	to LEPU(8) and SERC.	For further information
	agricultural producer of a pesticide product registered under FIFRA.	animal waste.	Michigan SARA Title III Program accepts reports on behalf of the	& LEPC contact information, contact
	Excludes release < 1000 lbs of NOx released to the air from combustion or combustion-related activities.	Transportation related releases can be reported to 911.	SERC.	Michigan SARA Title III Program 517-284-7272
	Kelease into the environment of a CERCLA hazardous substance (40 CFR 302, Table 302.4) or hazardous constituent in a mixture or solution (including hazardous waste streams) from a vessel or facility			NRC 800-424-8802
	(any building, structure, etc. including motor vehicles, rolling stock, aircaft, pipe, pipeline, well, pond, lagoon, impoundment, ditch, landfill,	Immediate (within 15 minutes after		or online at
	or site wriere a nazardous substance has come to be located) in a quantity equal to or greater than its corresponding reportable quantity in any 24-hour period.	discovery): to NRC	•	,
	Excludes petroleum, including oil, or any fraction thereof.	by person in charge of vessel or offshore or onshore facility	For continuous releases only:	•
Section 103	See 40 CFR 302.6 for notification requirements for radionuclide		Initial written within 30 days	
40 CFR 302 (Hazardous	releases.	identified as such and are reported	& & College	
oubstances)	Includes continuous release: occurs without interruption or abatement or that is routine, anticipated, and intermittent and incidental to normal	initially and when there is a significant change in the release.	r birow-up within 30 days of first anniversary of initial written notification:	
	operations or treatment processes.	See 73 FR 76948 (12/18/08) re	to EPA Region 5.	For further information
	See 67 FR 18899 (4/17/02) for guidance on the CERCLA federally permitted release definition for certain air emissions. See 71 FR 58525 (10/4/06) re Exemption for NOx releases to the air of < 1000 lbs from	Exemption from reporting continuous releases to the air from animal waste.		contact Michigan SARA Title III Program 517-284-7272 or
	consociation of computational activities.			EPA's Superfund, TRI, EPCRA, RMP, and Oil
	Does not apply to the application, handling, and storage by an agricultural producer of a pesticide product registered under FIFRA.			Information Center 800-424-9346
				-



NOTE: If the release is a **THREAT TO HUMAN HEALTH or SAFETY**, call 911 or your local fire department.
\*This table covers only those reporting requirements found in rules and regulations that apply in Michigan. Releases might be reportable under multiple regulations.
Additional reporting requirements might be found in permits, licenses, registrations, contingency and pollution prevention plans, and local ordinances.

	Release Notification Requ	Notification Requirements in Michigan*		
Act & Regulation	Reporting Criteria	Initial Notification	Written Follow-up Report	Notes
NREPA 1994 PA 451 Part 85, Fertilizers	Release to the environment of a commercial fertilizer >55 gallons liquid or 650 pounds dry, or tank overfills; or an on farm fertilizer > 55 gallons liquid.	Immediate: to MDARD		MDARD Agriculture Pollution Emergency Hotline: 800-405-0101
Regulation 641 Commercial Fertilizer Bulk Storage Regulation 642, On Farm	For storage tank with bladder system instead of diking: also report all overfills and internal spills.	commercial bulk storage facility personnel	Not required.	:
Fertilizer Bulk Storage (Agricultural)	The term "release" excludes normal agricultural practices. The term "liquid fertilizer" excludes anhydrous ammonia.	(For farms, the regulation does not specify who makes the report.)		For further information contact MDARD 517-284-5644
	A fire, explosion, spill, leak, accident, or related occurrence that involves the transportation, storage, handling, sale, use, or processing of hazardous material by a firm, person, or vehicle.	Immediately following incident, report known details regarding incident:		Contact LARA Bureau of Fire Services by calling the MSP
Fire Prevention Code 1941 PA 207 Section 29.5g	Hazardous material ≈ explosives, pyrotechnics, flammable gas, flammable compressed gas, flammable liquid, nonflammable compressed gas, combustible liquid, oxidizing material, poisonous gas or liquid, LPG, or irritating, etiologic, radioactive, or corrosive material.	to LARA Bureau of Fire Services and organized local fire department by owner of firm or vehicle or the	Not required.	Hazwat hotime: 800-525-5555
	Act 207 amended 6/19/2006. The State Fire Marshall is in LARA, Bureau of Fire Services.	person and the chief of first police or organized fire dept upon scene of incident.		For further information: contact local fire department
Fire Prevention Code	A release from an AST system of > 55 gal of any flammable or	As soon as practicable after	TA FABRICA A C. L. C.	PEAS: 800-292-4706
Part 2 of Storage and Handling of Flammable and	computations in the containment area during any 24 hour period.	detection of release: to PEAS	volum to days after release: to LARA Bureau of Fire Services Storage Tank Division	For further information: contact LARA Bureau
Combustible Liquids rules (FL/CL code)	Note: Many liquid pesticides are combustible (flash point between 100 and 200°F).	by owner or operator.	outlining cause, discovery, response to prevent recurrence.	of Fire Services, Storage Tank Division 517-335-7211



NOTE: If the release is a **THREAT TO HUMAN HEALTH or SAFETY**, call 911 or your local fire department.
\*This table covers only those reporting requirements found in rules and regulations that apply in Michigan. Releases might be reportable under multiple regulations.
Additional reporting requirements might be found in permits, licenses, registrations, contingency and pollution prevention plans, and local ordinances.

	Release Notification Regu	Notification Requirements in Michigan*		
Act & Regulation	_	Initial Notification	Written Follow-up Report	Notice
	Discharge of a harmful quantity of oil or a hazardous substance from a vessel or onshore or offshore facility into or upon navigable waters of the United States or adjoining shorelines.	Immediate: to NRC		NRC 800-424-8802 or online at
CWA Section 311 33 CFR 153 (Navigable waters – Coast Guard/DOT)	Harmful quantity = oil discharge that violates applicable water quality standards, or causes a film or sheen upon or discoloration of the surface of the water or adjoining shorelines, or causes a sludge or	by person in charge of vessel or facility.		District 9 Coast Guard 216-902-6117
Control of Pollution by Oil and Hazardous Substances, Discharge Removal	emulsion to be deposited beneath the surface of the water or upon adjoining shorelines; or a CERCLA hazardous substance (40 CFR 302, Table 302.4) in a quantity equal to or greater than its corresponding reportable quantity.	If direct reporting to NRC not	Not required.	EPA Region 5 for predesignated OSC 312-353-2318
	Oil = oil of any kind or in any form including petroleum, crude oil, petroleum refined products, sludge, oil refuse, oil mixed with wastes, etc., as well as vegetable and animal oils.	practicable, may report to district Coast Guard or EPA predesignated OSC.		For further information contact EPA Region 5 at 312-353-8200 or District 9 Coast Guard at 216-902-6045
CWA Section 311 40 CFR 110 (Discharge of	Discharges of <b>oil</b> that violate applicable <b>water</b> quality standards, or cause a film or sheen upon or discoloration of the surface of the water or adjoining <b>shorelines</b> , or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines.	immediate: to NRC by	Not remitred	NRC 800-424-8802 or online at www.nrc.uscg.mil
(iio	Oil = oil of any kind or in any form including petroleum, crude oil, petroleum refined products, sludge, oil refuse, oil mixed with wastes, etc., as well as vegetable and animal oils.	person in charge of vessel or facility.		For further information contact DEQ-WRD
NREPA 1994 PA 451	Discharge of untreated sewage or partially treated sewage from a sewer system onto land or into the waters of the state.	Immediate (within 24 hours): to DEQ-ODWIMA district office (PEAS after hours);	At end of discharge: to same parties notified initially on Form EQP 5857 (Rev	PEAS: 800-292-4706
Fall 31, water Resources Protection (Sewer Systems)	"Sewer system" means a sewer system designed and used to convey sanitary sewage or storm water, or both.	Local health depts.; Daily newspaper circulated in source & affected counties; & Affected municipalities.	12/2011) "Report of Discharges of Untreated or Partially Treated Sewage." Includes results of E. coli testing.	For further information contact DEQ-ODWMA
NREPA 1994 PA 451 Part 41, Sewerage	Discharges of pollutants from sewerage systems (which can include combined sewers) in excess of those authorized by a discharge permit issued by the DEQ to surface water or groundwater as a result of a facility breakdown or emergency.	Promptly: to DEQ-ODWMA district office (PEAS after hours)	Within 72 hours: to DEQ-ODWMA district supervisor, outlining cause, discovery, corrective actions	PEAS: 800-292-4706
olisie de la company de la com	Sewerage systems handle sanitary sewage or other industrial liquid wastes.	by owner.	taken to minimize impact, restore operations, and eliminate future unpermitted discharges.	For further information contact DEQ-ODWMA



NOTE: If the release is a **THREAT TO HUMAN HEALTH or SAFETY**, call 911 or your local fire department.
\*This table covers only those reporting requirements found in rules and regulations that apply in Michigan. Releases might be reportable under multiple regulations.
Additional reporting requirements might be found in permits, licenses, registrations, contingency and pollution prevention plans, and local ordinances.

	Release Notification Regu	Notification Requirements in Michigan*		
Act & Regulation	Reporting Criteria	Initial Notification	Written Follow-up Report	Notos
NREPA 1994 PA 451 Part 55, Air Pollution Control (Permit to Install Exemptions)	Emergency venting of <b>natural gas</b> from transmission and distributions systems or <b>field gas</b> from gathering lines in amounts > 1,000,000 standard cubic feet per event.  Emergency = unforeseen event that disrupts normal operating conditions and poses a threat to human life, health, property or the	Within 24 hours of the event: to PEAS by owner or operator.	Not required.	PEAS: 800-292-4706
	environment if not controlled immediately. See R 336.1285(mm), effective 6/20/2008, for details.			For further information contact DEQ-AQD
Public Heatth Code 1978 PA 368 Part 133, Dry Cleaning	Condition or incident presents a threat or hazard to <b>public health</b> or safety.	Immediate: to DEQ-AQD district office (PEAS after hours) by owner or operator.	Within 30 days after incident: To DEQ-AQD district supervisor.	PEAS: 800-292-4706 For further information
	A loss, spill or release of (1) any amount of <b>brine</b> , <b>crude oil</b> , or <b>oil or gas field waste</b> <i>unless</i> it is less than 42 gallons and occurs while an authorized representative is on site and is completely contained and cleaned up within 1 hour.	Within 8 hours after discovery of: 42 gallons or more of brine, crude oil, or oil or gas field waste, or any amount of chemical or natural gas,	Within 10 days after discovery of loss or spill: to DEQ-OOGM district supervisor on Form EQP-7233 (Rev	PEAS: 800-292-4706
NREPA 1994 PA 451 Part 615, Supervisor of	or (2) any unpermitted amount of natural gas, or (3) <b>chemicals</b> used in association with oil and gas activities.	or; less than 42 gallons if the spill contacts surface water, groundwater, or other	'Report of Loss or Spill." by permittee	
vells (oil and gas production fields)		environmentally sensitive resources, or is not completely contained and cleaned up within	Written report only for less than 42 gallons of brine, crude oil, or	
		48 hours: to DEQ-OOGM district office (PEAS after hours)	does not contact surface water,	
		by permittee.	environmentally sensitive resources, and is completely contained and cleaned up within 48 hours.	For further information contact DEQ-OOGM
			As soon as practicable, and within 30 days after discovery: to US DOT	NRC 800-424-8802
	An incident, meaning:  (1) Event that involves a release of gas from a pipeline, or of liquefied natural gas, iduefied petroleum gas refrinerant has an gas from an	Corlinet to city of the control of t	on DOT Form PHMSA F 7100.1 "Incident	or online at www.nrc.uscg.mii
49 CFR 191	LNG facility that results in: Death or hospitalization; or Property damage ≥ \$50,000; or estimated gas loss of ≥ three million cubic feet	following discovery:	Report – Gas Distribution System."	
Transportation of Natural and Other Gas by Pipeline	(2) Event that results in emergency shutdown of LNG facility.  (3) Significant event per operator.	by operator.	PHMAS F 7100.2 "Incident Report – Gas Transmission and	
	Written Incident reports not required for LNG facilities.	Notification must be electronic	Gathering Systems"	
	Applies to pipeline systems and the transportation of gas through those systems in or affecting interstate or foreign commerce. (See 49 CFR 191.3 for details.)	unless there is a safety-related condition to report.	PHMSA F 7100.3 "Incident Report – Liquefied Natural Gas (LNG) Facilities"	For further information contact US DOT Pipeline Safety Information Center at
			Supplemental report filed as necessary as soon as practicable.	202-366-4595 or online at http://ops.dot.gov

NOTE: If the release is a **THREAT TO HUMAN HEALTH or SAFETY**, call 911 or your local fire department.
\*This table covers only those reporting requirements found in rules and regulations that apply in Michigan. **Releases might be reportable under multiple regulations.**\*Additional reporting requirements might be found in permits, licenses, registrations, contingency and pollution prevention plans, and local ordinances.



	Release Notification Regu	Notification Requirements in Michinan*		
Act & Regulation	Reporting Criteria	Initial Notification	186-264-27	
	Spills of PCBs at concentrations of 50 ppm or more and a bit of the	HOURS HOURS	Wilden Follow-up Report	Notes
	decontamination requirements under TSCA that:			EPA Region 5
	Contaminate surface water sewers, drinking water surplice, granical			Corrective Action
1	lands or vegetable pardens	As soon as possible after	Not somittee at the section of No.	Section
1 SCA 40 CFR 761 125 (PCBs)	or exceed 10 pounds.	discovery, and within 24 hours:	Records of cleanup and	312-886-7890
(503)	-	to EPA Region 5.	certification of decontamination	
	(TSCA specifies that these requirements are in addition to any under	,	shall be documented	For further information
	CWA or CERCLA, e.g. CERCLA requires spills of 1 paying as many to			contact EPA Region 5
	be reported to NRC.)			Corrective Action
				Section
			Annually by July 1:	Michigan SARA Title III
CADA Title III			to EPA & SERC on EPA's Form	Program accepts
מאס הייינים	Covered facilities as defined in 40 CEP 372 subpart B and authors to		R "Toxic Chemical Release	reports on behalf of
3ection 3.13	toxic chemical release reporting for toxic chemical and at the	:	Inventory Reporting Form"	SERC
40 CFR 3/2 (10xic	categories listed in 40 CEP 375 subset D	Not applicable.	(EPA Form 9350-1,	!
cuemical release reporting)	and a second a second and a second a second and a second		Rev.10/2011)	For further information
				contact Michigan
			Report aggregate releases	SARA Title III Program
		j	(permitted & unpermitted)	517_28/_7272

# Acronyms used in table:

CERCLA = Comprehensive Environmental Response, CAFO = Concentrated Animal Feeding Operation AST = Above Ground Storage Tank AQD = Air Quality Division CAA = Clean Air Act Compensation

and Liability Act of 1980

CFR = Code of Federal Regulations

CWA = Clean Water Act

EPCRA = Emergency Planning & Community Right-to-DEQ = Michigan Department of Environmental Quality EHS = Extremely Hazardous Substance EPA = U. S. Environmental Protection Agency DOT = Department of Transportation

Know Act

FIFRA = Federal Insecticide, Fungicide, & Rodenticide Act FL/CL = Flammable and combustible liquids = Federal Register

HAP = Hazardous Air Pollutant

HazMat = Hazardous Materials HB = House Bill

LARA = Michigan Department of Licensing & Regulatory Affairs LEPC = Local Emergency Planning Committee LNG = Liquefied Natural Gas

LPG = Liquefied Petroleum Gas

MCL = Michigan Compiled Laws

MDARD = Michigan Department of Agriculture & Rural Development MIOSHA = Michigan Occupational Safety and Health Administration MSP = Michigan Department of State Police

NREPA = Natural Resources & Environmental Protection Act ODWMA = Office of Drinking Water & Municipal Assistance NRC = National Response Center (U.S. Coast Guard)

OOGM = Office of Oil, Gas, and Minerals OPS = Office of Pipeline Safety (US DOT) OSC = On Scene Coordinator

OWMRP = Office of Waste Management & Radiological Protection

PCB = Polychlorinated biphenyl PA = Public Act (Michigan)

PHMSA = Pipeline & Hazardous Materials Safety Administration PEAS = Pollution Emergency Alerting System RMP = Risk Management Program

RRD = Remediation and Redevelopment Division SARA = Superfund Amendments and Reauthorization Act of 1986

SERC = State Emergency Response Commission TRI = Toxic Chemical Release Inventory US DOT = U.S. Department of Transportation USNRC = U.S. Nuclear Regulatory Commission TSDF = Treatment, Storage & Disposal Facility TSCA = Toxic Substance Control Act

UST = Underground Storage Tank WRD = Water Resources Division



Table 1 – City Ordinances as they relate to IDEP enforcement

Permit Item	Permit Item Description	Corresponding Ordinance/Code
20		1040-05 Sewer connection required
21	Allows flows from firefighting activities unless they are significant pollution source to waters	1040-05 - Sewer connection required
22	Allow flows from various activities unless they are significant pollution source to a MS4	1040-05 —Sewer connection required
23	Regulates the contribution of pollutants.	610-13 – Animal defecation
		648-02 (d) — Deposits on public property 1040-05 — Sewer connection required
		1040-09 – Discharge of harmful matter into sewers; remedy of city 1040-14 – Privies
76		1278-10 – Hazardous materials and industrial waste
	rromous tos and direct dumping to the MS4	1040-05 – Sewer connection required 1040-27 (a) – Criss-connection miles
25	Establishes authority to inspect, investigate, and monitor suspected IDs to the MS4.	1040-27 (b, c) – Cross-connection rules
26	Requires the elimination of ID and provide the MS4 the authority for enforcement.	202-99 (a. d) – General code penalty, complicity, civil infractions 1040-05 – Sewer connection required 1040-27 (d) – Cross-connection rules

Based on review of the following City Codes/Ordinances/Regulations:

•	Discharge of
	1040-09
	General code penalty; complicity; civil
	202-99

of harmful matter into sewers; remedy of city 1040-14 Privies infractions

1278-10 Hazardous materials and industrial waste Cross-connection rules 1040-27

Deposits on public property

648-02

610-13 Animal defecation

1040-05 Sewer connection required

## Wayne, Michigan Code of Ordinances

## 610.13 ANIMAL DEFECATION.

No person shall intentionally allow any animal to deposit its feces on any public land, unless the person in control of the animal immediately removes and disposes of such waste in a proper and sanitary manner.

(Ord. 2004-11. Passed 8-17-04; Ord. 2008-09. Passed 11-18-08.)

## Wayne, Michigan Code of Ordinances

## 1040.05 SEWER CONNECTION REQUIRED.

Every person owning or using property in the City, upon which sewage is created, is hereby required to provide an adequate connection with a sanitary sewer line of the City whenever one is available. Every person owning or using property in the City upon which water is used, is hereby required to provide an adequate connection to the Municipal water supply whenever it is available.

(Ord. 1990-01. Passed 1-2-90.)

## Wayne, Michigan Code of Ordinances

## 1040.14 PRIVIES.

No person shall provide, maintain or use an outside privy or chemical toilet in the City. Existing privies or chemical toilets shall be converted to another use or disposed of, and their vaults shall be adequately filled, within thirty days after the effective date of this chapter, provided, however, that nothing herein shall preclude the use of temporary portable toilets used in conjunction with special events or emergencies, or provided at construction sites, where other adequate permanent accommodations are not available.

(Ord. 1990-01. Passed 1-2-90.)

## Wayne, Michigan Code of Ordinances

## 1278.10 HAZARDOUS MATERIALS AND INDUSTRIAL WASTE.

No person shall cause or permit any inflammable, explosive or gaseous materials, or materials, compounds or chemicals which tend to be or may be toxic or hazardous to the public safety, welfare and comfort, to be deposited in, disposed of, drained in, or connected to, any public sewer, or in any fashion to cause contamination or pollution to the air, ground, ground water or streams. If there is to be special industrial sewage waste, or if any other stream pollution possibility is raised, the written approval of the appropriate official of the State Water Resources Commission and the State Department of Health shall be filed with the City regarding compliance or its equivalent with their requirements of the prevention of pollution and contamination.

(Ord. 1988-14. Passed 7-5-88.)

## STANDARD OPERATING PROCEDURE CONSTRUCTION STORMWATER RUNOFF CONTROL PROGRAM

## PREPARED FOR:

THE CITY OF WALLED LAKE 1499 E WEST MAPLE ROAD, WALLED LAKE, MICHIGAN 48390



**APRIL 2016** 

## B.4 Section 34.108 – Reduction of soil erosion or sedimentation by owner (a) "A person who owns land on which an earth change has been made that may result in or contribute to soil erosion or sedimentation of the waters of the state shall implement and maintain soil erosion and sedimentation control measures that will effectively reduce soil erosion and sedimentation from the

(b) "This section is effective whether or not an earth change permit is required by this article."

## SECTION C - INSPECTIONS/COMPLAINTS

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

land on which the earth change has been made."

## C.2 Section 34.105 – Inspections

- a. "The building and code enforcement department (or a person trained and experienced in soil erosion and sedimentation control techniques, as designated by the building and code enforcement department) shall inspect all work covered by an earth change permit issued pursuant to this article and is hereby authorized to enter property in the city covered by a permit for the purpose of performing any duties under this article. Inspection fees shall be paid as provided according to the fee schedule adopted by resolution of the city council."
- b. "The building and code enforcement department, or any person designated by the building and code enforcement department, may enter at all reasonable times in or upon any private or public property for the purpose of inspection and investigating conditions or practices that may be a violation of part 91, the rules, or this article."

Complaints regarding soil erosion and sedimentation issues made by the public will be forward to the City's DPW office. At that time, the DPW director will direct a site inspection to document any violations of the soil erosion and sedimentation/grading permit within 24 to 48 hours and pursue enforcement actions as appropriate. See the Enforcement Response Procedure for a summary of the enforcement protocols to ensure compliance with the City's Part 91 program.

## SECTION D - MEASUREABLE GOALS

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

- Number of Part 91 related complaints received by the City building inspector.
- Number of Part 91 permits issued by the City.

Sec. 34-100. - Local enforcing agency.

The building and code enforcement department is hereby designated as the municipal enforcing agency responsible for the administration and enforcement of part 91, the rules, and this article within the city.

(Ord. No. C-257-05, § 3, 2-15-05)

Sec. 34-102. - Permit and approved plan required.

After the effective date of this article, no person shall maintain or undertake an earth change on any land within the city except in accordance with an earth change permit and approved soil erosion and sedimentation control plan as provided by part 91, the rules, and this article.

(Ord. No. C-257-05, § 3, 2-15-05)

## STANDARD OPERATING PROCEDURE POST CONSTRUCTION STORMWATER RUNOFF CONTROL

## PREPARED FOR:

THE CITY OF WALLED LAKE
1499 E WEST MAPLE ROAD, WALLED LAKE, MICHIGAN 48390



**APRIL 2016** 

## Section 21.23 -- SOIL REMOVAL OR FILLING

The use of land for quarry excavation or the removal or filling of topsoil, sand, gravel or other material from or on the land is not permitted in any zoning district except under a permit from the Building Inspector. Approval shall not be granted, and a permit shall not be issued, if such removal or filling will be above or below the normal grade as established from the nearest existing or proposed street, or will cause stagnant water to collect or leave the surface of the land, at the expiration date of such permit, in an unsuitable condition or unfit for the growing of turf or for other land uses permitted in the district in which the removal or filling occurs. This regulation shall not prohibit the normal removal or filling of soil for the construction of an approved building or structure when such plans have been approved by the Building Inspector, and a building permit has been issued for said building development. The removal, filling or combination of removal and filling of soil in excess of 1,000 cubic yards shall require site plan approval by the Planning Commission, unless such activity is normally related to activity for which a building permit has been issued.

## Section 21.24 -- STORAGE OR DUMPING ON OPEN LAND PROHIBITED

The use of open land for the open storage or collection or accumulation of lumber, except for firewood less than two (2) feet long that is stored for use on the premises, or man-made materials, or for the dumping or disposal of scrap metal, junk, parts of automobiles, trucks, boats, tires, garbage, rubbish, or other refuse or of ashes, slag or other wastes or by-products, shall not be permitted in any district.

## Section 21.25 -- GOVERNMENTAL FUNCTIONS PERMITTED

The City of Walled Lake shall have the right to construct and maintain any building or structure required for the performance of its governmental or proprietary functions; provided that such building, structure or function shall conform to the use and procedural regulations of the district in which it is located and of this Ordinance, be constructed so as to conform with the surrounding uses, and shall be subject to site plan approval pursuant to Section 21.28.

## Section 21.26 -- EASEMENTS

It shall be unlawful for any person to install, erect or cause or permit the installation of a permanent structure (including by way of example but not limitation, garage, building or large tree) on or across an easement of record which will prevent or interfere with the free right or opportunity to use or make accessible such easement for its proper use. Where public utilities now exist, a six (6) foot easement shall be maintained.

## Section 21.27 -- REGULATION OF NUISANCE ACTIVITIES

No activity or use shall be permitted on any property which by reason of the emission of odor, fumes, smoke, vibration, radiation, noise, disposal of waste or other similar externality is deleterious to other permitted activities in the zone district or is obnoxious or offensive to uses permitted in neighboring districts.

## Section 21.28 -- SITE PLAN REVIEW (amended eff. Feb. 2009 Sections A-E)

A. Statement of Purposes.

The site plan review process is established for the following purposes:

1. Consultation and Cooperation.

- i. The Development Coordinator or his/her designated representative or successor.
- ii. The City Planner and City Engineer.
- iii. One (1) to three (3) representatives of the Planning Commission.
- iv. Other City staff or consultants who the Director of Planning and Development determines are needed to properly evaluate a proposal.
- b. Meetings. Meetings of the Pre-Site Plan Review Committee shall be scheduled and held as needed by the Development Coordinator. The Development Coordinator shall insure that all members of the Committee are notified of meetings.
- c. Responsibilities. The Committee may, in an advisory capacity:
  - i. Review and comment on site plan proposals;
  - ii. Provide guidance to land developers, particularly regarding Zoning Ordinance and other applicable regulations and planning and development objectives of the City;
  - iii. Review other plans or proposals referred to it by the Planning Commission or Development Coordinator; and
  - iv. Identify when a site plan or other development proposal is substantially complete.
- d. Effect of Committee's Review. The Pre-Site Plan Review Committee's review shall not substitute for or be construed in any way as a decision or opinion of the Planning Commission regarding the site plan.
- e. Placement of site plan on Planning Commission's agenda.

The Development Coordinator or his/her designee shall prepare the agenda for the Planning Commission's regular meeting. The Coordinator shall seek assistance from the Planning Commission Chairperson and the City Planner.

- 3. Application for Review by Pre-Site Plan Review Committee.
  - a. An applicant shall submit the following prior to review by the Pre-Site Plan Review Committee:
    - i. A completed application form.
    - ii. The fee established by the City Council.
    - iii. Not less than nine (9) individually folded copies of the site plan and supporting documentation, prepared in sufficient detail to indicate the layout of the proposed development and to enable determination of compliance with the Zoning Ordinance.

An applicant may submit plans and documentation that are less than complete for the purposes of obtaining guidance during the plan preparation process. The Pre-Site Plan Review Committee can only comment on the plans that have been submitted, so the committee's comments are subject to revision when completed plans and documentation are submitted.

The Development Coordinator shall review the plans and supporting documentation to determine if sufficient information has been provided to determine the nature and scope of the proposal and compliance with zoning regulations.

- b. If the Development Coordinator determines the materials are sufficient, he/she shall schedule a meeting of the Pre-Site Plan Review Committee as soon as is convenient.
- D. Planning Commission Review.

## c. <u>Denial</u>

Upon determination that a site plan does not comply with the standards and regulations set forth in this Section or elsewhere in this Ordinance, or requires extensive revision in order to comply with said standards and regulations, the Planning Commission shall deny the site plan.

## d. Tabling

Upon determination that a site plan is not ready for approval or denial, or upon request by the applicant, the Planning Commission may table consideration of a site plan until a later meeting.

### 5. Record of Action.

Each action taken with reference to site plan review and approval shall be recorded in minutes of the Planning Commission. A building permit shall not be issued until five (5) copies of the final site plan which addresses all conditions of approval and includes a revision date and notation of all variances, has been signed by the Planning Commission Chairperson, the Development Coordinator, the City Planner, and the City Engineer.

## E. Administrative Review.

The Development Coordinator shall determine which projects, proposals, developments, uses and activities are eligible for administrative review and action in accordance with eligibility criteria set forth in this subsection. In the case of reuse or expansion of an existing building or structure, an approved site plan must be on file at the City to be eligible for administrative review. The Development Coordinator shall review and take action on all projects, plans, developments, proposals and uses eligible for administrative review pursuant to the provisions of this ordinance, provided he/she may submit an eligible plan, project, proposal or use to an administrative plan review committee for administrative review, recommendation and/or action as determined by the Development Coordinator. The following provisions shall apply to administrative reviews:

- 1. Review by Administrative Plan Review Committee.
  - a. Subject to the exceptions and limitations designated in this sub-section, the Development Coordinator may submit the following plans, proposals, developments, uses and activities to an administrative plan review committee ("Review Committee") for administrative review:
    - i. Construction of an addition to an existing building or expansion of an existing, conforming use, subject to the following:
      - (a) The proposed addition or expansion shall not increase the total square footage of the building or area occupied by the use by more than 1,500 square feet, provided further that no other expansion has occurred within the past 3 years.
      - (b) The proposed addition or expansion excludes a single family dwelling.
    - ii. Co-location on an existing wireless communication facility.
    - iii. Family day care homes (less than six children), as licensed by the State of Michigan.
    - Modifications to an approved site plan not deemed minor, as described in Section 21.28E(7).
    - v. Projects, plans, developments, proposals submitted to the Review Committee under any other ordinance provision allowing for administrative review by the Review Committee.
    - vi. Modifications to an approved site plan for a special land use, conditional zoning, Commercial Planned Development, or Planned Unit Development project are not eligible for review by a Review Committee.

- Temporary construction buildings.
- Accessory structures and uses specified in Section 21.10 (Accessory Buildings, Structures and Uses).
- Modifications to an approved site plan for a special land use, conditional zoning, Commercial Planned Development or Planned Unit Development project are not eligible for review by the Development Coordinator.
- m. The Development Coordinator or applicant shall have the option to request Review Committee or Planning Commission review of a project or proposal that would otherwise qualify for administrative review and action under the provisions of this sub-section, with all costs associated with such review borne by the applicant.

## 3. Exempt Improvements.

Site plan review and a building permit shall generally not be required for painting, re-shingling, window replacement that does not involve structural or dimensional changes, replacement of existing diseased or dead landscaping, pot hole repair, parking lot restriping, installation of a dumpster screen in accordance with this Ordinance, or other ordinary maintenance activities.

## 4. Application Requirements and Procedures.

If the proposed modifications are determined to be minor per Section 21.28E(7), then a sketch plan and application may be submitted. The sketch plan must include the following minimum information:

- a. Name, address and telephone number of the applicant.
- b. Title block,
- c. Scale.
- d. Northpoint.
- e. Dates of submission and revisions (month, date, year).
- f. The seal of one of the following professionals registered in the State of Michigan: Architect, Civil Engineer, Landscape Architect, or Professional Community Planner. The architectural plan of the buildings shall be prepared by and bear the seal of an Architect.
- g. Existing lot lines, building lines, structures, parking areas and other improvements on the site and within 100 feet of the site.
- h. Detailed plans and specifications describing the proposed improvements on the site.
- Any additional information deemed necessary by the Development Coordinator to determine compliance with the City ordinances. The Coordinator may waive any application requirement he/she determines is not needed to determine compliance with the Zoning Ordinance.

## 5. Submission to Review Agencies.

If review input is required, the Development Coordinator may request that review agencies or professionals, including the Fire Department, Department of Public Works, Planner, and Engineer, confine their review to the proposed alterations only, rather than review the entire building or site layout.

6. Development Coordinator Review.

plan, subject to guidelines in the Zoning Ordinance: approval, approval with conditions, denial, or table the site plan, as follows:

- i. <u>Approval</u>. Upon determination that a site plan is in compliance with the standards and requirements of this Ordinance and other applicable ordinances and laws, approval shall be granted.
- ii. Approval Subject to Conditions. Upon determination that a site plan is in compliance except for minor modifications, the conditions for approval shall be identified and the applicant shall be given the opportunity to correct the site plan. The conditions may include the need to obtain variances or obtain approvals from other agencies. If a plan is approved subject to conditions, the applicant shall submit five copies of a revised plan with a revision date, indicating compliance with the conditions of approval, to the Development Coordinator.
- iii. Denial. Upon determination that a site plan does not comply with the standards and regulations set forth in this Article or elsewhere in this Ordinance, or requires extensive revision in order to comply with said standards and regulations, site plan approval shall be denied.
- iv. <u>Tabling</u>. Upon determination that a site plan is not ready for approval or rejection, or upon a request by the applicant, the Review Committee may table consideration of a site plan until a future meeting.
- 9. Appeal. An applicant may appeal any condition or denial of any plan, proposal, development or use submitted for administrative review by submitting a signed, written request for appeal to the City Clerks Office within 30 days of the administrative denial and/or imposition of condition(s). The Planning Commission shall review all appeals filed under this subsection. The Planning Commission shall review the denial or condition(s) in accordance with Planning Commission review criteria applicable to original/initial Planning Commission review. The Planning Commission may affirm, reverse, modify or affirm/modify subject to conditions any administrative decision appealed under this subsection.

# F. Criteria for Approval of Site Plans

The following criteria shall be used by the Planning Commission as a basis upon which site plans will be reviewed and approved. The Planning Commission shall adhere to sound planning and design principles, yet may allow for design flexibility in the administration of the following standards:

- 1. All elements of the site shall be harmoniously and efficiently designed in relation to the topography, size, and type of land, and the character of the adjacent properties and the proposed use. The site will be developed so as not to impede the normal and orderly development or improvement of surrounding properties for uses permitted on such property.
- 2. The site plan shall comply with the district requirements for minimum floor space, height of building, lot size, open space, density and all other requirements as set forth in The Schedule of Regulations unless otherwise provided in this Ordinance.
- The existing natural landscape shall be preserved in its natural state as much as possible, by
  minimizing tree and soil removal and by topographic modifications that result in maximum
  harmony with adjacent properties.
- 4. There shall be reasonable visual and sound privacy. Fences, walls, barriers, and landscaping shall be used, as appropriate, for the protection and enhancement of property and the safety and privacy of occupants and users.

- It is an objective of site plan review to improve the quality of existing developments as they are expanded, contracted, redeveloped or changed in keeping with sound site development standards
- A major objective shall be to retain, enhance and protect the quality, value and privacy of single
- All development phases shall be designed in logical sequence to insure that each phase will 17. independently function in a safe, convenient and efficient manner without being dependent upon improvements of a subsequent development potential of lands.
- All sites shall be designed to comply with State and local barrier- free requirements and to 18. reasonably accommodate the handicapped and elderly.
- All site features, including circulation, parking, building orientation, landscaping, lighting, utilities, common facilities and open space shall be coordinated with adjacent properties.
- All designs shall recognize and follow any design themes adopted by the City. 20.

#### **Submittal Requirements** G.

The following required information shall be included on all site plans:

#### 1. Application Form

The application form shall contain the following information:

- Applicant's name and address. a.
- Name and address of property owner, if different from applicant. b.
- Common description of property and complete legal description. c.
- Dimensions of land and total acreage. d,
- Existing zoning and zoning of all adjacent properties.
- Proposed use of land and name of proposed development, if applicable. f.
- Proposed buildings to be constructed. g.
- Name and address of firm or individual who prepared site plan. h.
- Proof of property ownership. i.

# 2. Site Plan Descriptive and Identification Data

Site plans shall consist of an overall plan for the entire development, drawn to a scale of not less than 1 inch = 30 feet for property less than 5 acres, or 1 inch = 50 feet for property 5 acres or more in size. Sheet size shall be at least 24 inches by 36 inches. The following descriptive and identification information shall be included on all site plans:

- Applicant's name, address, telephone number. a.
- b. Title block.

- Dimensions and centerlines of existing and proposed roads and road rights-of-way.
- e. Acceleration, deceleration, and passing lanes, where required.
- f. Proposed location of access drives and on-site driveways.
- g. Location of existing drainage courses, flood plains, lakes and streams, with elevations.
- h. Location and dimensions of existing and proposed interior sidewalks and sidewalks in the right-of-way, in accordance with Section 21.36.
- i. Exterior lighting locations and method of shielding lights from shining off the site.
- j. Trash receptacle location(s) and method of screening, in accordance with Section 21.39.
- k. Transformer pad location and method of screening, if applicable.
- 1. Front, side, and rear yard dimensions.
- Parking spaces, typical dimensions of spaces, indication of total number of spaces, drives, and method of surfacing.
- Information needed to calculate required parking in accordance with zoning ordinance standards.
- o. The location of lawns and landscaped areas.
- p. Detailed landscape plan in accordance with the requirements of Section 21.35 indicating location, types and sizes of materials. A landscaping and property maintenance plan and schedule for pruning, mowing, watering, fertilizing, and replacement of dead and diseased materials. Cross section of any berms shall be provided.
- q. Location, sizes, and types of existing trees five (5) inches or greater in diameter, measured at one (1) foot off the ground, before and after proposed development.
- r. All existing and proposed easements.
- Designation of fire lanes.
- t. Loading/unloading area.
- u. All proposed screen and free standing architectural walls, including typical cross-section and the height above ground on both sides.
- v. The location of any outdoor storage of material(s) and the manner in which it shall be screened or covered.
- w. Location and description of all easements for public right-of- way, utilities, access, shared access, and drainage.
- x. A three (3) foot wide hard surfaced splash area shall be installed in the road right-of-way along the curb edge, plus along both sides of any driveway approach, pursuant to the design and installation standards maintained by the City and in accordance with Section 21.35(d).

# 6. Information Applicable to Multiple-Family Residential Development.

- a. The number and location of each type of residential unit (one bedroom units, two bedroom units, etc.).
- b. Density calculations by type of residential unit (dwelling units per acre).
- c. Floor plans of typical buildings with square feet of floor area.
- d. Building elevations of typical buildings.
- e. Garage and/or carport locations and details, if proposed.
- f. Dedicated road or service drive locations.
  - g. Community building location, dimensions, floor plans, and elevations, if applicable.
  - h. Swimming pool fencing detail, including height and type of fence, if applicable.
  - i. Location and size of recreation and open space areas.
- j. Indication of type of recreation facilities proposed for recreation area.

#### 7. General Notes.

- a. If any of the items listed above are not applicable, the following information should be provided on the site plan:
  - 1. A list of each item considered not applicable.
  - 2. The reason(s) why each listed item is not considered applicable.
- b. Other data may be required if deemed necessary by the City or Planning Commission to determine compliance with the provisions of this Ordinance.

# H. Construction Pursuant to an Approved Plan

When an applicant receives site plan approval as provided herein, the applicant shall develop the site in complete conformity with the approved site plan. Complete construction plans, including a landscape plan prepared by a registered landscape architect for all landscaped areas, shall be submitted for review by the Director of Planning and Development. Upon finding by the Director of Planning and Development that the construction plans meet the requirements of site plan approval and other applicable ordinances of the City, the shall authorize issuance of a building permit.

# I. Period of Validity, Extension of Site Plan Approval

Site plan approval shall be valid for one year from the date of approval. If no building permit is obtained within one (1) year of site plan approval or if no work is commenced within six (6) months after the issuance of a building permit, the site plan approval expires and is of no force or effect, unless extended by the Planning Commission.

### J. Certificate of Occupancy

CITY OF WALLED LAKE

# Site Plan Review Application



2014

City of Walled Lake Application for Site Plan Re Page 2	view		
Existing Zoning (please chee	ck):		
R-1B Single Family R RD Two Family Res RM-1 Multiple Family RM-2 Multiple Family MH Mobile Home D	Residential District Residential District	C-3 Central B O-1 Office Dis CS Communi I I-1 Limited In	Commercial District usiness District strict ty Service District ndustrial District Parking District
Present Use of Property:			·
Proposed Use of Property:			
Please Complete the Followi	ng Chart:		
Type of Development	Number of Units	Gross Floor Area	Number of Employees on Largest Shift
Detached Single Family			N/A
Attached Residential			N/A
Office			
Commercial			
Industrial			
Other			
Professionals Who Prepared I  A. Name:  Mailing Address:		<b>71.0</b>	
Marinig Madress	7.4		
Telephone:		Fax:	
Primary Design Responsi	bility:		
B. Name:			
Mailing Address:			<del> </del>
Telephone:		Fax:	
Primary Design Responsib	oility:	·	

City of Walled Lake Application for Site Plan Review Page 4

TO BE COMPLETI	ED BY T	HE CITY				Case No.
Date Submitted:		<u> </u>	<b></b>			Fee Paid:
Received By:	<u>:</u> :		_	-	Date	of Public Hearing:
CITY ACTION						
Approved:		Denied:	1. · · · · · · · · · · · · · · · · · · ·	<u> </u>		Date of Action:

	Applicant	Staff	Planning
1. Applicant's name, address, telephone number.			Commission
2. Title block.			
3. Scale,			
4. Northpoint.			
5. Dates of submission and revisions (month, day, year).			
6. Location map drawn to a scale with northpoint.			
7. Legal and common description of property.			
8. Written description of proposed land use.			
<ol><li>Zoning classification of petitioner's parcel and all abutting parcels.</li></ol>			
10. Proximity to section corner and major thoroughfares.			
11. The seal of one of the following professionals registered in the State of Michigan: Registered Architect, Registered Civil Engineer, Registered Landscape Architect, or Registered Professional Community Planner. The Architectural plan of the buildings shall be prepared by and bear the seal of a Registered Architect.			
<ol> <li>Boundary dimensions of the property. The boundaries of the site shall be clearly differentiated from other contiguous property.</li> </ol>			
<ol> <li>Notation of any variances which have been or must be secured.</li> </ol>			
<ol> <li>The performance guarantees to be provided including the amounts, types, and terms.</li> </ol>			
15. The area of the site in square feet and acres excluding all existing and proposed public right-of-way; and the total area of all building, pavement and other impervious surface.			
16. The dimensions of all lots and property lines, showing the relationship of the subject property to abutting properties and all required minimum setbacks from the existing or proposed right-of-way and from adjacent properties.			

		Applicant	Staff	Planning Commission
13	<ol> <li>Parking spaces, typical dimensions of spaces, indication of total number of spaces, drives, and method of surfacing.</li> </ol>			
14	<ol> <li>Information needed to calculate required parking in accordance with zoning ordinance standards.</li> </ol>			
15	5. The location of lawns and landscaped areas.			
16	of Section 21.35 indicating location, types and sizes of materials. A landscaping and property maintenance plan and schedule for pruning, mowing, watering, fertilizing, and replacement of dead and diseased materials. Cross section of any berms shall be provided.			
18	. All existing and proposed easements.			
19	. Designation of fire lanes.			
20	. Loading/unloading area.			
21	All proposed screen and free standing architectural walls, including typical cross-section and the height above ground on both sides.			
22.	The location of any outdoor storage of material(s) and the manner in which it shall be screened or covered.			
23.	Location and description of all easements for public right-of- way, utilities, access, shared access, and drainage.			
24.	A three (3) foot wide hard surfaced splash area shall be installed in the road right-of-way along the curb edge, plus along both sides of any driveway approach, pursuant to the design and installation standards maintained by the City and in accordance with Section 21.35(d).			
D. E	Building and Structure Details			
1.	Location, height, and outside dimensions of all proposed buildings or structures.			
2.	Indication of number of stories and number of commercial or office units contained therein.			. 🗀
3.	Typical building floor plans.			
4.	Total floor area			

			Applicant	Staff	Planning Commission
	11	Existing ground elevations on the site of appropriate intervals to show drainage patterns, including existing ground elevations of adjacent land within 100 feet of the subject property and existing building, drive and/or parking lot elevations or any adjacent unusual surface conditions.			
	12	. Proposed finish grades on the site, including the finish grades of all buildings, driveways, walkways, and parking lots.	Service of the servic		
	13	. Curbs and gutters, in accordance with Section 21.44.			
E.	Int De	formation Applicable to Multiple-Family Residential velopment.			
	1.	The number and location of each type of residential unit (one bedroom units, two bedroom units, etc.).			
	2.	Density calculations by type of residential unit (dwelling units per acre).			
	3.	Floor plans of typical buildings with square feet of floor area.			
	4.	Building elevations of typical buildings.			
	5.	Garage and/or carport locations and details, if proposed.			
	6.	Dedicated road or service drive locations.			
	7.	Community building location, dimensions, floor plans, and elevations, if applicable.			
	8.	Swimming pool fencing detail, including height and type of fence, if applicable.			
	9.	Location and size of recreation and open space areas.			
		Indication of type of recreation facilities proposed for recreation area.			
F.	Gen	eral Notes.			
		If any of the items listed above are not applicable, the following information should be provided on the site plan:  a. A list of each item considered not applicable.			
		b. The reason(s) why each listed item is not considered applicable.			
		Other data may be required if deemed necessary by the City or Planning Commission to determine compliance with the provisions of this Ordinance.			



Commercial & Industrial

# City of Walled Lake WLB-2015 SOIL EROSION and SEDIMENTATION CONTROL APPLICATION For Part 91

1499 E. West Maple Road Walled Lake, Michigan 48390

Telephone (248) 624-4847 Fax (248) 624-1616

Name Lando	wner Designate	d Agent						
Street Address			<del> </del>					
City		State	Zip Coo	le	Area Code/T	elephone Number		
2. LOCATION	V .		<u> </u>			<del></del>		
Section	Town	Range	Townsh	ip	City/Village	County		
Subdivision	Lot No.	Tax I.D. Num						
	L	<u>l_</u>			Street Addres			
3. PROPOSEI  Describe Project	EARTH CHA	NGE	Project	Type: Residentia	ıl Multi-family	Commercial Industrial Land Balancing		
Describe Project						Size of Earth Change (acres or square for		
Name of AND Distanc	e to Nearest Lake, Stream	n, or Drain		Date Projec	ct to Start	Date Project to be Completed		
4. SOIL ERO	SION AND SE	DIMENTA'	TION CONT	TROL PLA	N (Refer to I	Rule 323.1703)		
Notae aams	alata sata of plans	Estimated Cos	t of Erosion and Se	dimentation Con	trol			
Note: comp must be attached.	piete sets of plans	Plan Preparer's	Name and Telepho	one including Are	ea Code			
	ESPONSIBLE		TH CHANG	E				
Name of Landowner (if	not provided in Box No	. l above)			Address	Address		
City		State	Zip	***	Area Code/Tel	Area Code/Telephone Number		
Name of Individual "Or	Site" Responsible for E	arth Change	L	Company N	ame	<del></del>		
Address	<u></u>	City		State	Zip Code	Area Code/Telephone Number		
6. PERFORMA	ANCE DEPOSI	_l T (If requir	ed by the ne	rmitting a	genev)			
Amount Required \$			ertified Check	Irrevocable Le		Surety Bond		
Name of Surety Company	ny				nor or order	outery Bond		
Address		City		la	- Ia: a .			
	·	City		State	Zip Code	Area Code/Telephone Number		
1, Son Erosion and	ne above information de Sedimentation Collinances, and the do	ntrol, of the N	atural Resource	s and Enviror	e above describe amental Protection	d earth change in accordance with Par on Act, 1994 PA 451, as amended,		
andowner's Signature			Print Nam	ne		Date		
esignated Agent's Sign	ignated Agent's Signature		Print Nam	Print Name		Date		
*Designated agent	must have a written	statement from	m landowner au	thorizing him	/her to secure a r	permit in the landowner's name.		
						The state of the s		
oil Erosion an	d Sadimontation	a Cantual D	ownit Trees					

\$120.00 acre (Min 1 acre)



# Building Department 1499 E West Maple, Walled Lake, MI 48390 248-624-4847 Fax 248-624-1616

For Department Use Or	nly Permit #
Permit Fee	Plan Review
ICC Review	Bond

# **ZONING PERMIT APPLICATION**

DATE JOB ADDRESS	ING PERIVITI A	PPLICAT	ION		
1. Owner's Information					
NameAddress			<del>.</del>		
CityState	7in Codo		Dhana	-	
	zip Code		_ Phone		
Email Address					
2. Contractor's Information					
Name Address					
CityState	_Zip Code	P	hone		
Email Address			<u>.                                    </u>		
State/Local License Number	Federal Employer	· ID/Exemp	tion		
Norker's Compensation Insurance Carrier or reason for ex	emption				
MESC Employer Number or reason for exemptions		<u></u>			
3. Type of Work/Fee Schedule			······································		
TYPE OF WORK					
Plan Examination Fee (non-refundable)		\$ \$ \$	35.00	\$ \$	JIAL 35.00
Temporary Sign / Change of face sign	····	\$	60.00	_ <del>}</del>	35.00
Fences		\$	120.00		
Asphalt/Concrete and culvert work in the right of way		\$	60.00		
Work not involving Sq Ft Computation	7874	\$	60.00		
Soil Erosion [minimum	one (1) acre]	\$	120.00 acre		
Grading: Res/Com		\$ 60.	00 / \$120.00		
Parking Lots (existing)		\$	120.00		
Detached Accessory Structures*					
Decks/Porch – Less than 200 SQ FT		\$	120.00		
*Any structure over 200 SQ FT requi				alsomestace	
INSPECTION/REGISTRATION FEES			50.00		
Re-inspection License registration fee		\$	50.00		
License registration ree			25.00 OTAL COST =		
*Note: All refunds subject to 25% service fee			OIABCOSIT-4	<b>为元学</b> (3/26)美	
**Plan review fee (\$35.00) due at time of submission. Per	rmit fee(s) may be	paid once	plans are appro	oved.	
4. Plan Review Required		<u> </u>	practice and appro-		
See BACK PAGE for the submission requirement for each scop	e of work. Please n	ote, no app	lications will be	accepted v	vithout
ALL the required materials.					
Section 23a of the State construction code act, P.A. 230 of 19					
circumvent the licensing requirement of this State relating in p structure. Violators of Section 23a are subject to civil fines.	ersons who are to p	erform wor	k on a residentia	al building (	or a resident
I hereby certify that the proposed work is authorized by the c	owner of record and	that I have	been authorize	d by the o	wner to ma
this application as his/her authorized agent, and we agree to					
of Michigan. All information submitted on this application is a	accurate to the best	of my know			
PERMIT IS VALID FOR 6 MONTHS. 24 hour notice req	uired to schedule in	spections			
Applicant's Signature Contractor Property Ov			Data		
Applicant's Signature	/ner		Date		



**Building Department** 1499 E. West Maple 248-624-4847 Fax 248-624-1616

For Department Use Date Received	Only	
Number of plan set	s received	
Permit Fee	Plan Review Fee	
Bond Amount		

		MIT APPLICATION	
DATE	JOB ADDRESS		_
1. Owner's Information			
Name	Address		
City	Address MI, Zip Code	Phone	
**Please provide e-mail a	ddress for expedited plan review re	2011te**	
2. Contractor's Informatio		sourts	
Name	Address	The state of the s	
City	MI, Zip Code	Phone #	
Builder's License Number	Federal Employer	ID/Exemption	
Worker's Compensation Insu	rance Carrier or reason for exemption		
MESC Employer Number or r	eason for exemptions		
Email			
**Please provide e-mail a	ddress for expedited plan review re	sults**	
Single Family Do	Construction Typeuplex    Multi-family   Con		
**Please Note: NO commercial	ox Box installed?	ox is present at the property**	
**Please Note: NO commercial  4. Garage (3 sets of plans r	permits will be approved unless a Knox Bo		feet
**Please Note: NO commercial  4. Garage (3 sets of plans r	permits will be approved unless a Knox Boequired)    Width		
**Please Note: NO commercial  4. Garage (3 sets of plans r  Attached Detached	permits will be approved unless a Knox Boequired)    Width	feet X Length	
**Please Note: NO commercial  4. Garage (3 sets of plans r  Attached Detached	permits will be approved unless a Knox Bo equired)  Width Height (ground to peak)	feet X Length	
<ul> <li>**Please Note: NO commercial</li> <li>4. Garage (3 sets of plans r</li> <li>Attached  Detached</li> <li>5. Repair or Alternations (3</li> </ul>	equired)    Width  Height (ground to peak)    Sets of plans required) or Roofing	feet X Length	
**Please Note: NO commercial  4. Garage (3 sets of plans r  Attached Detached  5. Repair or Alternations (3  Describe work:	equired)    Width  Height (ground to peak)    Sets of plans required) or Roofing	feet X Lengthfeet Wall height	
4. Garage (3 sets of plans r  Attached Detached  5. Repair or Alternations (3  Describe work:  6. Addition (3 sets of plans	equired)  Width Height (ground to peak) sets of plans required) or Roofing  required)	_feet X Lengthfeet Wall height	

## 8. ADDITIONAL INFORMATION: (3 sets of plans required)

- 1. All information must be correct, complete, and legible.
- 2. Include copy of mortgage survey or plot plan for any addition, garage, shed, pool, deck or any structure.
- 3. Separate permits are required for electrical, mechanical, and plumbing.
- 4. No work may be started before the approval of this permit. Penalty for work done prior to the issuance of a permit shall double the permit fee.
- 5. 24 Hours notice is required for inspections
- 6. Stamped Approved plans shall be on site in a readily available and observable location for the inspector to use. If plans are not available inspection will be denied

#### PERMIT IS VALID FOR 6 MONTHS.

I hereby certify that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his/her authorized agent, and we agree to conform to all applicable laws of the City of Walled Lake and the State of Michigan. All information submitted on this application is accurate to the best of my knowledge.

Section 23a of the State construction code act, P.A. 230 of 1972, as amended, MCL 125.1523A, prohibits a person from conspiring to circumvent the licensing requirement of this State relating in persons who are to perform work on a residential building or a residential structure. Violators of Section 23a are subject to civil fines.

Applicant's Signature	Date
Contractor* Property Owner	
*If applicant is NOT property owner, than the property o	owner must sign this application as well.
Property Owner's Signature	Date
Do not write below this line	
Per all City Codes and Ordinances; the adopted Michiga	n Residential Code, and the adopted Michigan Building Code.
Zoning Review Approved by	Date
Approved by	Date



Building Department 1499 E. West Maple 248-624-4847 Fax 248-624-1616

For Department Use Only				
Date Received				
Number of plan s	ets received			
Permit Fee Plan Review Fee				
Bond Amount				

# **BUILDING PERMIT APPLICATION**

DATE		AVIII APPLICATION	
DATE	JOB ADDRESS		
1. Owner's Information			
Name	Address		
City Email	MI, Zip Code	Phone	
**Please provide e-mail a	ddress for expedited plan review	results**	···
2. Contractor's Informatio	n		
Name	Address		
City	MI, Zip Code	Phone #	
Builder's License Number	Federal Employe	er ID/Exemption	
Worker's Compensation Insu	rance Carrier or reason for exemption		
MESC Employer Number or r	eason for exemptions		· -
Email			
**Please provide e-mail a	ddress for expedited plan review r	esults**	
3. Proposed Project –	Construction Type	Use Group	
C Single Family C De	inlay 🗂 Multifamily 🗂 Co	von ovaiol 🖂 lodustuial	
	uplex Multi-family Co	ommercial   Industrial	
If commercial, is there a Kno	uplex   Multi-family   Co ox Box installed?   Yes   No opermits will be approved unless a Knox B	_	
If commercial, is there a Kno	ox Box installed? Tes No permits will be approved unless a Knox E	_	
If commercial, is there a Kno **Please Note: NO commercial 4. Garage (3 sets of plans r	ox Box installed?	Box is present at the property**	feet
If commercial, is there a Kno **Please Note: NO commercial 4. Garage (3 sets of plans r	ox Box installed?	_	
If commercial, is there a Known **Please Note: NO commercial  4. Garage (3 sets of plans r  ☐ Attached ☐ Detached	ox Box installed?	Box is present at the property** feet X Length	
If commercial, is there a Knowstern transfer of the second secon	ox Box installed?	Box is present at the property** feet X Length	
If commercial, is there a Known **Please Note: NO commercial  4. Garage (3 sets of plans r  ☐ Attached ☐ Detached	ox Box installed?	Box is present at the property** feet X Length	
If commercial, is there a Knowstern transfer of the second secon	ox Box installed?	Box is present at the property** feet X Length	
If commercial, is there a Knowstern transfer of the second secon	ox Box installed?	Box is present at the property** feet X Length	
If commercial, is there a Knowstern transfer of the second secon	ox Box installed?	Box is present at the property** feet X Length	
If commercial, is there a Knowstern transfer of the second secon	equired)  Width Height (ground to peak) sets of plans required) or Roofing	Box is present at the property** feet X Length	
If commercial, is there a Known **Please Note: NO commercial  4. Garage (3 sets of plans range)  Attached Detached  5. Repair or Alternations (3 Describe work:	equired)  Width Height (ground to peak) sets of plans required) or Roofing	Sox is present at the property** feet X Lengthfeet Wall height	
If commercial, is there a Known **Please Note: NO commercial  4. Garage (3 sets of plans range)  Attached Detached  5. Repair or Alternations (3 Describe work:  6. Addition (3 sets of plans	equired)  Width Height (ground to peak) sets of plans required) or Roofing  required)	Sox is present at the property** feet X Lengthfeet Wall heightfeet	

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Applicant's Signature	Date
Contractor* Property Owner	
*If applicant is NOT property owner, than the property owner	must sign this application as well.
Property Owner's Signature	Date
Do not write below this line	
Per all City Codes and Ordinances; the adopted Michigan Resi	idential Code, and the adopted Michigan Building Code.
Zoning Review Approved by	Date
Approved by	Date

# STANDARD OPERATING PROCEDURE POLLUTION PREVENTION AND GOOD HOUSEKEEPING

# PREPARED FOR:

THE CITY OF WALLED LAKE
1499 E WEST MAPLE ROAD, WALLED LAKE, MICHIGAN 48390



**APRIL 2016** 

Table 1

Facility Name	Structural Controls	Priority Level	Assessment Factors	BMP's Implemented
Civic Center	Catch Basins (5) Stockpiles (5) Detention Basin (1) Salt Dome (1) Ditch (1)	High	1, 3, 4	See Section E
Mercer Beach	Catch Basins (2)	Low	1	Catch basin cleaning Street sweeping
Pratt Park	Ditch (2)	Low	1	Ditch Maintenance
Riley Park	Catch Basins (1)	Low	1	Catch basin cleaning Street sweeping
Marshall Taylor Park	Ditch (2)	Low	1	Ditch Maintenance
Hiram Sims Park	None	Low	1	None

#### 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

All of the City's public works operations are conducted at their Department of Public Works (DPW) facility located at the Civic Center. This site is considered a high priority site due the following operations:

#### Civic Center - 1499 E West Maple Road

- Maintenance and cleaning of vehicles and equipment
- Salt Storage
- Stockpiled materials

# SECTION F - CATCH BASIN MAINTENANCE PRIORITY

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

**Low Priority** – Catch basins that are of low priority have very little sediment accumulation and do not require routine maintenance. Low priority catch basins are inspected annually and on an as needed basis based on complaints or by DPW staff during normal work activities.

streets. Medium priority areas are swept at least annually and as-needed determined by DPW field staff.

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

In the event a priority rating is changed, or new City owned streets are constructed, this procedure will be updated and revised to reflect the change in priority within 120 days.

Street sweeping activities are conducted by a third party contractor. Collected sediment from street sweeping activities is disposed of as described in Section H.

#### SECTION J - WINTER OPERATIONS

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

#### J.1 Salt Storage and Loading

The City has one (1) salt storage structure consisting of a rectangular building, with a floor that is comprised of an impervious cement pad. The building is not located within 50 feet of a lake shore, stream bank, or wetland, nor is it located in a 100-year floodplain.

The salt dome is completely enclosed and has a concrete loading pad. The loading area is swept regularly and maintained to be free of salt residue. Salt storage and application training is performed annually by DPW staff to minimize any track-out from loading operations.

# SECTION K - ROAD, PARKING LOT, AND SIDEWALK MAINTENANCE

Road, parking lot, and sidewalk maintenance activities includes pothole repair, sidewalk repair/replacement, and curb and gutter repair. These services are addressed by DPW 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 City DPW facility and covered with a tarp. In cases where a contractor is retained to perform these activities, a City representative is on site to oversee the work and ensure that left over material, concrete washout, and other associated pollutants are disposed of properly. Disposing of concrete washout and other excess repair materials into the storm sewer is strictly prohibited by the City.

# SECTION N - NON-STRUCTURAL CONTROLS

The City is committed to employing preventative 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 DPW facility are as follows:

# N.1 Routine Inspections and Good Housekeeping Procedures

Preventive maintenance involves the regular inspection, testing, and cleaning of facility equipment, vehicles, and operational systems. DPW foremen meet with DPW 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 City.

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

Part 5 rules also require surveillance of polluting materials. The routine inspections will include this information for the salt storage and stockpile areas.

## N.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 DPW 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 DPW areas will be conducted every (six) 6 months which generally coincides with a planned cleaning of the entire facility. Documentation of the comprehensive site inspection results will be prepared and kept on file.

#### SECTION O - NEW APPLICANT OWNED FACILITIES

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

### SECTION P — CERTIFIED PESTICIDE APPLICATOR

The DPW does not have any certified pesticide applicators on staff and does not utilize pesticides, herbicide, or fertilizers on City owned properties on a regular basis. If needed, the City will retain the services of a pesticide application contractor that possesses a state applicator's license. Any

# SECTION S - PROCESS FOR REVISION

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

PCL XL error

Subsystem: TEXT

Error:

InternalError 0x50

Operator:

Text

Position:

26752

# STANDARD OPERATING PROCEDURE POLLUTION PREVENTION AND GOOD HOUSEKEEPING

SPILL RESPONSE

# PREPARED FOR:

THE CITY OF WALLED LAKE
1499 E WEST MAPLE ROAD, WALLED LAKE, MICHIGAN 48390



**APRIL 2016** 

#### 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, overpack containers, container patch kits, spill dams, shovels, floor dry, acid/base neutralizers, and "caution-keep out" signs are common spill response items.

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

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

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

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

<u>Large Spills:</u> 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**

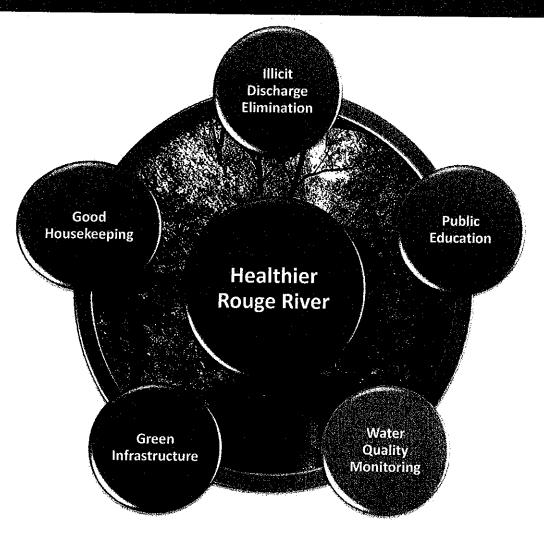
All chemical spills, regardless of size, should be reported as soon as possible to the Facility Responsible Person. The Responsible Person will determine whether the spill has the potential to affect the environment outside of the facility and must be reported to local, state, or federal agencies. Examples 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

ROUGE RIVER COLLABORATIVE
TOTAL MAXIMUM DAILY LOAD (TMDL)
IMPLEMENTATION PLAN FOR MUNICIPAL
STORMWATER PERMITEES





Prepared by:

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March 23, 2016

# A. Introduction

The Alliance of Rouge Communities (ARC), a 501(c)(3) organization, is a voluntary public watershed entity currently comprised of municipal governments, counties, schools, and cooperating partners as authorized by Part 312 (Watershed Alliances) of the Michigan Natural Resources and Environmental Protection Act (MCL 324.101 to 324.90106) as amended by Act No. 517, Public Acts of 2004. The purpose of the ARC is to provide an institutional mechanism to encourage watershed-wide cooperation and mutual support to meet water quality permit requirements and to restore beneficial uses of the Rouge River to the area residents.

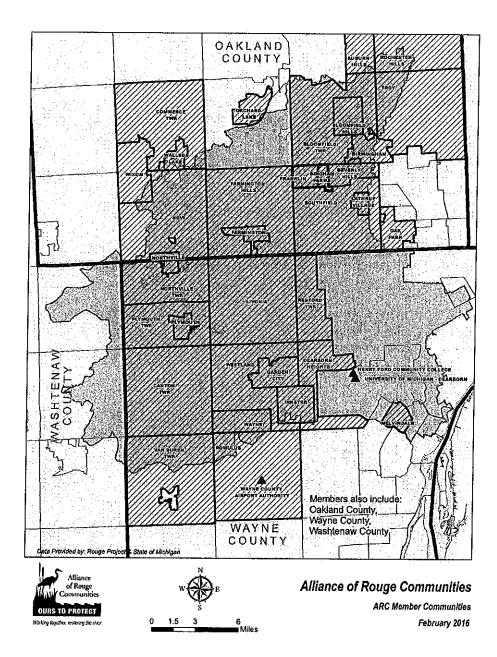


Table 1 – TMDL Targets for Municipal Stormwater Permittees

Parameter	TMDL Targets for MS4 Permittees Primary (1°) and Secondary (2°)	Notes
E. coli	1°: 300 cfu/100 ml and 130 cfu/100 ml	Daily geometric mean value 30 day geometric mean value
Biota	1°: Procedure 51 scores ≥ Acceptable 2°: Suspended solids ≤ 80 mg/l	For 2 successive years Annual average during wet weather
Dissolved	1°: 7 mg/L	
Oxygen	2°: Suspended solids ≤ 80 mg/l*	

<sup>\*</sup>This concentration is presumed for the purposes of this document, but it was not explicitly listed in the DO TMDL.

#### B.1. E. coli Conditions

Between May and October 2005, the MDEQ evaluated *E. coli* conditions on a routine basis during a range of weather conditions at approximately 70 locations across the watershed. Issues were found during both dry and wet weather conditions at most sites as indicated in **Table 2**. MDEQ also determined that human sources of *E. coli* were likely present at a few sites based on DNA analyses. However, only a few samples with elevated *E. coli* levels were evaluated for the presence of human DNA (MDEQ, 2007a).

Table 2 - Summary of E. coli Data from the E. coli TMDL

	Range of Exc	ceedances by Site (% of samples abov	e the standard)
River Branch	Above the Monthly Standard of 130 cfu/100 ml	Above the Daily Standard of 300 cfu/100 ml	Above the Partial Body Contact Standard of 1,000 cfu/100 ml
Lower	89 100%*	41 – 100%	9 - 83%
Main	59 – 100%	40 – 100%	0-71%
Middle	89 – 100%	39 – 100%	9-91%
Upper	100%	90 – 100%	48 86%

<sup>\*</sup>Table interpretation note: at least one site had 89% of samples exceed the monthly standard and at least one site had all (100%) samples exceed the monthly standard. The remaining sites fell within this range.

### **B.2. Suspended Solids Conditions**

For the Biota TMDL, the MDEQ calculated the mean suspended solids concentration of each major river branch using data collected by the Rouge Project between 1994 and 2001 (See **Table 3**). In addition, an annual sediment load of 33,800 tons/year was calculated using the Simple Method model. Based on the 80 mg/l value, a suspended solids loading target of approximately 29,000 tons/year was established. This would require a 15% reduction in sediment loads from stormwater permittees (MDEQ, 2007b).

Table 3. Suspended Solids Concentrations by River Branch

River Branch	Mean Suspended Solids	Concentration (mg/l)
Rives bidiicii	Wet Weather*	Dry Weather
Lower	191	37
Main	114	27
Middle	95	19
Upper	152	30
Watershed-wide	138	28

<sup>\*</sup>The TMDL target is 80 mg/l.

# **B.5. Summary**

Based on the information discussed above, addressing the indicator pollutants/parameters shown in Table 6 will make progress toward addressing the impairments identified in the TMDLs.

Table 6. Indicators to be Addressed in this Plan

Indicators	· · · · · · · · · · · · · · · · · · ·
E. coli	Associated TMDLs
3.00.	E. coli
Suspended Solids	Biota
***PENACA 30NA3	Dissolved Oxygen
	E. coli
Stream flow	Biota
J. Carr Novy	Dissolved Oxygen
	E. coli

#### C. **BMP Prioritization Procedure**

Several criteria were used to prioritize the best management practices (BMPs) that should be implemented to address the impairments. These criteria are as follows:

- A. Ability of the BMP to affect human health impacts caused by direct contact with the river.
  - Low, moderate, high
- B. Ability of the BMP to impact the concentrations of E. coli and suspended solids in the river and/or reduce peak stream flows.
  - Low, moderate, high
- C. Ability of the BMP to impact multiple TMDL parameters
  - Low, moderate, high
- D. Anticipated level of impact of the BMP as compared to added cost to implement it.
  - · Low, moderate, high
- E. Legal authority to implement the BMP.
  - Yes or no
- F. Are there prerequisite projects that need to be completed before the BMP can be implemented?
  - Yes or no.

This process will be reviewed and updated, if necessary, by the ARC before August 30, 2022. The review will be based on the results of monitoring data and other measurables provided in Section E.

#### D. Selected BMPs

Using the criteria listed above, several BMPs were evaluated for implementation as shown in Attachment B. Those BMPs with the highest scores are listed in Table 7 along with the associated TMDL pollutant. These BMPs will be implemented by ARC members on an ongoing basis or according to the frequencies/schedules listed in the collaborative plans and stormwater management plans.



Table 9 - Watershed-wide Monitoring Locations and Frequency

Parameter	Anticipated Monitoring Sites	Frequency	Schedule
Dissolved oxygen	Main (US5 and US7), Lower (L05D), Middle (D06) Upper (U05) and Johnson Creek (JC)	20 events	May - Oct 2017
Stream flow	Main (US5 and US7), Lower (US1), Middle (US2) Upper (US3) and Johnson Creek (JC)	Continuous	May - Oct 2017
E. coli	Similar to sites in the MDEQ E. coli TMDL Assessment – 85 sites	20 events	May Oct 2017
Suspended solids	Same as DO sites	20 events	May – Oct 2017

Schedule:

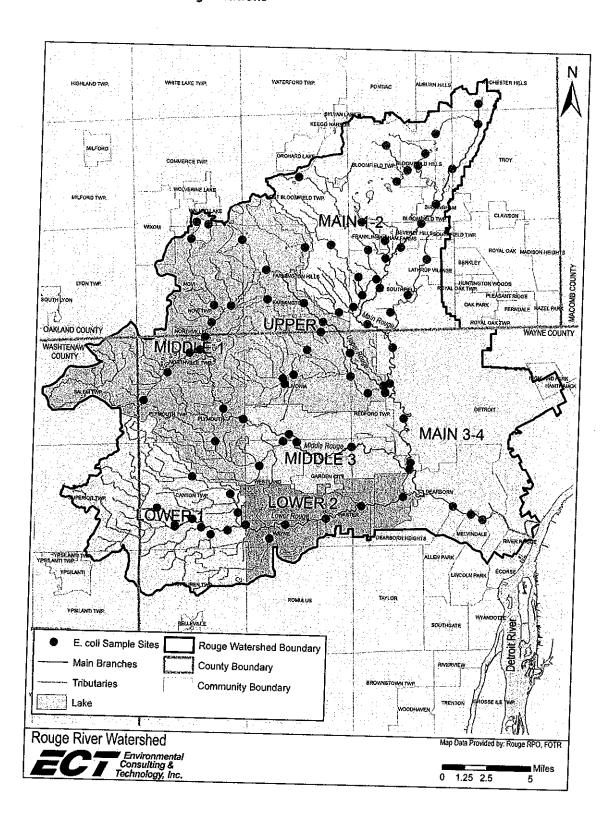
Metric Summary Report: Due June 30, 2022.

Watershed-wide Assessment Report: Due every 10 years by June 30 starting in 2018.

### ARC Member Responsibilities:

- ARC (as contracted by the permittees)
  - Conduct instream monitoring for select indicators to determine the effectiveness of TMDL Plan.
  - o Collect tracking metrics data from permittees.
  - o Evaluate Metrics A and E by April 30, 2022.
- Counties (Road Agencies, WCDPS and OCWRC)
  - Keep records of Metrics B, C, D, and F as listed in Table 8 and provide the data to ARC staff by April 30, 2022.
- Cities and Villages
  - Keep records of Metrics B, C, D, and F as listed in Table 8 and provide the data to ARC staff by April 30, 2022.
- Townships and Schools
  - o Keep records of Metrics C, D, and F as listed in **Table 8** and provide the data to ARC staff by April 30, 2022.

Figure 2 – Bacteria Monitoring Locations



# Attachment A Participating ARC Members

Permittee (listed alphabetically	)
Communities	
Beverly Hills, Village of	Northville, City of
Bingham Farms, Village of	Northville Township
Birmingham, City of	Novi, City of
Bloomfield Hills, City of	Oak Park, City of
Bloomfield Township	Plymouth, City of
Canton Township	Plymouth Township
Dearborn Heights, City of	Redford Township
Farmington, City of	Southfield, City of
Farmington Hills, City of	Troy, City of
Franklin, Village of	Walled Lake, City of
Garden City, City of	Wayne, City of
Inkster, City of	Westland, City of
Lathrup Village, City of	
Livonia, City of	
Melvindale, City of	
Counties	
Oakland County*	
Wayne County	
Schools	
Henry Ford College	

<sup>\*</sup>Participating but this plan is not part of their pending permit application.

	Ability of the BMD to affect	Abilita	BMP Selection Criteria and Ranking for TMDL Parameters	DL Parameters			
	human health impacts caused by direct contact	Ability cor suspen	Anticipated level of impact of the BMP as compared to added	Ability to impact multiple TMDL	Legal authority to implement	Are there prerequisite projects that need	al Score
ВМР			cost to implement it	politicants	the BMP?	to be completed?	toT
Illicit discharge source		O-low, 1=inoderate, 2=i	Z=high		Yes. No	Vo. No.	
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abatement	]	7	2	2	>	z	. ∞
New Stormwater Ordinance							
Implementation	O	2	7	2	>	V[4]	,
Green Infrastructure					-	r[1]	9
Installation on Public Property	0	1	2	7	>	V [2]	L L
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PEP Activities: Education on Pollution Complaint Line	₩.	н	Н	2	>	2	u
PEP Activities: Don't Feed						•	າ
Waterfowl Signage	ᠸ┤		Н	,-	>		T
PEP Activities: Septic				4	-	z	4
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PEP Activities: Education on							)
the impacts of Pet Waste	<b>~</b> 1		H	<u> </u>	,		T
Good Housekeeping				5		z	ო
Measures - catch basin	0		,	-			
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Contractor Education	0	-					<del></del>
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Corridor Education	>	0	н	н	>	z	2
Streambank Stabilization	0	0	τ		Y (on public		T
Woody Debris Management	c			)	property)	Y [3]	-
Notes		0	0	0	Y (on public	Y [4]	_
BMPs that will be implemented.					property)	1.1.	

Notes:

BMPs that will be implemented to address TMDL parameters.

[1] Pending the adoption of new stormwater standards and a propgram to implement the standards.

[2] Pending the adoption of new stormwater standards and funding to implement the standards on permittee properties.

[3] Pending reduction in stream flows and funding to implement.